



Metasol

Meta Solution

Contactors and Overload relays

Metasol Contactors and Overload Relays

*New generation of Contactors
from LS Industrial Systems*



Metasol Contactors

Metasol Contactors

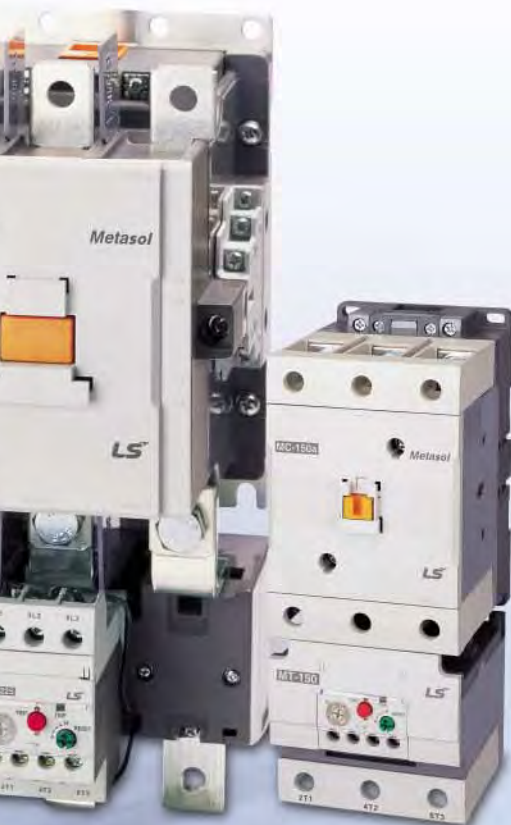
- **Designed to show superior technology:
The Metasol series**

Sealed structure has improved its safety features so that no arc flash is exposed. In order to emphasize its durability as an industrial device, Metasol series adopt simple design form and sophisticated shape applying diamond cut concepts on product surface.



LSIS META SOLUTION CONTACTORS

Contents :



Metasol MC

| | |
|-------------------------------------------------------------|-----|
| Table of specifications | 10 |
| Type numbering system | 12 |
| Environment | 16 |
| Connections | 17 |
| Control coil characteristics | 18 |
| Marking | 20 |
| Internal structure | 21 |
| Contactors (18~800AF) | 22 |
| Motor starters | 40 |
| Reversing contactors | 44 |
| Capacitive contactors | 46 |
| Accessory | 48 |
| Overload relays | 58 |
| Overload relay trip curves | 74 |
| Type 2 Coordination | 82 |
| Rated short circuit breaking capacity of installation | 85 |
| Dimension | 86 |
| Contact arrangement | 104 |

Mini Contactor

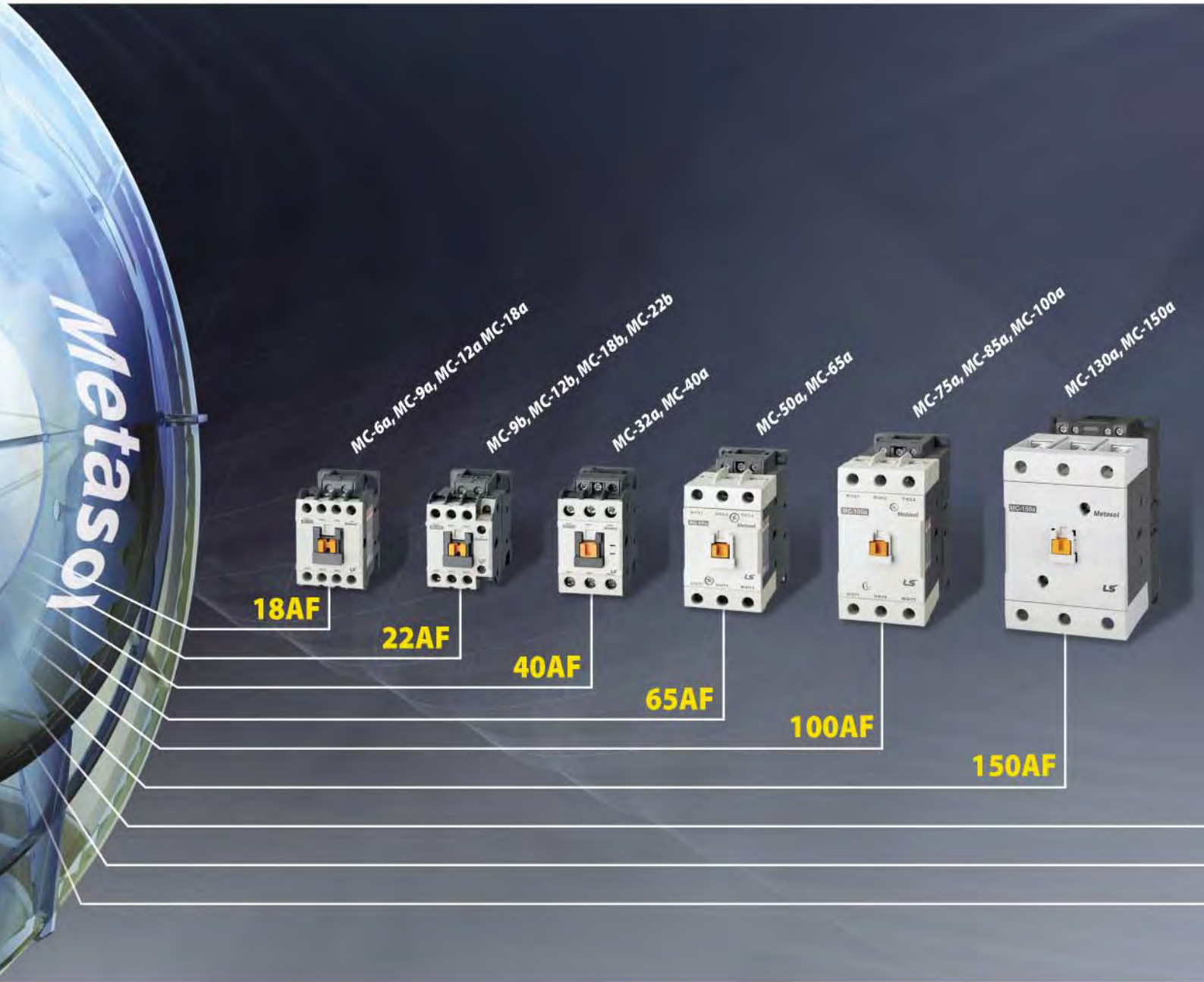
EMPR

Manual Motor Starters

Catalogue numbers

| | |
|-------|-----|
| | 107 |
| | 141 |
| | 154 |
| | 170 |

Metasol Series completion



More Safe,
More Valuable



Contactors & Overload Relays



- *Advanced technology & Expert solution*
- *Offering economical solution with compact size & easy connection*
- *Ensure reliability in the system: Type II Coordination*
- *Perfect system with peripheral devices.*
- *Environment friendly product: complies with International environment standard RoHS.*
- *25Models in 9 Frames*



MC/TOR

25 Models in 9 Frames

High reliability from optimum design

Metasol

Meta solution

- Compact design for space saving
- DIN rail and screw mountable
- Directly mountable overload relays provided separately
- Easy to combine with manual motor starters by using adapter and wiring kit
- Finger-proof design
- Broad range of accessories
- World class products conforming to IEC and UL standards

18AF

Contactor
MC-6a, 9a, 12a, 18a
 Rated current: 6, 9, 12, 18A
 Rated insulation voltage: 690V
 Type II : 150kA @415V Max.

Overload relay MT-12
 Current range: 0.1~18A
 Trip class: Class10, 20



22AF

Contactor
MC-9b, 12b, 18b, 22b
 Rated current: 9, 12, 18, 22A
 Rated insulation voltage: 690V
 Type II : 150kA @415V Max.

Overload relay MT-32
 Current range: 0.1~40A
 Trip class: Class10, 20



800AF

Contactor

MC-500a, 630a, 800a

Rated current: 500, 630, 800A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-800

Current range: 200~800A
Trip class: Class10, 20



400AF

Contactor

MC-265a, 330a, 400a

Rated current: 265, 330, 400A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-400

Current range: 85~400A
Trip class: Class10, 20



225AF

Contactor

MC-185a, 225a

Rated current: 185, 225A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-225

Current range: 65~240A
Trip class: Class10, 20



40AF

Contactor

MC-32a, 40a

Rated current: 32, 40A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-32

Current range: 0.1~40A
Trip class: Class10, 20



65AF

Contactor

MC-50a, 65a

Rated current: 50, 65A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-63

Current range: 4~65A
Trip class: Class10, 20



100AF

Contactor

MC-75a, 85a, 100a

Rated current: 75, 85, 100A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-95

Current range: 7~100A
Trip class: Class10, 20



150AF

Contactor

MC-130a, 150a

Rated current: 120, 150A
Rated insulation voltage: 690V
Type II : 150kA @415V Max.

Overload relay MT-150

Current range: 34~150A
Trip class: Class10, 20





MC/TOR Accessories

Perfect combination of peripheral
devices and various accessories

Offering economical solution with compact size & easy connection



Perfect system with other devices and accessories

■ One-touch connection

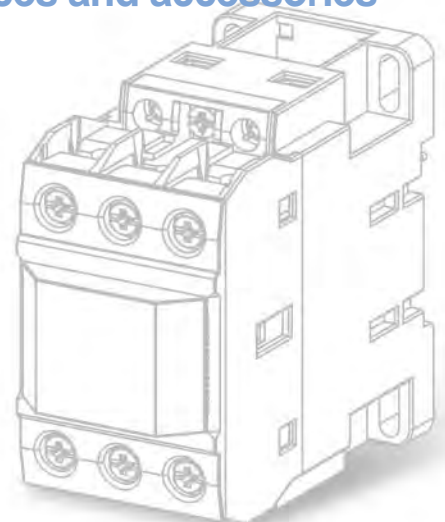
- Din Rail connection without any special tools
- Direct combine a surge unit

■ Simple wiring

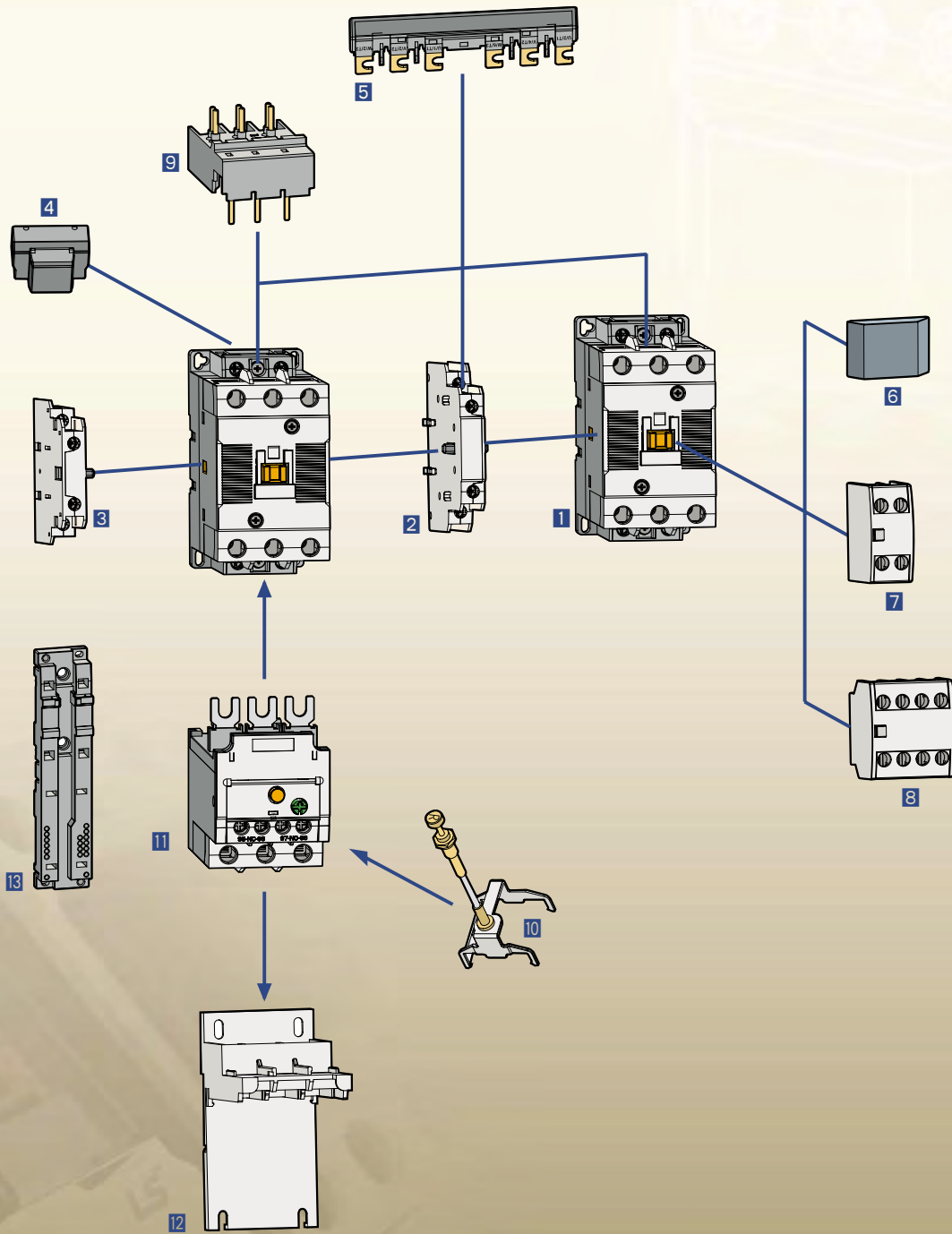
- Mounting unit, Adapter
- Reversing wire set

■ Easy Maintenance

- 4-terminal type: Easy wiring of operation coil
- Module type of Screw terminal
- Interlock unit with built-in auxiliary contacts(2NO built-in)



Advanced accessories for Metasol contactors



Accessory layout upto 150AF

- | | | |
|-------------------------------------------------|------------------------------------------------------|------------------------------------------|
| 1 Contactor | 6 Safety cover (Option) | 10 Remote reset unit |
| 2 Interlock unit | 7 Auxiliary contact unit - front mount(2p) | 11 Overload relay |
| 3 Auxiliary contact unit - side mount | 8 Auxiliary contact unit - front mount(4p) | 12 Separate mounting unit |
| 4 Surge unit | 9 Direct adaptor to MMS | 13 Mounting unit for use with MMS |
| 5 Wire kit | | |

Table of specifications

MC type Magnetic Contactors



| Frame size | | | 18AF | | | | 22AF | | | | |
|----------------------------------------------------------|------------------------|-----------------|--------------------------|-------|--------|--------|--------------------------|--------|--------|---------|-----|
| Type | screws clamp terminals | | MC-6a | MC-9a | MC-12a | MC-18a | MC-9b | MC-12b | MC-18b | MC-22b* | |
| Number of poles | | | 3pole | | | | 3pole | | | | |
| Rated operational voltage, Ue | | | 690V | | | | 690V | | | | |
| Rated insulation voltage, Ui | | | 690V | | | | 690V | | | | |
| Rated frequency | | | 50/60Hz | | | | 50/60Hz | | | | |
| Rated impulse withstand voltage, Uimp | | | 6kV | | | | 6kV | | | | |
| Maximum operating rate in operating cycles per hour(AC3) | | | 1800 operations per hour | | | | 1800 operations per hour | | | | |
| Durability | Mechanical | | 15 mil. operations | | | | 15 mil. operations | | | | |
| | Electrical | | 2.5 mil. operations | | | | 2.5 mil. operations | | | | |
| Current and power | AC-1, Thermal current | A | 25 | 25 | 25 | 32 | 25 | 25 | 32 | 40 | |
| | | AC-3 | 200/240V | kW | 2.2 | 2.5 | 3.5 | 4.5 | 2.5 | 3.5 | 4.5 |
| | | | A | 9 | 11 | 13 | 18 | 11 | 13 | 18 | 22 |
| | | 380/440V | kW | 3 | 4 | 5.5 | 7.5 | 4 | 5.5 | 7.5 | 11 |
| | | | A | 7 | 9 | 12 | 18 | 9 | 12 | 18 | 22 |
| | | 500/550V | kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 |
| | | | A | 6 | 7 | 12 | 13 | 7 | 12 | 13 | 20 |
| | | 690V | kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 |
| | | A | 4 | 5 | 9 | 9 | 6 | 9 | 9 | 18 | |
| UL rating (50/60Hz) | Continuous current | | A | 25 | 25 | 25 | 32 | 25 | 25 | 40 | 40 |
| | Single phase | 110~120V | HP | 0.5 | 0.5 | 0.75 | 1 | 0.5 | 0.75 | 1 | 2 |
| | | 220~240V | HP | 1.5 | 1.5 | 2 | 3 | 1.5 | 2 | 3 | 3 |
| | Three phase | 200~208V | HP | 2 | 2 | 3 | 5 | 2 | 3 | 5 | 7.5 |
| | | 220~240V | HP | 3 | 3 | 5 | 7.5 | 3 | 5 | 7.5 | 10 |
| | | 440~480V | HP | 5 | 5 | 7.5 | 10 | 5 | 7.5 | 10 | 15 |
| | | 550~600V | HP | 7.5 | 7.5 | 10 | 15 | 7.5 | 10 | 15 | 20 |
| NEMA size | | | 00 | 00 | 0 | 0 | 00 | 00 | 0 | 1 | |
| Size and weight | AC control | Weight | 0.33 | | | | 0.34 | | | | |
| | | Size(W × H × D) | 45 × 73.5 × 82 | | | | 45 × 73.5 × 86 | | | | |
| | DC control | Weight | 0.5 | | | | 0.51 | | | | |
| | | Size(W × H × D) | 45 × 83 × 113.7 | | | | 45 × 73.5 × 117.7 | | | | |
| Auxiliary(standard) | | | 1a or 1b | | | | 1a1b | | | | |
| Auxiliary | Side mount | | UA-1 | | | | UA-1 | | | | |
| | Front mount | | AU-2, AU-4 | | | | AU-2, AU-4 | | | | |

Note) Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

MT type Thermal Overload Relays



| Type | Screws clamp terminals | | MT-12/□ | | MT-32/□ | |
|---------------------------------------|------------------------|-----------------|------------------|--|--------------|--|
| Rated operational voltage, Ue | | | 690V | | 690V | |
| Rated insulation voltage, Ui | | | 690V | | 690V | |
| Rated impulse withstand voltage, Uimp | | | 6kV | | 6kV | |
| Trip class | | | 10A, 20 | | 10A, 20 | |
| Setting range | | | 0.1~18A | | 0.1~40A | |
| Size and weight | | Weight | kg | | kg | |
| | | Size(W × H × D) | mm | | mm | |
| | | | 0.1 | | 0.17 | |
| | | | 45 × 73.2 × 63.7 | | 45 × 75 × 90 | |

* The safety cover of magnetic contactor and thermal overload relay is optional.



| 40AF | |
|--------------------------|--------|
| MC-32a | MC-40a |
| ● | ● |
| 3pole | |
| 690V | |
| 1000V | |
| 50/60Hz | |
| 8kV | |
| 1800 operations per hour | |
| 12 mil. operations | |
| 2 mil. operations | |
| 50 | 60 |
| 7.5 | 11 |
| 32 | 40 |
| 15 | 18.5 |
| 32 | 40 |
| 18.5 | 22 |
| 28 | 32 |
| 18.5 | 22 |
| 20 | 23 |
| 50 | 60 |
| 2 | 3 |
| 5 | 7.5 |
| 7.5 | 15 |
| 10 | 15 |
| 20 | 30 |
| 25 | 30 |
| 1 | 1 |
| 0.55 | |
| 69 × 83 × 93 | |
| 0.77 | |
| 69 × 83 × 120 | |
| UA-1 | |
| AU-2, AU-4 | |



| MT-32/□ |
|--------------|
| ● |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 0.1~40A |
| 0.17 |
| 45 × 75 × 90 |



| 65AF | |
|--------------------------|--------|
| MC-50a | MC-65a |
| ● | ● |
| 3pole | |
| 690V | |
| 1000V | |
| 50/60Hz | |
| 8kV | |
| 1800 operations per hour | |
| 12 mil. operations | |
| 2 mil. operations | |
| 70 | 100 |
| 15 | 18.5 |
| 55 | 65 |
| 22 | 30 |
| 50 | 65 |
| 30 | 33 |
| 43 | 60 |
| 30 | 33 |
| 28 | 35 |
| 70 | 100 |
| 3 | 5 |
| 10 | 15 |
| 20 | 25 |
| 25 | 30 |
| 40 | 50 |
| 50 | 60 |
| 2 | 2 |
| 1.05 | |
| 79 × 106 × 122 | |
| 1.3 | |
| 79 × 106 × 149 | |
| UA-1 | |
| AU-2, AU-4 | |



| MT-63/□ |
|---------------|
| ● |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 4~65A |
| 0.31/0.33 |
| 55 × 81 × 100 |



| 100AF | | |
|--------------------------|--------|---------|
| MC-75a | MC-85a | MC-100a |
| ● | ● | ● |
| 3pole | | |
| 690V | | |
| 1000V | | |
| 50/60Hz | | |
| 8kV | | |
| 1800 operations per hour | | |
| 12 mil. operations | | |
| 2 mil. operations | | |
| 110 | 135 | 160 |
| 22 | 25 | 30 |
| 75 | 85 | 105 |
| 37 | 45 | 55 |
| 75 | 85 | 105 |
| 37 | 45 | 55 |
| 64 | 75 | 85 |
| 37 | 45 | 45 |
| 42 | 45 | 65 |
| 110 | 135 | 160 |
| 5 | 7.5 | 10 |
| 15 | 15 | 20 |
| 25 | 30 | 30 |
| 30 | 40 | 40 |
| 50 | 60 | 75 |
| 60 | 75 | 75 |
| 2 | 3 | 3 |
| 1.93 | | |
| 94 × 140 × 137 | | |
| 2.8 | | |
| 94 × 140 × 174 | | |
| UA-1 | | |
| AU-2, AU-4 | | |



| MT-95/□ |
|---------------|
| ● |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 7~100A |
| 0.48/0.5 |
| 70 × 97 × 110 |

Table of specifications

MC type Magnetic Contactors



| Frame size | | | 150AF | | 225AF | | |
|----------------------------------------------------------|------------------------|-----------------|--------------------------|---------|--------------------------|---------|----|
| Type | screws clamp terminals | | MC-130a | MC-150a | MC-185a | MC-225a | |
| Number of poles | | | 3pole | | 3pole | | |
| Rated operational voltage, Ue | | | 690V | | 690V | | |
| Rated insulation voltage, Ui | | | 1000V | | 1000V | | |
| Rated frequency | | | 50/60Hz | | 50/60Hz | | |
| Rated impulse withstand voltage, Uimp | | | 8kV | | 8kV | | |
| Maximum operating rate in operating cycles per hour(AC3) | | | 1200 operations per hour | | 1200 operations per hour | | |
| Durability | Mechanical | | 5 mil. operations | | 5 mil. operations | | |
| | Electrical | | 1 mil. operations | | 1 mil. operations | | |
| Current and power | AC-1, Thermal current | A | 160 | 210 | 230 | 275 | |
| | AC-3 | 200/240V kW | 37 | 45 | 55 | 75 | |
| | | A | 130 | 150 | 185 | 225 | |
| | | 380/440V kW | 60 | 75 | 90 | 132 | |
| | | A | 130 | 150 | 185 | 225 | |
| | | 500/550V kW | 60 | 70 | 110 | 132 | |
| | | A | 90 | 100 | 180 | 200 | |
| | 690V kW | 55 | 55 | 110 | 140 | | |
| | A | 60 | 60 | 120 | 150 | | |
| UL rating (50/60Hz) | Continuous current | | 160 | 210 | 230 | 275 | |
| | Single phase | 110~120V | HP | 10 | 15 | 15 | 15 |
| | | 220~240V | HP | 20 | 25 | 30 | 40 |
| | Three phase | 200~208V | HP | 40 | 40 | 60 | 60 |
| | | 220~240V | HP | 40 | 50 | 60 | 75 |
| | 440~480V | HP | 75 | 100 | 125 | 150 | |
| 550~600V | | HP | 75 | 75 | 125 | 150 | |
| | NEMA size | | 3 | 4 | 4 | 4 | |
| Size and weight | AC control | Weight | 2.4 | | 5.4 | | |
| | | Size(W × H × D) | 95 × 158 × 132 | | 138 × 203 × 181 | | |
| | DC control | Weight | 2.3 | | | | |
| | | Size(W × H × D) | 95 × 158 × 132 | | | | |
| Auxiliary(standard) | | | | | 2a2b | | |
| Auxiliary | Side mount | | UA-1 | | AU-100 (Max.4NO4NC) | | |
| | Front mount | | AU-2, AU-4 | | - | | |

MT type Thermal Overload Relays



| Type | | | MT-150/□ | MT-225/□ |
|---------------------------------------|-----------------|----|----------------|-----------------|
| Screws clamp terminals | | | ● | ● |
| Rated operational voltage, Ue | | | 690V | 690V |
| Rated insulation voltage, Ui | | | 690V | 690V |
| Rated impulse withstand voltage, Uimp | | | 6kV | 6kV |
| Trip class | | | 10A, 20 | 10A, 20 |
| Setting range | | | 34~150A | 65~240A |
| Size and weight | Weight | kg | 0.67 | 2.5 |
| | Size(W × H × D) | mm | 95 × 109 × 113 | 147 × 141 × 184 |

* The safety cover of magnetic contactor and thermal overload relay is optional.



| 400AF | | |
|--------------------------|---------|---------------------|
| MC-265a | MC-330a | MC-400a |
| ● | ● | ● |
| 3pole | | |
| 690V | | |
| 1000V | | |
| 50/60Hz | | |
| 8kV | | |
| 1200 operations per hour | | |
| 5 mil. operations | | 2.5 mil. operations |
| 1 mil. operations | | 0.5 mil. operations |
| 300 | 350 | 450 |
| 80 | 90 | 125 |
| 265 | 330 | 400 |
| 147 | 160 | 200 |
| 265 | 330 | 400 |
| 147 | 160 | 225 |
| 225 | 280 | 350 |
| 160 | 200 | 250 |
| 185 | 225 | 300 |
| 300 | 350 | 450 |
| - | - | - |
| - | - | - |
| 75 | 100 | 125 |
| 100 | 125 | 150 |
| 200 | 250 | 300 |
| 200 | 250 | 300 |
| 5 | 5 | 5 |

9.2
163 × 243 × 198

| 2a2b |
|---------------------|
| AU-100 (Max.4NO4NC) |
| - |



| MT-400/□ |
|-----------------|
| ● |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 85~400A |
| 2.6 |
| 151 × 171 × 198 |



| 800AF | | |
|--------------------------|---------|---------------------|
| MC-500a | MC-630a | MC-800a |
| ● | ● | ● |
| 3pole | | |
| 690V | | |
| 1000V | | |
| 50/60Hz | | |
| 8kV | | |
| 1200 operations per hour | | |
| 2.5 mil. operations | | 0.5 mil. operations |
| 580 | 660 | 900 |
| 147 | 190 | 220 |
| 500 | 630 | 800 |
| 265 | 330 | 440 |
| 500 | 630 | 800 |
| 265 | 330 | 500 |
| 400 | 500 | 720 |
| 300 | 400 | 500 |
| 380 | 420 | 630 |
| 580 | 660 | 900 |
| - | - | - |
| - | - | - |
| 150 | 200 | 200 |
| 200 | 250 | 300 |
| 400 | 500 | 600 |
| 400 | 500 | 600 |
| 6 | 6 | 7 |

22.4
285 × 312 × 242

| 2a2b |
|---------------------|
| AU-100 (Max.4NO4NC) |
| - |



| MT-800/□ |
|-----------------|
| ● |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 200~800A |
| 11.5 |
| 360 × 530 × 212 |

Type numbering system

Contactors

MC-6a / **R** / **AC220** **60Hz** **1a1b**

| Rated current | | Version | | Coil voltage | | Frequency | | Auxiliary contact | |
|---------------|------|---------|-----------|--------------|---------|-----------|------|-------------------|---------|
| 6a | 6A | - | Standard | AC 220 | AC 220V | 60 | 60Hz | 00 | None |
| ⋮ | ⋮ | R | Reversing | ⋮ | ⋮ | 50 | 50Hz | 11 | 1a1b |
| 800a | 800A | | | DC 24 | DC 24V | | | 22 | 2a2b |
| | | | | | | | | 10 | 1a(1NO) |
| | | | | | | | | 01 | 1b(1NC) |

Note) See page 18, 19 for details.

Starters

MS-6a / **R** **2H** / **AC220** **60Hz** **10** / **0.1**

| Rated current | | Contactor version | | Relay version | | Coil voltage | | Frequency | | Auxiliary contact | | Relay setting current | |
|---------------|------|-------------------|-----------|---------------|-----------------------------|--------------|---------|-----------|------|-------------------|---------|-----------------------|------|
| 6a | 6A | - | Standard | 2H | Non-differential (2-heater) | AC 220 | AC 220V | 60 | 60Hz | 00 | None | 0.1 | 0.1A |
| ⋮ | ⋮ | R | Reversing | 3H | Non-differential (3-heater) | ⋮ | ⋮ | 50 | 50Hz | 11 | 1a1b | ⋮ | ⋮ |
| 800a | 800A | | | 3K | Differential | DC 24 | DC 24V | | | 22 | 2a2b | 800 | 800A |
| | | | | 3D | Class 20 | | | | | 10 | 1a(1NO) | | |
| | | | | | | | | | | 01 | 1b(1NC) | | |

Note) See page 18, 19 for details.

Thermal Overload Relay

MT-12 / **2H** **0.1**

| Frame size | | Relay version | | Relay setting current | |
|------------|-------|---------------|-----------------------------|-----------------------|------|
| 12 | 12AF | 2H | Non-differential (2-heater) | 0.1 | 0.1A |
| 32 | 32AF | 3H | Non-differential (3-heater) | ⋮ | ⋮ |
| 63 | 63AF | 3K | Differential | 800 | 800A |
| 95 | 95AF | 3D | Class 20 | | |
| ⋮ | ⋮ | | | | |
| 800 | 800AF | | | | |

Optional Accessories

Auxiliary contact unit

UA1

| Version | |
|---------|-----------------|
| UA-1 | Side mount |
| AU-100 | |
| AU-2 | Front mount(2P) |
| AU-4 | Front mount(4P) |

11

| Contact composition | |
|---------------------|---------|
| 11 | 1NO+1NC |
| 20 | 2NO |
| 02 | 2NC |
| 40 | 4NO |
| 31 | 3NO+1NC |
| 22 | 2NO+2NC |
| 13 | 1NO+3NC |
| 04 | 4NC |

Surge absorber

US11

| Composition and voltage | | |
|-------------------------|-------------|----------------|
| 1 | Varistor+RC | AC/DC 24~48V |
| 2 | Varistor+RC | AC/DC 100~125V |
| 3 | Varistor+RC | AC/DC 200~240V |
| 4 | Varistor+RC | AC 380~440V |
| 5 | Varistor+RC | AC 24~48V |
| 6 | Varistor+RC | AC 100~125V |
| 11 | Varistor | AC 200~240V |
| 12 | Varistor | DC 24~48V |
| 13 | Varistor | DC 100~125V |
| 14 | Varistor | DC 200~220V |
| 22 | RC | AC 100~125V |

Note) See page 52 for details.

Interlock unit

UR02

| Contact composition | |
|---------------------|------|
| 02 | 2NC |
| 00 | None |

Wire kit for Interlocking

UW32

| Frame size | |
|------------|------|
| 18 | 18AF |
| 22 | 22AF |
| 32 | 32AF |
| 63 | 63AF |
| 95 | 95AF |

Interlock set (UR+UW)

RK32

| Frame size | |
|------------|------|
| 32 | 32AF |
| 63 | 63AF |
| 95 | 95AF |

Separate mounting unit (For relay)

UZ32

| Frame size | |
|------------|-------|
| 32 | 32AF |
| 63 | 63AF |
| 95 | 95AF |
| 150 | 150AF |

Remote reset unit (For relay)

UM

| Cable length | |
|--------------|-----|
| 4R | 400 |
| 5R | 500 |
| 6R | 600 |



















Environment



| | |
|----------------------------------------------------------------|-------------------------------------------------|
| Standards | IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, K60947 |
| Certifications | CE, UL |
| Rated insulation voltage (Ui) | 1000V |
| Rated impulse withstand voltage (Uimp) | 8kV |
| Degree of protection | IP20 (Conforming to IEC60529) |
| Ambient air temperature | Storage: -50° C ~ +80° C |
| | Operation: -5° C ~ +60° C |
| Operating altitude | 3000m (8900ft) |
| Operating positions | |
| Shock resistance (1/2 sine wave =11ms) | Opened: 8G |
| | Closed: 10G |
| Vibration resistance (Conforming to IEC68-2-6) (5...300 Hz) | Opened: 2G |
| | Closed: 4G |
| Flame resistance | Conforming to UL 94: Vo |
| | Conforming to IEC 695-2-1: 960° C |

Connections

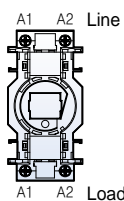
Connections

| Wire type | |  |  |  |  |  |  |  | Torque |
|---------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|
| | | (mm ² /AWG) | | | | | | | [Nm][lb-in] |
| MC-18AF |  | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~10/18~8 | up to 1.13/10 | |
| MC-22AF |  | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~6/18~10 | 1~10/18~8 | up to 2.25/20 | |
| MC-40AF |  | 1~6/18~10 | 2.5~10/14~8 | 2.5~10/14~8 | 2.5~10/14~8 | 2.5~10/14~8 | 1~10/18~8 | up to 4/35 | |
| MC-65AF |  | - | - | - | - | - | 1~25/12~4 | up to 4/35 | |
| MC-100AF |  | - | - | - | - | - | 1~25/12~4 | up to 4/35 | |
| MC-150AF |  | - | - | - | - | - | 1~25/12~4 | up to 9.8/87 | |
| Coil terminal |  | 0.5~2.5/20~14 | 0.75~25/18~12 | | | 0.5~25/20~12 | | up to 2.25/20 | |
| MC-225AF |  | - | - | - | - | - | 2.5~150/8~300 | up to 14.7/130 | |
| MC-400AF |  | - | - | - | - | - | 2.5~200/8~700 | up to 22.6/200 | |
| MC-800AF |  | - | - | - | - | - | 80~325/ 2/0~Busbar | up to 26.5/500 | |
| Coil terminal |  | 1.25~5.5/16~10 | 1.25~5.5/16~10 | | | 1.25~5.5/16~10 | | up to 1.75/15 | |

Control coil characteristics



| Frame size | | 18AF | 22AF | 40AF | 65AF | 100AF | 150AF | |
|--------------------------|----------------------|--------------------------------------------------------------------------------|-----------|-----------|-----------|-------------|------------------|--|
| Type | | MC-6a | MC-9b | MC-32a | MC-50a | MC-75a | MC-130a | |
| | | MC-9a | MC-12b | MC-40a | MC-65a | MC-85a | MC-150a | |
| | | MC-12a | MC-18b | | | MC-100a | | |
| | | MC-18a | MC-22b | | | | | |
| AC coil | | | | | | | | |
| Control voltage | [Uc] | 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V | | | | | 24, 48, 110, | |
| | 50Hz [V] | | | | | | 220, 300, | |
| | 60Hz [V] | 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V | | | | | 400, 500 | |
| | 50/60Hz [V] | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V | | | | | | |
| Voltage limit | [Uc] | | | | | | | |
| | Pick-up | 85 ~ 110% (50Hz) | | | | | | |
| | Drop-out | 85 ~ 110% (60Hz) | | | | | | |
| Coil consumption at 20°C | | 30 ~ 60% | | | | | | |
| | AC 220V Inrush [VA] | 58/56 | 58/56 | 53/50 | 110/104 | 229/216 | 108/104 | |
| | 50/60Hz Holding [VA] | 9.0/6.0 | 9.0/6.0 | 12.0/9.0 | 13.0/10.0 | 17.0/13.0 | 18.0/21.0 | |
| | Heat dissipation [W] | 2.1/1.5 | 2.1/1.5 | 2.7/2.2 | 2.8/2.4 | 5.4/4.7 | 2.7/3.6 | |
| Operating time | Closing [ms] | 12 ... 22 | 12 ... 22 | 12 ... 22 | 12 ... 22 | 15 ... 30 | 20 ... 40 | |
| | Opening [ms] | 4 ... 19 | 4 ... 19 | 4 ... 19 | 4 ... 19 | 10 ... 30 | 60 ... 70 | |
| DC coil | | | | | | | | |
| Control voltage | [Uc] | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250 | | | | | 24, 48, 110, 220 | |
| Voltage limit | [Uc] | | | | | | | |
| | Pick-up | 70 ~ 110% | | | | | | |
| Coil consumption at 20°C | | 10 ~ 30% | | | | | | |
| | DC 110V Inrush [W] | 9 | 9 | 7 | 9 | 18 | 213 | |
| | Holding [W] | 9 | 9 | 7 | 9 | 18 | 7.5 | |
| Time constant (L/R) | [ms] | 28 | 28 | 28 | 65 | 75 | | |
| Operating time | Closing [ms] | 35 ... 50 | 35 ... 50 | 50 ... 65 | 50 ... 65 | 100 ... 120 | 70 ... 80 | |
| | Opening [ms] | 4 ... 19 | 4 ... 19 | 4 ... 19 | 4 ... 19 | 10 ... 25 | 60 ... 70 | |

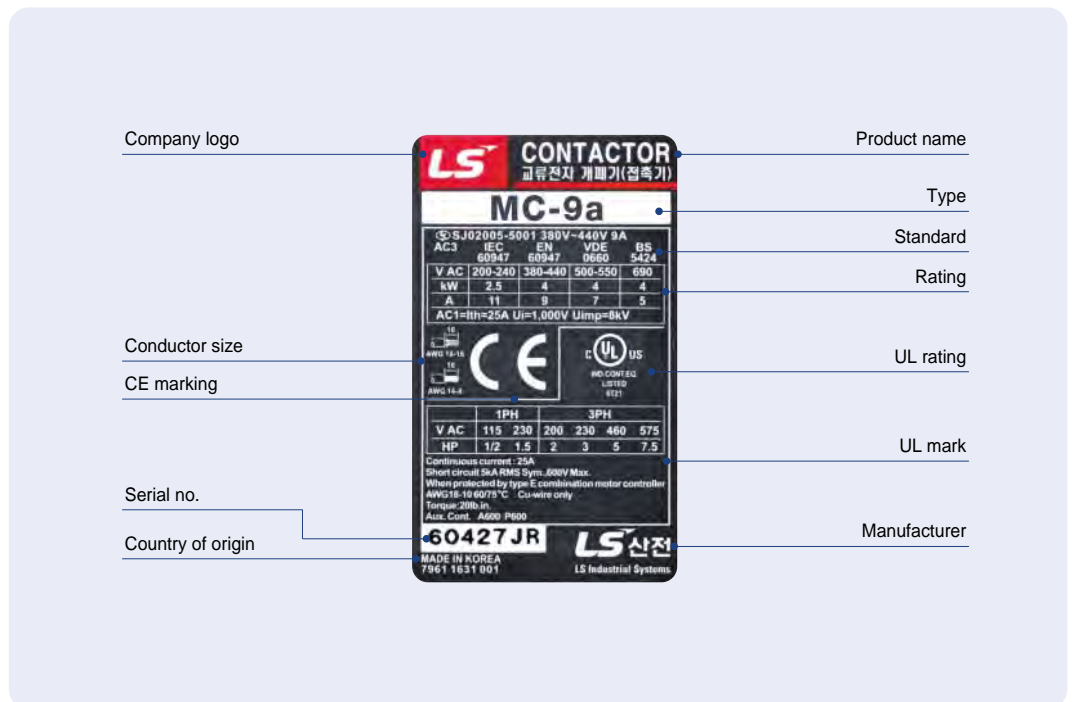
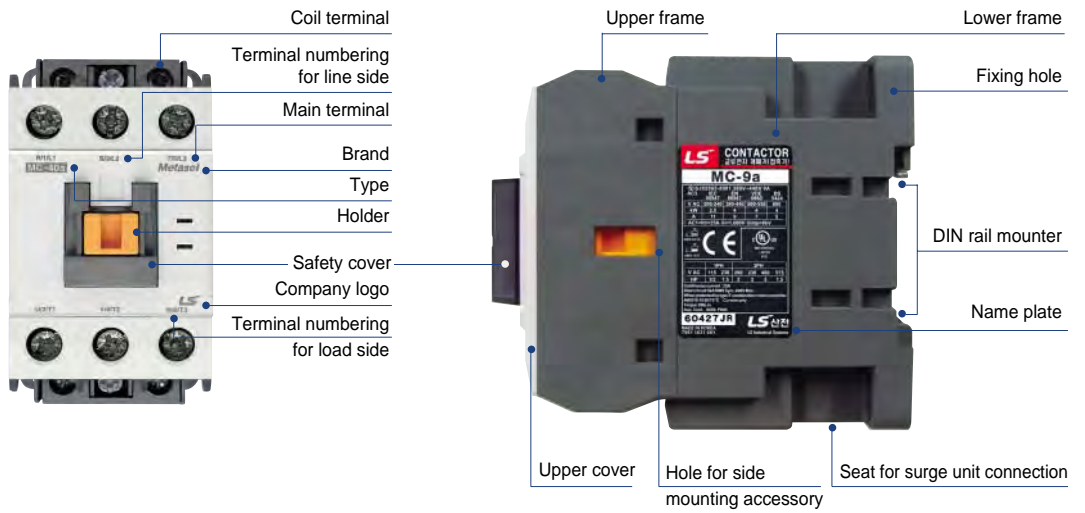


Note) A1(A2) in line side is internally connected to A1(A2) in load side.

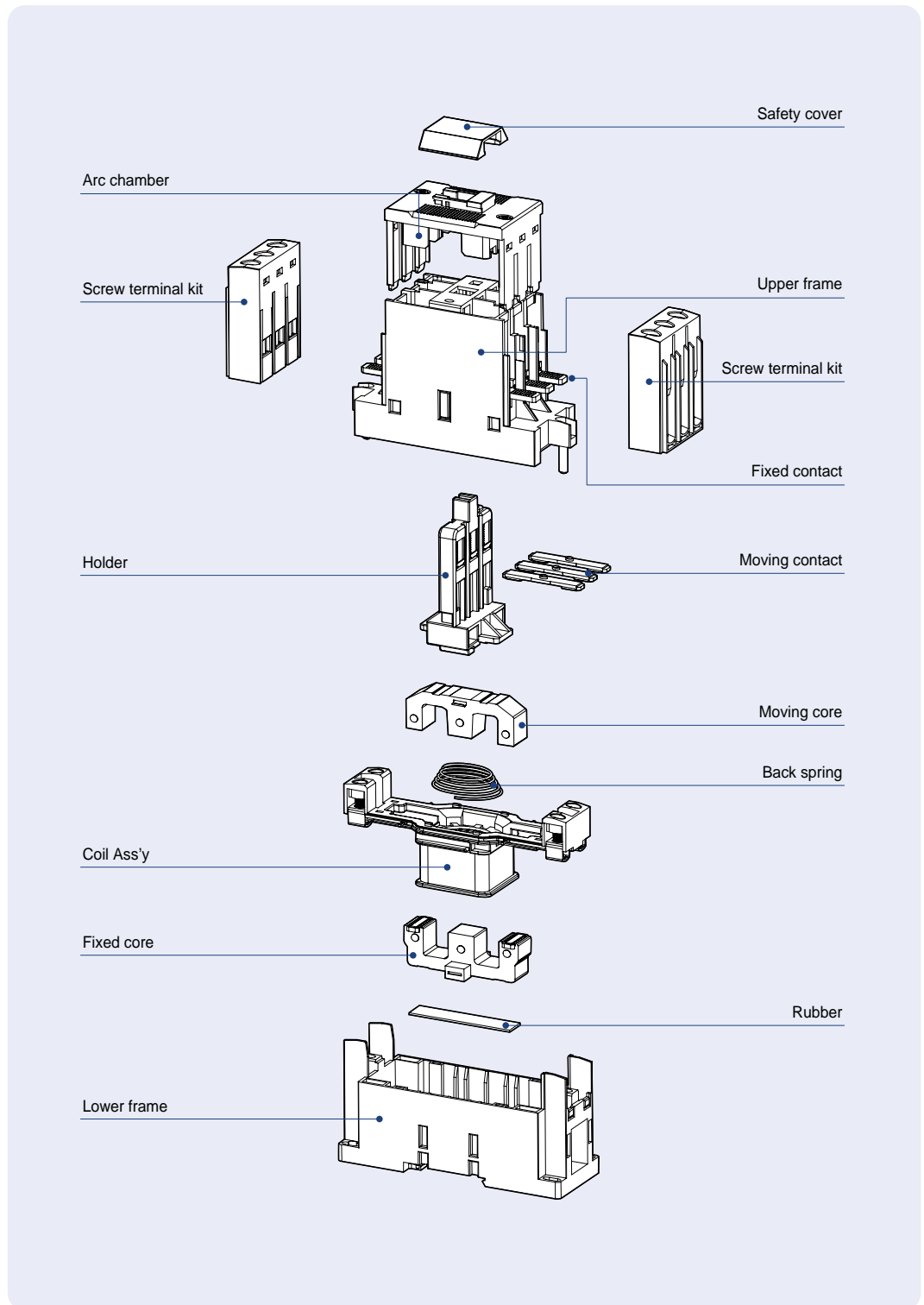


| Frame size | 225AF | 400AF | 800AF |
|--------------------------|--------------------|-------------------------------|-------------------------------|
| Type | MC-185a MC-225a | MC-265a MC-330a MC-400a | MC-500a MC-630a MC-800a |
| AC/DC common coil | | | |
| Control voltage [Uc] | | | |
| AC/DC | 24/24 | - | - |
| AC/DC | 48/48 | - | 100/100 |
| AC/DC | 100~240/100~220 | 100~240/100~220 | 200/200 |
| AC | 300 | 300 | 300 |
| AC | 400 | 400 | 400 |
| AC | 500 | 500 | 500 |
| Voltage limit [Uc] | | | |
| Pick-up | | 86~110% | |
| Drop-out | | 30~60% | |
| Coil consumption at 20°C | | | |
| AC 220V Inrush [VA] | 380 | 571 | 1000 |
| 50/60Hz Holding [VA] | 11.6 | 14 | 29 |
| Heat dissipation [W] | 4.7 | 5 | 7.8 |
| Operating time | | | |
| Closing [ms] | 70 | 55 | 75 |
| Opening [ms] | 70 | 55 | 75 |

Marking



Internal structure



Contactors (18AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 1NO or 1NC Auxiliary contact built-in as standard.

Rating

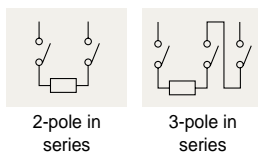


MC-18a

| Contactor type | | | MC-6a | | MC-9a | | MC-12a | | MC-18a | | |
|-----------------------------------|----------------------------------|-----------------|----------------------|----|-------|----|--------|----|--------|----|----|
| | | | kW | A | kW | A | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 2.2 | 9 | 2.5 | 11 | 3.5 | 13 | 4.5 | 18 | |
| | | 380/440V | 3 | 7 | 4 | 9 | 5.5 | 12 | 7.5 | 18 | |
| | | 500/550V | 3 | 6 | 4 | 7 | 7.5 | 12 | 7.5 | 13 | |
| | | 690V | 3 | 4 | 4 | 5 | 7.5 | 9 | 7.5 | 9 | |
| | AC4 | 200/240V | 1.5 | 7 | 1.5 | 8 | 2.2 | 11 | 3.7 | 16 | |
| | | 380/440V | 2.2 | 5 | 2.2 | 6 | 4 | 9 | 4 | 11 | |
| AC1 | | - | 25 | - | 25 | - | 25 | - | 32 | | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 18 | - | 18 | - | 18 | - | 18 | |
| | | in series | 48V | - | 17 | - | 17 | - | 17 | - | 17 |
| | | 110V | - | 12 | - | 12 | - | 12 | - | 12 | |
| | 3-pole | 24V | - | 20 | - | 20 | - | 20 | - | 20 | |
| | | in series | 48V | - | 20 | - | 20 | - | 20 | - | 20 |
| | | 110V | - | 15 | - | 15 | - | 15 | - | 15 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 15 | - | 15 | - | 15 | - | 15 | |
| | | in series | 48V | - | 12 | - | 12 | - | 12 | - | 12 |
| | | 110V | - | 8 | - | 8 | - | 8 | - | 8 | |
| | 3-pole | 24V | - | 18 | - | 18 | - | 18 | - | 18 | |
| | | in series | 48V | - | 15 | - | 15 | - | 15 | - | 15 |
| | | 110V | - | 12 | - | 12 | - | 12 | - | 12 | |
| Directly mountable Overload relay | | | MT-12 | | | | | | | | |
| Conductor size (solid, stranded) | AWG | | 18~10 | | 16~10 | | 16~8 | | 14~8 | | |
| | (the max. number of conducts: 2) | mm ² | 1~4 | | 1.5~4 | | 1.5~10 | | 2.5~10 | | |
| Conductor type | | | 65/75°C Cu-wire only | | | | | | | | |



Coil voltage

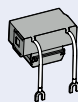


| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

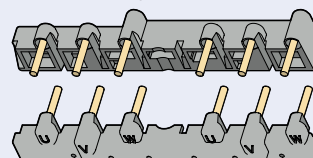
Certification

- CE(IEC)
- UL508

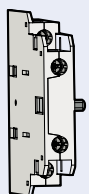
Accessories



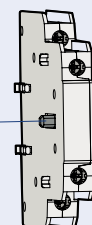
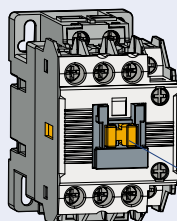
Surge unit, US
connecting to coil terminals
▶ 54 page



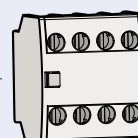
Wire kit, UW
for use with Interlock unit
▶ 50 page



Auxiliary contact unit, UA1
side mount, 1NO+1NC
▶ 48 page



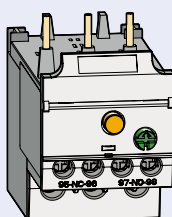
Interlock unit, UR
side mount
▶ 52 page



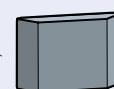
Auxiliary contact unit, AU-4
front mount, 4P
▶ 46 page



Auxiliary contact unit, AU-2
front mount, 2P
▶ 46 page



Overload relay, MT
directly mountable to MC type
contactor
▶ 60 page



Safety cover, A7
▶ 56 page

Contactors (22AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 1NO or 1NC Auxiliary contact built-in as standard.



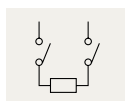
MC-22b

Rating

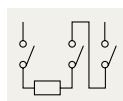
| Contactor type | | | MC-9b | | MC-12b | | MC-18b | | MC-22b | | |
|-----------------------------------|----------------------------------|-----------------|----------------------|----|--------|----|--------|----|--------|----|----|
| | | | kW | A | kW | A | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 2.5 | 11 | 3.5 | 13 | 4.5 | 18 | 5.5 | 22 | |
| | | 380/440V | 4 | 9 | 5.5 | 12 | 7.5 | 18 | 11 | 22 | |
| | | 500/550V | 4 | 7 | 7.5 | 12 | 7.5 | 13 | 15 | 20 | |
| | | 690V | 4 | 5 | 7.5 | 9 | 7.5 | 9 | 15 | 18 | |
| | AC4 | 200/240V | 1.5 | 8 | 2.2 | 11 | 3.7 | 16 | 3.7 | 18 | |
| | | 380/440V | 2.2 | 6 | 4 | 9 | 4 | 11 | 5.5 | 13 | |
| | AC1 | | - | 25 | - | 25 | - | 32 | - | 40 | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 18 | - | 18 | - | 18 | - | 32 | |
| | | in series | 48V | - | 17 | - | 17 | - | 17 | - | 30 |
| | | 110V | - | 12 | - | 12 | - | 12 | - | 23 | |
| | 3-pole | 24V | - | 20 | - | 20 | - | 20 | - | 32 | |
| | | in series | 48V | - | 20 | - | 20 | - | 20 | - | 32 |
| | | 110V | - | 15 | - | 15 | - | 15 | - | 27 | |
| DC 2,4 duty (L/R=15ms) | 2-pole | 24V | - | 15 | - | 15 | - | 15 | - | 25 | |
| | | in series | 48V | - | 12 | - | 12 | - | 12 | - | 20 |
| | | 110V | - | 8 | - | 8 | - | 8 | - | 15 | |
| | 3-pole | 24V | - | 18 | - | 18 | - | 18 | - | 30 | |
| | | in series | 48V | - | 15 | - | 15 | - | 15 | - | 30 |
| | | 110V | - | 12 | - | 12 | - | 12 | - | 20 | |
| Directly mountable Overload relay | | | MT-32 | | | | | | | | |
| Conductor size (solid, stranded) | AWG | | 16~10 | | 16~8 | | 14~8 | | 14~8 | | |
| | (the max. number of conducts: 2) | mm ² | 1.5~4 | | 1.5~10 | | 2.5~10 | | 2.5~10 | | |
| Conductor type | | | 65/75°C Cu-wire only | | | | | | | | |



Coil voltage



2-pole in series



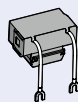
3-pole in series

| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

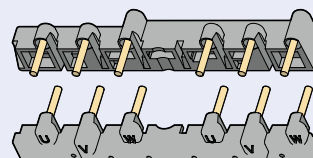
Certification

- CE(IEC)
- UL508

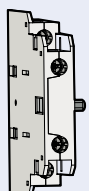
Accessories



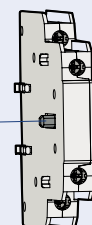
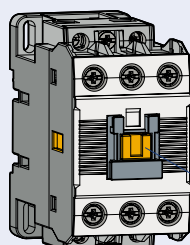
Surge unit, US
connecting to coil terminals
▶ 54 page



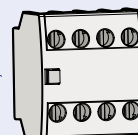
Wire kit, UW
for use with Interlock unit
▶ 52 page



Auxiliary contact unit, UA1
side mount, 1NO+1NC
▶ 48 page



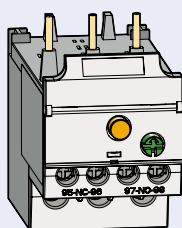
Interlock unit, UR
side mount
▶ 52 page



Auxiliary contact unit, AU-4
front mount, 4P
▶ 48 page



Auxiliary contact unit, AU-2
front mount, 2P
▶ 48 page



Overload relay, MT
directly mountable to MC type
contactor
▶ 61 page



Safety cover, A7
▶ 57 page

Contactors (40AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating



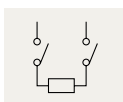
MC-40a

Rating

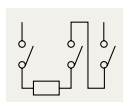
| Contactor type | | | MC-32a | | MC-40a | | |
|----------------------------------------------------------------------|--------|-----------------|----------------------|----|--------|----|----|
| | | | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 7.5 | 32 | 11 | 40 | |
| | | 380/440V | 15 | 32 | 18.5 | 40 | |
| | | 500/550V | 18.5 | 28 | 22 | 32 | |
| | | 690V | 18.5 | 20 | 22 | 23 | |
| | AC4 | 200/240V | 4.5 | 20 | 5.5 | 25 | |
| | | 380/440V | 7.5 | 17 | 11 | 24 | |
| | AC1 | | - | 50 | - | 60 | |
| DC1 (L/R=1ms) | 2-pole | 24V | - | 32 | - | 55 | |
| | | in series | 48V | - | 30 | - | 55 |
| | | 110V | - | 25 | - | 40 | |
| | 3-pole | 24V | - | 32 | - | 55 | |
| | | in series | 48V | - | 32 | - | 55 |
| | | 110V | - | 27 | - | 45 | |
| DC2,4 (L/R=15ms) | 2-pole | 24V | - | 25 | - | 30 | |
| | | in series | 48V | - | 20 | - | 25 |
| | | 110V | - | 15 | - | 20 | |
| | 3-pole | 24V | - | 30 | - | 45 | |
| | | in series | 48V | - | 30 | - | 40 |
| | | 110V | - | 20 | - | 30 | |
| Directly mountable Overload relay | | | MT-32 | | | | |
| Conductor size (solid, stranded) (the max. number of conducts: 2) | | AWG | 12~8 | | 10~6 | | |
| | | mm ² | 2.5~10 | | 4~16 | | |
| Conductor type | | | 65/75°C Cu-wire only | | | | |



Coil voltage



2-pole in series



3-pole in series

| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

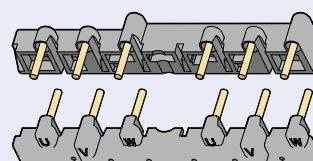
Certification

- CE(IEC)
- UL508

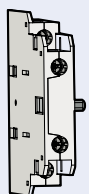
Accessories



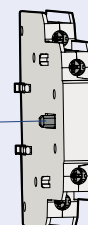
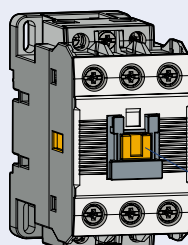
Surge unit, US
connecting to coil terminals
▶ 54 page



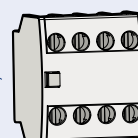
Wire kit, UW
for use with Interlock unit
▶ 52 page



Auxiliary contact unit, UA1
side mount, 1NO+1NC
▶ 48 page



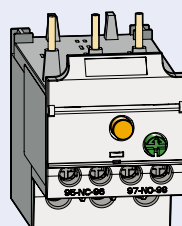
Interlock unit, UR
side mount
▶ 52 page



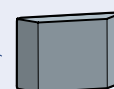
Auxiliary contact unit, AU-4
front mount, 4P
▶ 48 page



Auxiliary contact unit, AU-2
front mount, 2P
▶ 48 page



Overload relay, MT
directly mountable to MC type
contactor
▶ 61 page



Safety cover, A7
▶ 57 page

Contactors (65AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating

Rating



MC-65a

| Contactor type | | | MC-50a | | MC-65a | | |
|----------------------------------------------------------------------|-----------------|-----------|----------------------|----|--------|-----|----|
| | | | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 15 | 55 | 18.5 | 65 | |
| | | 380/440V | 22 | 50 | 30 | 65 | |
| | | 500/550V | 30 | 43 | 33 | 60 | |
| | | 690V | 30 | 28 | 33 | 35 | |
| | AC4 | 200/240V | 7.5 | 35 | 11 | 50 | |
| | | 380/440V | 15 | 32 | 22 | 47 | |
| | AC1 | | - | 70 | - | 100 | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 70 | - | 90 | |
| | | in series | 48V | - | 70 | - | 90 |
| | | 110V | - | 50 | - | 75 | |
| | 3-pole | 24V | - | 70 | - | 90 | |
| | | in series | 48V | - | 70 | - | 90 |
| | | 110V | - | 60 | - | 80 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 45 | - | 55 | |
| | | in series | 48V | - | 40 | - | 45 |
| | | 110V | - | 25 | - | 38 | |
| | 3-pole | 24V | - | 55 | - | 75 | |
| | | in series | 48V | - | 50 | - | 65 |
| | | 110V | - | 35 | - | 55 | |
| Directly mountable Overload relay | | | MT-63 | | | | |
| Conductor size (solid, stranded) (the max. number of conducts: 2) | AWG | | 10~4 | | 8~3 | | |
| | mm ² | | 6~25 | | 10~35 | | |
| Conductor type | | | 65/75°C Cu-wire only | | | | |



Coil voltage

| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

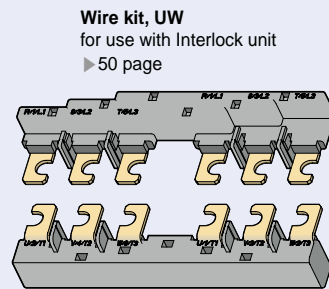
Certification

- CE(IEC)
- UL508

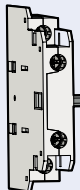
Accessories



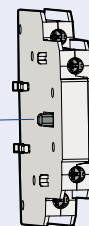
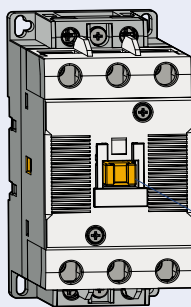
Surge unit, US
connecting to coil terminals
▶ 54 page



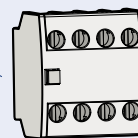
Wire kit, UW
for use with Interlock unit
▶ 50 page



Auxiliary contact unit, UA1
side mount, 1NO+1NC
▶ 48 page



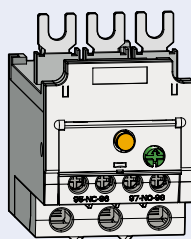
Interlock unit, UR
side mount
▶ 52 page



Auxiliary contact unit, AU-4
front mount, 4P
▶ 48 page



Auxiliary contact unit, AU-2
front mount, 2P
▶ 48 page



Overload relay, MT
directly mountable to MC type
contactor
▶ 61 page



Safety cover, A7
▶ 57 page

Contactors (100AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating



MC-100a

Rating

| Contactor type | | | MC-75a | | MC-85a | | MC-100a | | |
|-----------------------------------|----------------------------------|-----------------|----------------------|-----|--------|-----|---------|-----|-----|
| | | | kW | A | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 22 | 75 | 25 | 85 | 30 | 105 | |
| | | 380/440V | 37 | 75 | 45 | 85 | 55 | 105 | |
| | | 500/550 V | 37 | 64 | 45 | 75 | 55 | 85 | |
| | | 690V | 37 | 42 | 45 | 45 | 45 | 65 | |
| | AC4 | 200/240V | 13 | 55 | 15 | 65 | 19 | 80 | |
| | | 380/440V | 25 | 52 | 30 | 62 | 37 | 75 | |
| | AC1 | | - | 110 | - | 135 | - | 160 | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 90 | - | 100 | - | 100 | |
| | | in series | 48V | - | 90 | - | 100 | - | 100 |
| | | 110V | - | 75 | - | 80 | - | 80 | |
| | 3-pole | 24V | - | 90 | - | 100 | - | 100 | |
| | | in series | 48V | - | 90 | - | 100 | - | 100 |
| | | 110V | - | 80 | - | 85 | - | 85 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 55 | - | 60 | - | 60 | |
| | | in series | 48V | - | 45 | - | 50 | - | 50 |
| | | 110V | - | 38 | - | 40 | - | 40 | |
| | 3-pole | 24V | - | 75 | - | 80 | - | 80 | |
| | | in series | 48V | - | 65 | - | 70 | - | 70 |
| | | 110V | - | 55 | - | 60 | - | 60 | |
| Directly mountable Overload relay | | | MT-95 | | | | | | |
| Conductor size (solid, stranded) | AWG | | 8-2 | | 8-00 | | 8-0 | | |
| | (the max. number of conducts: 2) | mm ² | 10-35 | | 10-50 | | 10-70 | | |
| Conductor type | | | 65/75°C Cu-wire only | | | | | | |



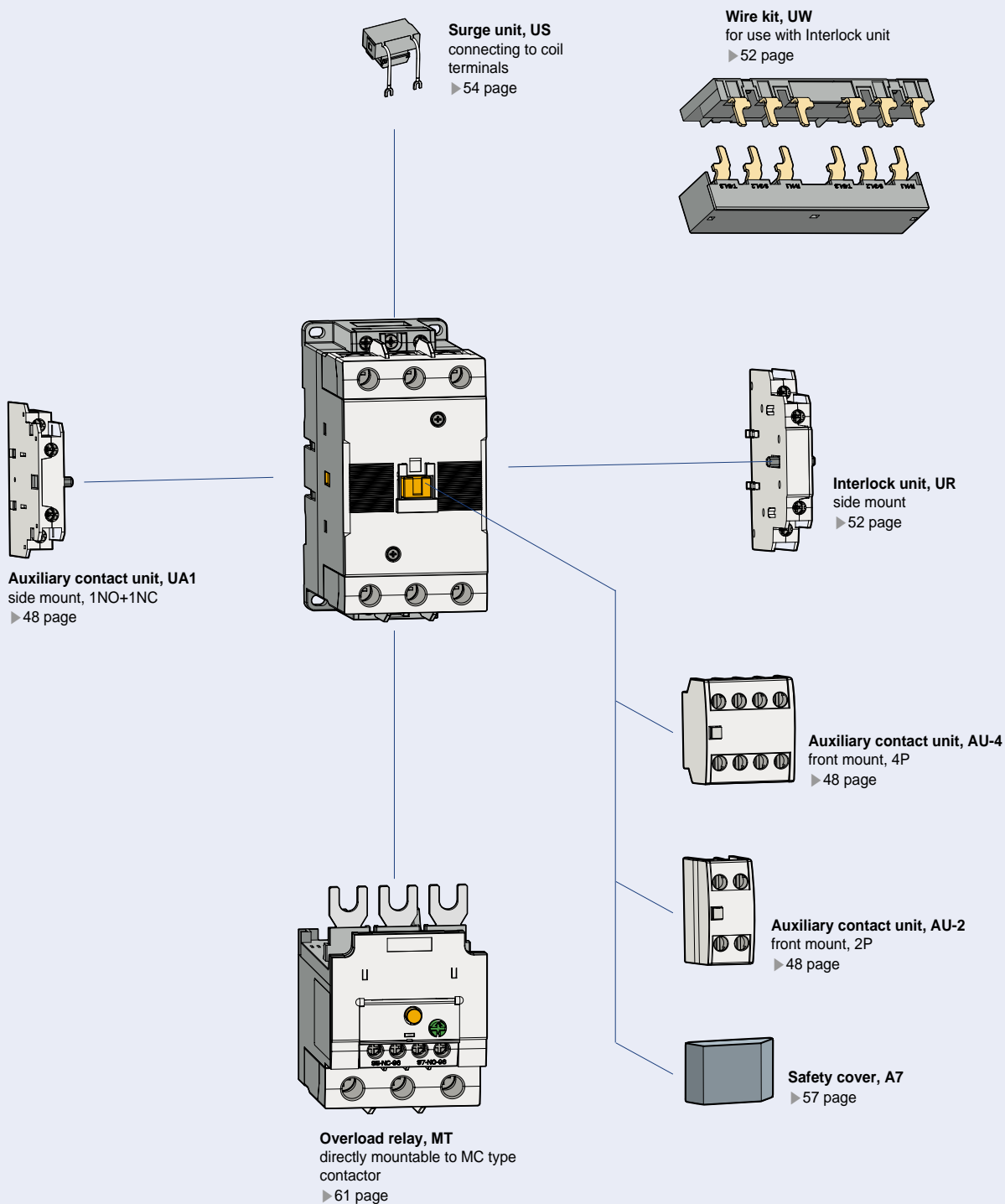
Coil voltage

| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

Certification

- CE(IEC)
- UL508

Accessories



Contactors (150AF)

Description

- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in the same physical size
- Front/side mountable accessories available
- Direct mountable overload relay available

Rating



MC-150a

| Contactor type | | | MC-130a | | MC-150a | |
|----------------------------------------------------------------------|-----------------|-----------|----------------------|-----|---------|-----|
| | | | kW | A | kW | A |
| AC duty | AC3 | 200/240V | 37 | 130 | 45 | 150 |
| | | 380/440V | 60 | 130 | 75 | 150 |
| | | 500/550V | 60 | 90 | 70 | 100 |
| | | 690V | 55 | 60 | 55 | 60 |
| | AC4 | 200/240V | 22 | 93 | 30 | 120 |
| | | 380/440V | 45 | 90 | 55 | 110 |
| | AC1 | | - | 160 | - | 210 |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 120 | - | 150 |
| | | in series | 48V | - | 100 | - |
| | | 110V | - | 80 | - | 100 |
| | 3-pole | 24V | - | 120 | - | 150 |
| | | in series | 48V | - | 120 | - |
| | | 110V | - | 100 | - | 150 |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 120 | - | 150 |
| | | in series | 48V | - | 60 | - |
| | | 110V | - | 40 | - | 80 |
| | 3-pole | 24V | - | 120 | - | 150 |
| | | in series | 48V | - | 90 | - |
| | | 110V | - | 80 | - | 120 |
| Directly mountable Overload relay | | | MT-150 | | | |
| Conductor size (solid, stranded) (the max. number of conducts: 2) | AWG | | 3-00 | | 3-00 | |
| | mm ² | | 35-70 | | 35-95 | |
| Conductor type | | | 65/75°C Cu-wire only | | | |



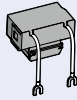
Coil voltage

| | | |
|----|---------|----------------------------------|
| AC | 50/60Hz | 24, 48, 110, 220, 300, 400, 500V |
| DC | DC | 24, 48, 110, 220V |

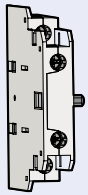
Certification

- CE(IEC)
- UL508

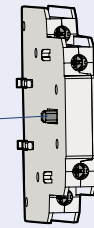
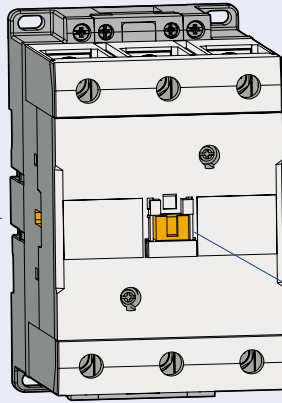
Accessories



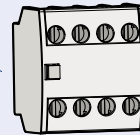
Surge unit, US
connecting to coil terminals
▶ 54 page



Auxiliary contact unit, UA1
side mount, 1NO+1NC
▶ 48 page



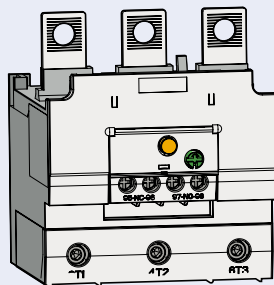
Interlock unit, UR
side mount
▶ 52 page



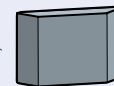
Auxiliary contact unit, AU-4
front mount, 4P
▶ 48 page



Auxiliary contact unit, AU-2
front mount, 2P
▶ 48 page



Overload relay, MT
directly mountable to MC type
contactor
▶ 62 page



Safety cover, A7
▶ 57 page

Contactors (225AF)

Description

- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Direct mountable overload relays available



MC-225a

Rating

| Contactor type | | | MC-185a | | MC-225a | | |
|----------------------------------------------------------------------|-----------------|-----------|-----------------------|-----|---------|-----|-----|
| | | | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 55 | 185 | 75 | 225 | |
| | | 380/440V | 90 | 185 | 132 | 225 | |
| | | 500/550V | 110 | 180 | 132 | 200 | |
| | | 690V | 110 | 120 | 140 | 150 | |
| | AC4 | 200/240V | 37 | 150 | 45 | 180 | |
| | | 380/440V | 75 | 150 | 90 | 180 | |
| AC1 | | - | 230 | - | 275 | | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 180 | - | 220 | |
| | | in series | 48V | - | 180 | - | 180 |
| | | 110V | - | 150 | - | 150 | |
| | 3-pole | 24V | - | 180 | - | 220 | |
| | | in series | 48V | - | 180 | - | 220 |
| | | 110V | - | 180 | - | 220 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 180 | - | 220 | |
| | | in series | 48V | - | 150 | - | 150 |
| | | 110V | - | 120 | - | 120 | |
| | 3-pole | 24V | - | 180 | - | 220 | |
| | | in series | 48V | - | 180 | - | 220 |
| | | 110V | - | 150 | - | 150 | |
| Directly mountable Overload relay | | | MT-225 | | | | |
| Conductor size (solid, stranded) (the max. number of conducts: 2) | AWG | | 1~410 | | 110~300 | | |
| | mm ² | | 50~95 | | 50~150 | | |
| Conductor type | | | 75°C Cu stranded wire | | | | |



Coil voltage, AC/DC common

| Nominal(ordering) voltage | AC 50/60Hz | DC |
|---------------------------|------------|------------|
| 24V | 24 - 25V | 24V |
| 48V | 48 - 50V | 48V |
| 100/200V | 100 - 240V | 100 - 220V |
| 300V | 265 - 347V | - |
| 400V | 380 - 450V | - |
| 500V | 440 - 575V | - |

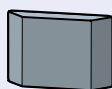
Certification

- CE(IEC)
- UL508

Accessories



AD-100
Delayed opening device
▶ 51 page



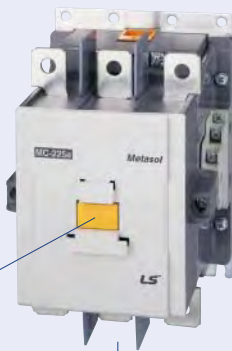
Safety cover, A7
▶ 57 page



AP-220
Terminal cover
▶ 51 page



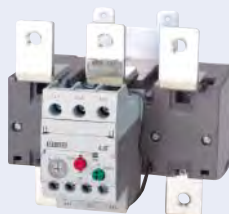
AI-225
Insulation barrier
▶ 51 page



AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC
▶ 49 page



AR-180
Interlock unit
side mount
▶ 53 page



MT-225
Overload relay
directly mountable to the contactor
Current range 65-240A
▶ 63 page

Contactors (400AF)

Description

- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Direct mountable overload relays available



MC-400a

Rating

| Contactor type | | | MC-265a | | MC-330a | | MC-400a | | |
|-----------------------------------|----------------------------------|-----------------|-----------------------|-----|---------|-----|---------|-----|-----|
| | | | kW | A | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 80 | 265 | 90 | 330 | 125 | 400 | |
| | | 380/440V | 147 | 265 | 160 | 330 | 200 | 400 | |
| | | 500/550V | 147 | 225 | 160 | 280 | 225 | 350 | |
| | | 690V | 160 | 185 | 200 | 225 | 250 | 300 | |
| | AC4 | 200/240V | 50 | 200 | 55 | 220 | 75 | 300 | |
| | | 380/440V | 102 | 200 | 110 | 220 | 150 | 300 | |
| AC1 | | - | 300 | - | 350 | - | 450 | | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 220 | - | 300 | - | 400 | |
| | | in series | 48V | - | 180 | - | 240 | - | 240 |
| | | 110V | - | 150 | - | 200 | - | 200 | |
| | 3-pole | 24V | - | 220 | - | 300 | - | 400 | |
| | | in series | 48V | - | 220 | - | 300 | - | 400 |
| | | 110V | - | 220 | - | 300 | - | 400 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 220 | - | 300 | - | 400 | |
| | | in series | 48V | - | 150 | - | 200 | - | 200 |
| | | 110V | - | 120 | - | 150 | - | 150 | |
| | 3-pole | 24V | - | 220 | - | 300 | - | 400 | |
| | | in series | 48V | - | 220 | - | 280 | - | 280 |
| | | 110V | - | 150 | - | 200 | - | 200 | |
| Directly mountable Overload relay | | | MT-400 | | | | | | |
| Conductor size (solid, stranded) | AWG | | 310~500 | | 410~500 | | 350~700 | | |
| | (the max. number of conducts: 2) | mm ² | 95~240 | | 95~240 | | 185~370 | | |
| Conductor type | | | 75°C Cu stranded wire | | | | | | |



Coil voltage, AC/DC common

| Nominal(ordering) voltage | AC 50/60Hz | DC |
|---------------------------|------------|------------|
| 100/200V | 100 - 240V | 100 - 220V |
| 300V | 265 - 347V | - |
| 400V | 380 - 450V | - |
| 500V | 440 - 575V | - |

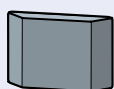
Certification

- CE(IEC)
- UL508

Accessories



AD-300
Delayed opening device
▶ 51 page



Safety cover, A7
▶ 57 page



AP-400
Terminal cover
▶ 51 page



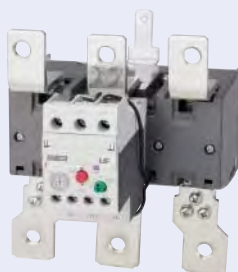
AI-400
Insulation barrier
▶ 51 page



AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC
▶ 49 page



AR-180
Interlock unit
side mount
▶ 53 page



MT-400
Overload relay
directly mountable to the contactor
Current range 85–400A
▶ 63 page

Contactors (800AF)

Description

- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Overload relays available



Rating

| Contactor type | | | MC-500a | | MC-630a | | MC-800a | | |
|-----------------------------------|-----------------|----------------------------------|-----------------------|-----|----------|-----|-------------|-----|-----|
| | | | kW | A | kW | A | kW | A | |
| AC duty | AC3 | 200/240V | 147 | 500 | 190 | 630 | 220 | 800 | |
| | | 380/440V | 265 | 500 | 330 | 630 | 440 | 800 | |
| | | 500/550V | 265 | 400 | 330 | 500 | 500 | 720 | |
| | | 690V | 300 | 380 | 400 | 420 | 500 | 630 | |
| | AC4 | 200/240V | 90 | 350 | 110 | 400 | 160 | 630 | |
| | | 380/440V | 176 | 350 | 200 | 400 | 300 | 630 | |
| AC1 | | - | 580 | - | 660 | - | 900 | | |
| DC1 duty (L/R=1ms) | 2-pole | 24V | - | 400 | - | 630 | - | 800 | |
| | | in series | 48V | - | 240 | - | 630 | - | 800 |
| | | 110V | - | 200 | - | 630 | - | 630 | |
| | 3-pole | 24V | - | 400 | - | 630 | - | 800 | |
| | | in series | 48V | - | 400 | - | 630 | - | 800 |
| | | 110V | - | 400 | - | 630 | - | 800 | |
| DC2, 4 duty (L/R=15ms) | 2-pole | 24V | - | 400 | - | 630 | - | 800 | |
| | | in series | 48V | - | 200 | - | 630 | - | 630 |
| | | 110V | - | 150 | - | 630 | - | 630 | |
| | 3-pole | 24V | - | 400 | - | 630 | - | 800 | |
| | | in series | 48V | - | 280 | - | 630 | - | 630 |
| | | 110V | - | 200 | - | 630 | - | 630 | |
| Directly mountable Overload relay | | | MT-800 | | | | | | |
| Conductor size (solid, stranded) | AWG | | 350~800 | | 600~2000 | | 1700~Busbar | | |
| | mm ² | (the max. number of conducts: 2) | 185~480 | | - | | - | | |
| Conductor type | | | 75°C Cu stranded wire | | | | | | |



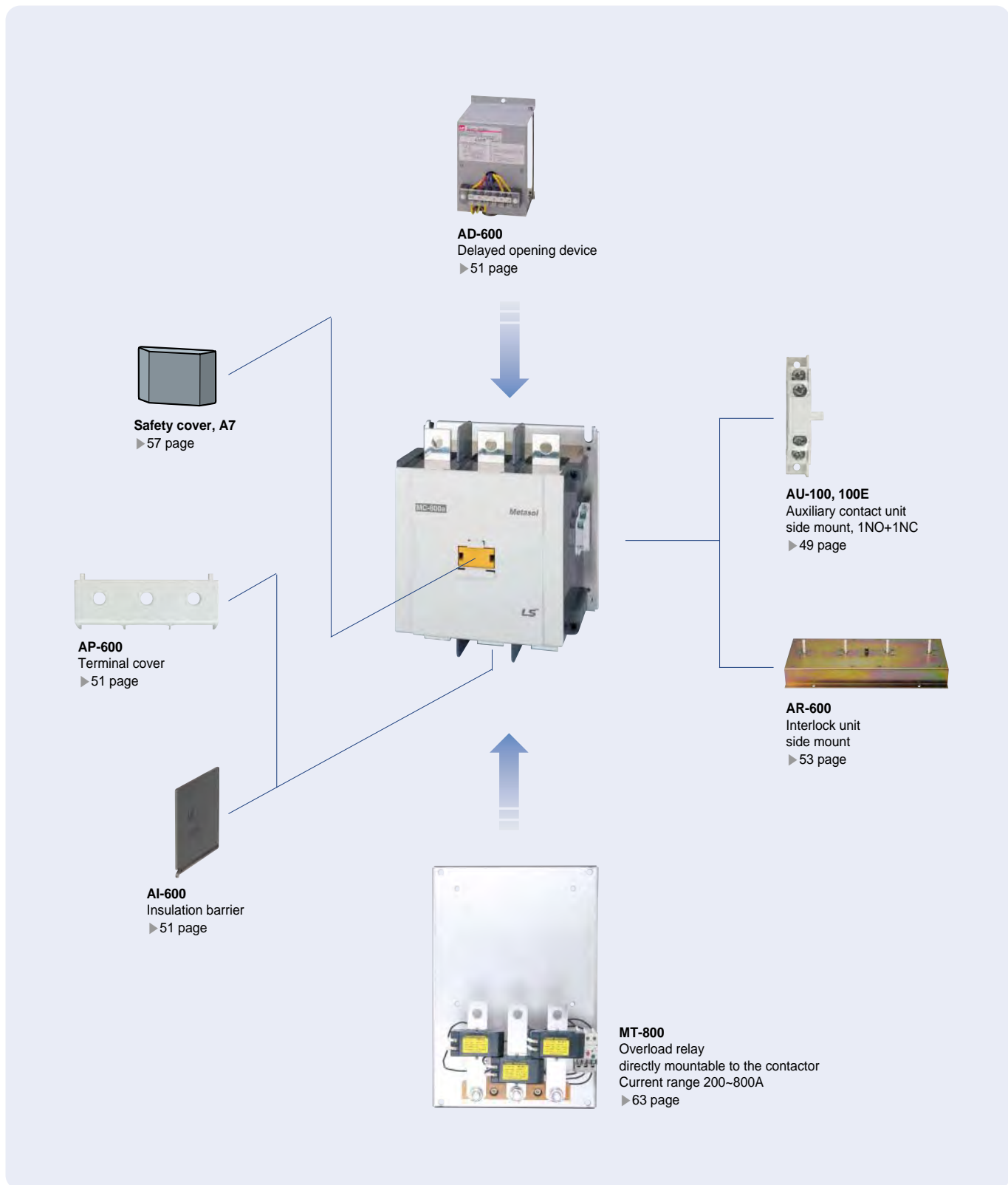
Coil voltage, AC/DC common

| Nominal(ordering) voltage | AC 50/60Hz | DC |
|---------------------------|------------|------------|
| 100V | 100 - 127V | 100 - 110V |
| 200V | 200 - 240V | 200 - 220V |
| 300V | 265 - 347V | - |
| 400V | 380 - 450V | - |
| 500V | 440 - 575V | - |

Certification

- CE(IEC)
- UL508

Accessories



Motor starters

Description

- Opened direct motor starter
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control contactor selectable
- Front/side mountable accessories available
- Overload relay is directly mounted to the contactor



Rating

| Starter type | 18AF | | | | 22AF | | | |
|-----------------------------------------------------------------|------------|-------|--------|--------|------------|--------|--------|--------|
| | MS-6a | MS-9a | MS-12a | MS-18a | MS-9b | MS-12b | MS-18b | MS-22b |
| Number of poles | 3 | | | | 3 | | | |
| Rated operational voltage (Ue) | Up to 690V | | | | Up to 690V | | | |
| Degree of pollution (IEC60529) | IP20 | | | | IP20 | | | |
| Rated operational current Ie ($\theta \leq 40^\circ\text{C}$) | | | | | | | | |
| AC-1 Ue max 690V A | 25 | 25 | 25 | 32 | 25 | 25 | 32 | 40 |
| AC-3 200/240V A | 9 | 11 | 13 | 18 | 11 | 13 | 18 | 22 |
| 380/400V A | 7 | 9 | 12 | 18 | 9 | 12 | 18 | 22 |
| 415V A | 7 | 9 | 12 | 18 | 9 | 12 | 18 | 22 |
| 440V A | 7 | 9 | 12 | 18 | 9 | 12 | 18 | 22 |
| 500V A | 6 | 7 | 12 | 13 | 7 | 12 | 13 | 20 |
| 690V A | 4 | 5 | 9 | 9 | 6 | 9 | 9 | 18 |
| Rated operational power ($\theta \leq 40^\circ\text{C}$) | | | | | | | | |
| AC-3 200/240V kW | 2.2 | 2.5 | 3.5 | 4.5 | 2.5 | 3.5 | 4.5 | 5.5 |
| 380/400V kW | 3 | 4 | 5.5 | 7.5 | 4 | 5.5 | 7.5 | 11 |
| 415V kW | 3 | 4 | 5.5 | 7.5 | 4 | 5.5 | 7.5 | 11 |
| 440V kW | 3 | 4 | 5.5 | 7.5 | 4 | 5.5 | 7.5 | 11 |
| 500V kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 |
| 690V kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 |
| According to IEC60947-4-1 | | | | | | | | |
| Rated making capacity AC-3 | 70 | 90 | 120 | 180 | 90 | 120 | 180 | 220 |
| Rated breaking capacity AC-3 | 56 | 72 | 96 | 144 | 72 | 96 | 144 | 176 |
| Electrical life for Ie/AC-3 Max | | | | | | | | |
| in millions of operating cycles | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Maximum operating rate | | | | | | | | |
| in operating cycles per hour | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |

Devices usable in the starter combination

| Contactors | | 18AF | | | | 22AF | | | |
|-------------------------|---------------------------------------|----------|-------|--------|--------|----------|--------|--------|--------|
| | | MC-6a | MC-9a | MC-12a | MC-18a | MC-9b | MC-12b | MC-18b | MC-22b |
| | with AC or DC control coil | | | | | | | | |
| | with coil in common use for AC and DC | - | - | - | - | - | - | - | - |
| Thermal Overload Relays | | | | | | | | | |
| Class 10A | Differential type | MT-12/3K | | | | MT-32/3K | | | |
| | Non-differential type | MT-12/3H | | | | MT-32/3H | | | |
| | Non-differential type(2-heater) | MT-12/2H | | | | MT-32/2H | | | |
| Class 20 | Differential type | MT-12/3D | | | | MT-32/3D | | | |
| Setting range | A | 0.1~18A | | | | 0.1~40A | | | |



| 40AF | |
|------------|--------|
| MS-32a | MS-40a |
| 3 | |
| Up to 690V | |
| IP20 | |
| 50 | 60 |
| 32 | 40 |
| 32 | 40 |
| 32 | 40 |
| 32 | 40 |
| 28 | 32 |
| 20 | 23 |
| 7.5 | 11 |
| 15 | 18.5 |
| 15 | 18.5 |
| 15 | 18.5 |
| 18.5 | 22 |
| 18.5 | 22 |
| 320 | 400 |
| 256 | 320 |
| 2 | 2 |
| 1800 | 1800 |

| 65AF | |
|------------|--------|
| MS-50a | MS-65a |
| 3 | |
| Up to 690V | |
| IP20 | |
| 70 | 100 |
| 55 | 65 |
| 50 | 65 |
| 50 | 65 |
| 50 | 65 |
| 43 | 60 |
| 28 | 35 |
| 15 | 18.5 |
| 22 | 30 |
| 22 | 30 |
| 22 | 30 |
| 30 | 33 |
| 30 | 33 |
| 500 | 650 |
| 400 | 520 |
| 2 | 2 |
| 1800 | 1800 |

| 100AF | | |
|------------|--------|---------|
| MS-75a | MS-85a | MS-100a |
| 3 | | |
| Up to 690V | | |
| IP20 | | |
| 110 | 135 | 160 |
| 75 | 85 | 105 |
| 75 | 85 | 105 |
| 75 | 85 | 105 |
| 75 | 85 | 105 |
| 64 | 75 | 85 |
| 42 | 45 | 65 |
| 22 | 25 | 30 |
| 37 | 45 | 55 |
| 37 | 45 | 55 |
| 37 | 45 | 55 |
| 37 | 45 | 55 |
| 37 | 45 | 45 |
| 750 | 850 | 1050 |
| 600 | 650 | 840 |
| 2 | 2 | 2 |
| 1800 | 1800 | 1800 |

| MC-32a | MC-40a |
|----------|--------|
| - | - |
| MT-32/3K | |
| MT-32/3H | |
| MT-32/2H | |
| MT-32/3D | |
| 0.1~40A | |

| MC-50a | MC-65a |
|----------|--------|
| - | - |
| MT-63/3K | |
| MT-63/3H | |
| MT-63/2H | |
| MT-63/3D | |
| 4~65A | |

| MC-75a | MC-85a | MC-100a |
|----------|--------|---------|
| - | - | - |
| MT-95/3K | | |
| MT-95/3H | | |
| MT-95/2H | | |
| MT-95/3D | | |
| 7~100A | | |

Motor starters

Description

- Opened direct motor starter
- 3-pole(NO) main contacts
- Screw mountable
- AC/DC common use control contactor used (from 225AF)
- Additional accessories available
- Overload relay is directly mounted to the contactor



Rating

| Starter type | 150AF | | 225AF | |
|--------------------------------------------------------------------|------------|---------|------------|---------|
| | MS-130a | MS-150a | MS-185a | MS-225a |
| Number of poles | 3 | | 3 | |
| Rated operational voltage (Ue) | Up to 690V | | Up to 690V | |
| Degree of pollution (IEC60529) | IP20 | | IP20 | |
| Rated operational current Ie ($\theta \leq 40^\circ\text{C}$) | | | | |
| AC-1 Ue max 690V A | 160 | 210 | 230 | 275 |
| AC-3 200/240V A | 130 | 150 | 185 | 225 |
| 380/400V A | 130 | 150 | 185 | 225 |
| 415V A | 130 | 150 | 185 | 225 |
| 440V A | 130 | 150 | 185 | 225 |
| 500V A | 90 | 100 | 180 | 200 |
| 690V A | 60 | 60 | 120 | 150 |
| Rated operational power ($\theta \leq 40^\circ\text{C}$) | | | | |
| AC-3 200/240V kW | 37 | 45 | 55 | 75 |
| 380/400V kW | 60 | 75 | 90 | 132 |
| 415V kW | 60 | 75 | 90 | 132 |
| 440V kW | 60 | 75 | 90 | 132 |
| 500V kW | 60 | 70 | 110 | 132 |
| 690V kW | 55 | 55 | 110 | 140 |
| According to IEC60947-4-1 | | | | |
| Rated making capacity AC-3 | 1200 | 1500 | 1850 | 2250 |
| Rated breaking capacity AC-3 | 960 | 1200 | 1480 | 1800 |
| Electrical life for Ie/AC-3 Max in millions of operating cycles | 1 | 1 | 1 | 1 |
| Maximum operating rate in operating cycles per hour | 1200 | 1200 | 1200 | 1200 |

Devices usable in the starter combination

| Contactors | | 150AF | | 225AF | |
|---------------------------------------|---|-----------|---------|-----------|---------|
| | | MC-130a | MC-150a | MC-185a | MC-225a |
| with AC or DC control coil | | | | - | - |
| with coil in common use for AC and DC | | - | - | | |
| Thermal Overload Relays | | 150AF | | 225AF | |
| Class 10A Differential type | | MT-150/3K | | MT-225/3K | |
| Non-differential type | | MT-150/3H | | MT-225/3H | |
| Non-differential type(2-heater) | | MT-150/2H | | MT-225/2H | |
| Class 20 Differential type | | MT-150/3D | | MT-225/3D | |
| Setting range | A | 34-150A | | 65-240A | |



| 400AF | | |
|------------|---------|---------|
| MS-265a | MS-330a | MS-400a |
| 3 | | |
| Up to 690V | | |
| IP20 | | |
| 300 | 350 | 450 |
| 265 | 330 | 400 |
| 265 | 330 | 400 |
| 265 | 330 | 400 |
| 265 | 330 | 400 |
| 225 | 280 | 350 |
| 185 | 225 | 300 |
| 80 | 90 | 125 |
| 147 | 160 | 200 |
| 147 | 160 | 200 |
| 147 | 160 | 200 |
| 147 | 160 | 225 |
| 160 | 200 | 250 |
| 2650 | 3300 | 4000 |
| 2120 | 2640 | 3200 |
| 1 | 1 | 1 |
| 1200 | 1200 | 1200 |

| 800AF | | |
|------------|---------|---------|
| MS-500a | MS-630a | MS-800a |
| 3 | | |
| Up to 690V | | |
| IP20 | | |
| 580 | 660 | 900 |
| 500 | 630 | 800 |
| 500 | 630 | 800 |
| 500 | 630 | 800 |
| 500 | 630 | 800 |
| 400 | 500 | 720 |
| 380 | 420 | 630 |
| 147 | 190 | 220 |
| 265 | 330 | 440 |
| 265 | 330 | 440 |
| 265 | 330 | 440 |
| 265 | 330 | 500 |
| 300 | 400 | 500 |
| 5000 | 6300 | 8000 |
| 4000 | 5040 | 6400 |
| 0.5 | 0.5 | 0.5 |
| 1200 | 1200 | 1200 |

| - | - | - |
|-----------|---------|---------|
| MC-265a | MC-330a | MC-400a |
| MT-400/3K | | |
| MT-400/3H | | |
| MT-400/2H | | |
| MT-400/3D | | |
| 85~400A | | |

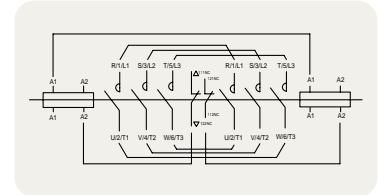
| - | - | - |
|-----------|---------|---------|
| MC-500a | MC-630a | MC-800a |
| MT-800/3K | | |
| MT-800/3H | | |
| MT-800/2H | | |
| MT-800/3D | | |
| 200~800A | | |

Reversing contactors

Description

- Two AC or DC control contactors are interlocked mechanically and electrically
- 3-pole(NO) main contact in each contactor
- Finger proof design
- DIN rail or screw mountable
- Front/side mountable accessories available
- Overload relay can be directly mounted to the contactor if necessary

Circuit diagram



Rating

| Type | AC-3 duty | | | | | | Current (AC3) | Weight (AC control) |
|-----------|------------|------------|------|------|------|------|---------------|---------------------|
| | 200 ~ 240V | 380 ~ 400V | 415V | 440V | 500V | 690V | 440V | |
| | kW | kW | kW | kW | kW | kW | A | |
| MC-6a/R | 2.2 | 3 | 3 | 3 | 3 | 3 | 7 | 0.63kg |
| MC-9a/R | 2.5 | 4 | 4 | 4 | 4 | 4 | 9 | 0.63kg |
| MC-12a/R | 3.5 | 5.5 | 5.5 | 5.5 | 7.5 | 7.5 | 12 | 0.63kg |
| MC-18a/R | 4.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 18 | 0.63kg |
| MC-9b/R | 2.5 | 4 | 4 | 4 | 4 | 4 | 9 | 0.75kg |
| MC-12b/R | 3.5 | 5.5 | 5.5 | 5.5 | 7.5 | 7.5 | 12 | 0.75kg |
| MC-18b/R | 4.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 18 | 0.75kg |
| MC-22b/R | 5.5 | 11 | 11 | 11 | 15 | 15 | 25 | 0.75kg |
| MC-32a/R | 11 | 18.5 | 18.5 | 18.5 | 22 | 22 | 32 | 0.95kg |
| MC-40a/R | 11 | 18.5 | 18.5 | 18.5 | 22 | 22 | 40 | 0.95kg |
| MC-50a/R | 15 | 22 | 22 | 22 | 30 | 30 | 50 | 1.7kg |
| MC-65a/R | 18.5 | 30 | 30 | 30 | 33 | 33 | 65 | 1.7kg |
| MC-75a/R | 22 | 37 | 37 | 37 | 37 | 37 | 75 | 3.3kg |
| MC-85a/R | 25 | 45 | 45 | 45 | 45 | 45 | 85 | 3.3kg |
| MC-100a/R | 30 | 55 | 55 | 55 | 55 | 45 | 100 | 3.3kg |



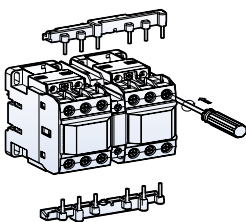
MC-40a/R



MC-65a/R



MC-100a/R



Coil voltage

| | | |
|----|---------|---------------------------------------------------------------------|
| AC | 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| | 60Hz | 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz | 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC | 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

Certification

- CE(IEC)
- UL508

Description

- 3-pole main contact
- Mechanically interlocked
- AC/DC common use coil built (from MC-185a/R)
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available

Rating



| Type | AC-3 duty | | | | | | Current (AC3) | Weight (AC control) |
|-----------|---------------|---------------|------|------|---------------|------|------------------|------------------------|
| | 200 ~ 240V | 380 ~ 400V | 415V | 440V | 500 ~ 550V | 690V | 440V | |
| | kW | kW | kW | kW | kW | kW | A | |
| MC-130a/R | 37 | 60 | 60 | 60 | 60 | 55 | 120 | 4.3kg |
| MC-150a/R | 45 | 75 | 75 | 75 | 75 | 55 | 150 | 4.3kg |
| MC-185/R | 55 | 90 | 90 | 90 | 110 | 110 | 185 | 13kg |
| MC-225a/R | 75 | 132 | 132 | 132 | 132 | 140 | 225 | 13kg |
| MC-265a/R | 80 | 147 | 147 | 147 | 147 | 160 | 265 | 21.4kg |
| MC-330a/R | 90 | 160 | 160 | 160 | 160 | 200 | 330 | 21.4kg |
| MC-400a/R | 125 | 200 | 200 | 200 | 225 | 250 | 400 | 21.4kg |
| MC-500a/R | 147 | 265 | 265 | 265 | 265 | 300 | 500 | 60kg |
| MC-630a/R | 190 | 330 | 330 | 330 | 330 | 400 | 630 | 60kg |
| MC-800a/R | 220 | 440 | 440 | 440 | 440 | 500 | 800 | 60kg |



Coil voltage

For MC130/R and MC-150a/R

| | | |
|----|---------|----------------------------------|
| AC | 50/60Hz | 24, 48, 110, 220, 300, 400, 500V |
| DC | DC | 24, 48, 110, 220V |

For MC-185a/R and up

- 24, 48, 100/200, 300, 400, 500V for types MC-185a/R, 225/R
- 100/200, 300, 400, 500V for types MC-265a/R, 330/R, 400/R
- 100, 200, 300, 400, 500V for types MC-500a/R, 600/R, 800/R

| Nominal(ordering) voltage | AC 50/60Hz | DC |
|---------------------------|------------|------------|
| 24V | 24 - 25V | 24V |
| 48V | 48 - 50V | 48V |
| 100V | 100 - 127V | 100 - 110V |
| 200V | 200 - 240V | 200 - 220V |
| 100/200V | 100 - 240V | 100 - 220V |
| 300V | 265 - 347V | - |
| 400V | 380 - 450V | - |
| 500V | 440 - 575V | - |

Capacitive contactors

Description

Capacitor unit(Pre-loading resistor) is connected to the terminals of the contactor to reduce the high inrush current exceeding $20 \times I_n$.

- AC or DC control coil on selection
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable

Rating

| Type | Maximum operating power (kvar) | | | Rated current (A) | Capacitor unit type |
|---------------|--------------------------------|------------|------------|-------------------|---------------------|
| | 220 ~ 240V | 400 ~ 440V | 500 ~ 550V | | |
| MC-9a/9b(D) | 5 | 9.7 | 14 | 14 | AC-9 |
| MC-12a/12b(D) | 6.7 | 12.5 | 18 | 18 | AC-9 |
| MC-18a/18b(D) | 8.5 | 16.7 | 24 | 24 | AC-9 |
| MC-22b(D) | 10 | 18 | 26 | 26 | AC-9 |
| MC-32a(D) | 15 | 25 | 36 | 36 | AC-9 |
| MC-40a(D) | 20 | 33.3 | 48 | 48 | AC-9 |
| MC-50a(D) | 20 | 40 | 58 | 58 | AC-50 |
| MC-65a(D) | 25 | 45.7 | 66 | 66 | AC-50 |
| MC-75a(D) | 29.7 | 54 | 78 | 78 | AC-50 |
| MC-85a(D) | 35 | 60 | 92 | 92 | AC-50 |
| MC-100a(D) | 37 | 62 | 94 | 94 | AC-50 |

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals $\leq 50V$)
 - To prevent short current, gG type fuse must be 1.5-2 times than rated current.



Coil voltage

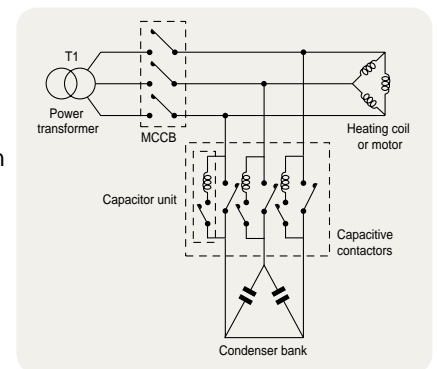
| | |
|------|-----------------------------------------------------------------------------|
| 50Hz | 24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V |
| AC | 60Hz 24, 48, 110, 110, 12, 200, 208, 220, 230, 240, 277, 380, 480, 600V |
| | 50/60Hz 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V |
| DC | DC 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V |

These capacitive contactors are suitable for switching single-step or multiple-step condenser bank.

It is standardized by IEC-60947-4941, UL and CSA.

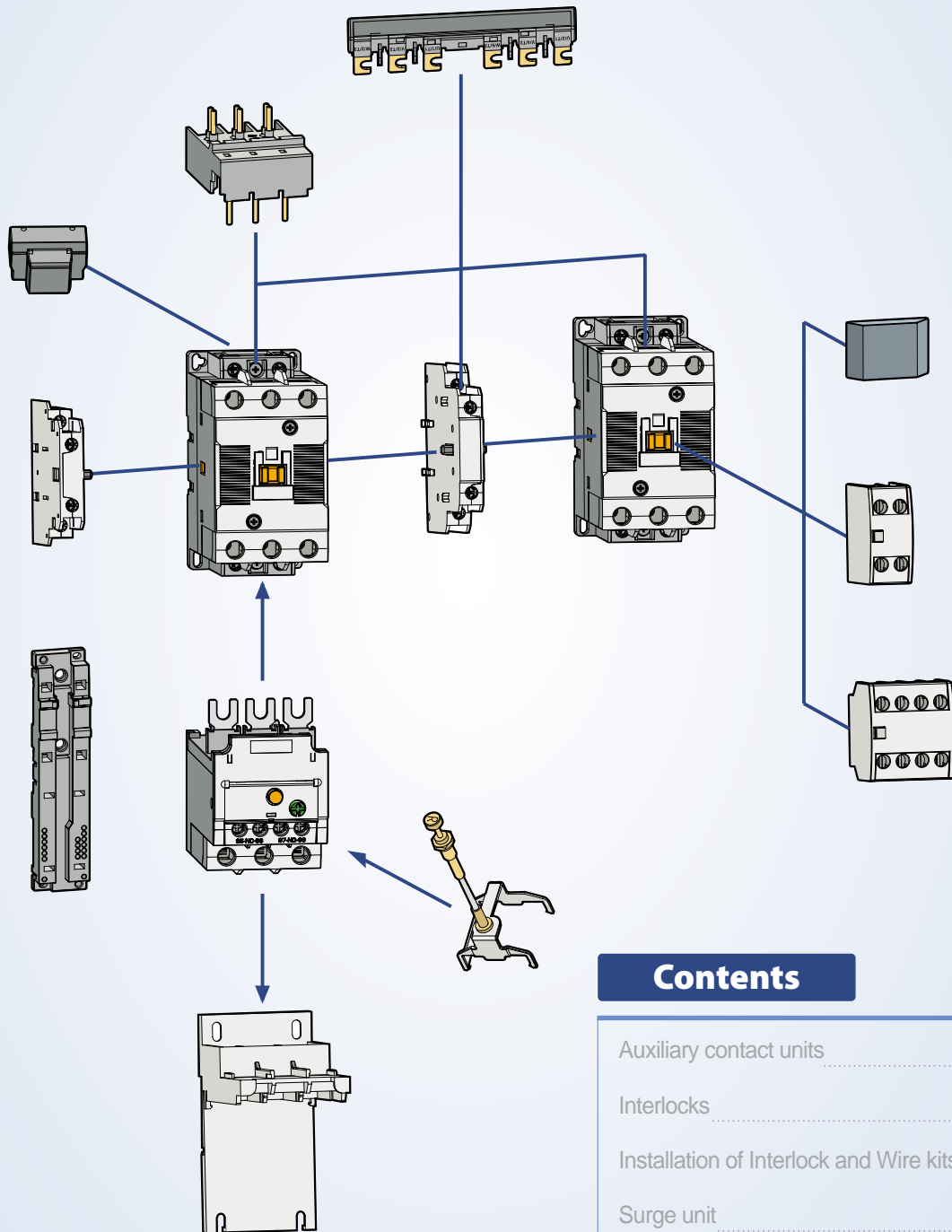
Features of capacitor unit(Pre-loading resistor)

- Damping resistor that can limit the inrush current upto $60 \times I_n$ is connected to the mechanism that closed earlier than the main contact of the contactor
- No heat loss by the serial resistor
- Eliminate the switching surge
- Improving the performance of the capacitor system



Example

Metasol Accessories

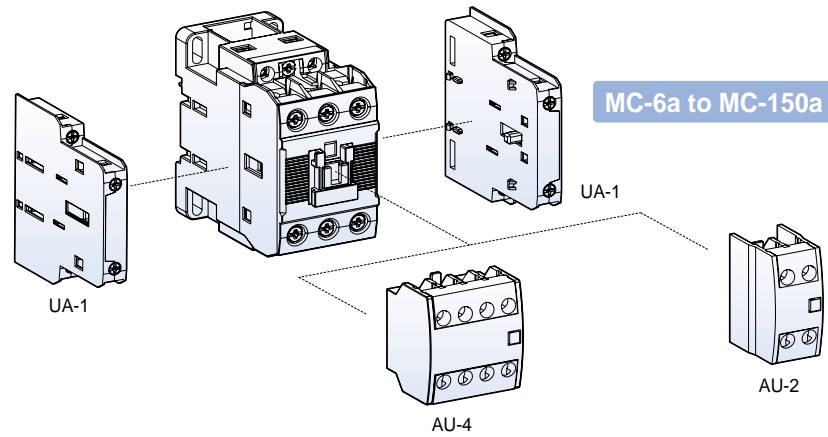


Contents

| | |
|-----------------------------------------------|----|
| Auxiliary contact units | 48 |
| Interlocks | 52 |
| Installation of Interlock and Wire kits | 53 |
| Surge unit | 54 |
| Capacitor unit | 55 |
| Replacement coils | 56 |
| Safety cover (Option) | 57 |

Auxiliary contact units

- 2 and 4 pole
- Side or front mountable
- Common use for Metasol contactors from MC-6 to MC-150a



Selection

| Type | Appearance | Pole | Composition | | Contact arrangement | Mount | Weight |
|------|------------|------|-----------------------|-----------------------|---------------------|-------|--------|
| | | | NO | NC | | | |
| UA-1 | | 2 | 1 | 1 | | Side | 53g |
| AU-2 | | 2 | 2 1 - | - 1 2 | | Front | 28g |
| AU-4 | | 4 | 4 3 2 1 - | - 1 2 3 4 | | Front | 50g |

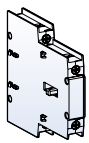
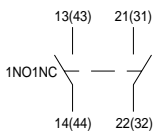
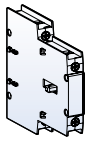
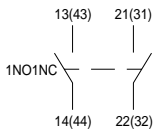
Maximum combination of contact units

| For contactors with AC coils | For contactors with DC coils |
|-----------------------------------------------|-----------------------------------------------|
| AU-4(on front)+UA-1 × 4EA (2EA on both sides) | AU-4(on front)+UA-1 × 2EA (1EA on both sides) |
| AU-2(on front)+UA-1 × 4EA (2EA on both sides) | AU-2(on front)+UA-1 × 2EA (1EA on both sides) |

- 2 pole
- Side mountable
- MC MC Common use for Metasol contactors from MC-185a to MC-800a



Selection

| Type | Appearance | Pole | Composition | | Contact arrangement | Mount | Weight |
|---------|-------------------------------------------------------------------------------------|------|-------------|----|--------------------------------------------------------------------------------------|-------|--------|
| | | | NO | NC | | | |
| AU-100 |  | 2 | 1 | 1 |  | Side | 53g |
| AU-100E |  | 2 | 1 | 1 |  | Side | 53g |

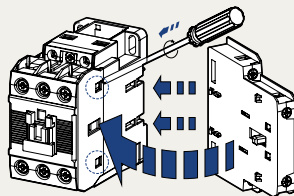
Auxiliary contact units

Rating

| Type | | UA-1 | AU-2, 4 | AU-100 | AU-100E | |
|----------------------------------------|-----------------------------------------------------|---------|---------|---------|-----------------------------------|-------|
| Rated operation voltage (Ue) | | 600V | 600V | 600V | 60V | |
| Rated insulation voltage (Ui) | | 600V | 600V | 600V | 600V | |
| Rated impulse withstand voltage (Uimp) | | 6kV | 6kV | 6kV | 6kV | |
| Rated frequency | | 50/60Hz | 50/60Hz | 50/60Hz | 50/60Hz | |
| Contact sensibility | | | | | | |
| Voltage | | DC 17V | DC 24V | DC 24V | DC 7V | |
| Current | | DC 5mA | DC 10mA | DC 10mA | DC 5mA | |
| Rated thermal current (Ith, AC12 duty) | | 10A | 16A | 16A | 1A | |
| Rated operation current | | | | | | |
| AC15 duty (A600) | 120V | 6A | 6A | 6A | AC/DC 24V 0.1A AC/DC 50V 0.01A | |
| | 240V | 3A | 3A | 3A | | |
| | 380V | 1.9A | 1.9A | 1.9A | | |
| | 480V | 1.5A | 1.5A | 1.5A | | |
| | 500V | 1.4A | 1.4A | 1.4A | | |
| | 600V | 1.2A | 1.2A | 1.2A | | |
| | DC13 duty (P600) | 125V | 1.1A | 1.1A | | 1.1A |
| | | 250V | 0.55A | 0.55A | | 0.55A |
| | | 400V | 0.31A | 0.31A | | 0.31A |
| | | 500V | 0.27A | 0.27A | | 0.27A |
| Electrical lifetime (mil. operations) | AC15 duty | 220V | 0.5 | 0.5 | AC/DC 24V 1A AC/DC 50V 1A | |
| | | 440V | 0.5 | 0.5 | | |
| | DC13 duty | 220V | 0.5 | 0.5 | | |
| | | 440V | 0.5 | 0.5 | | |
| Maximum operating cycles per hour | | 1800 | 1800 | 1800 | 1200 | |
| Conductor size (Solid, stranded) | AWG | 18~10 | 18~10 | 18~10 | 18~10 | |
| | mm ² (the max. number of conducts: 2) | 1~2.5 | 1~2.5 | 1~2.5 | 1~2.5 | |

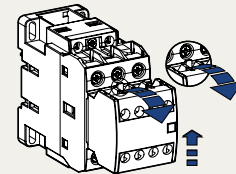
Installation

UA-1



To install side mounting unit remove the indicated part in the circle in the fig. first. And then fit each part as shown. To separate push forward and pull.

AU-2, 4



To install front mounting unit fit it on the upper part of the front of the contactor and push it down. To separate pull the lever of the unit and push the unit upward.

Delayed opening devices



Delayed opening device prevents the inadvertent opening of a contactor in the event of a wide voltage drop or brief supply voltage interruptions of control power for 1 to 4 seconds.

| Applying contactors | Type | Control voltage | |
|--------------------------------|--------|-----------------------------|-----------------------|
| | | Delayed opening device coil | Contactor device coil |
| MC-185a, 225a (225AF) | AD-100 | AC100~110V | DC100/110V |
| MC-265a, 330a, 400a (400AF) | AD-300 | AC200~220V | DC200/220V |
| MC-500a, 630a, 800a (800AF) | AD-600 | | |

Terminal cover units for contactors

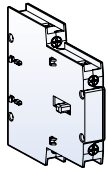


| Applying contactors | Type | Remarks |
|--------------------------------|--------|----------------|
| MC-185a, 225a (225AF) | AP-220 | |
| MC-265a, 330a, 400a (400AF) | AP-400 | 2 pcs included |
| MC-500a, 630a, 800a (800AF) | AP-800 | |

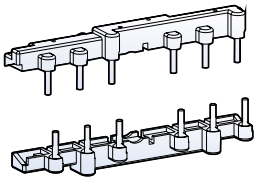
Insulation barrier units



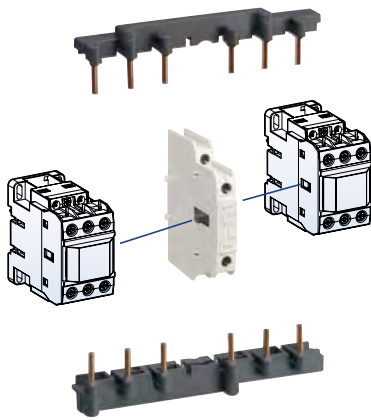
| Applying contactors | Type | Remarks |
|--------------------------------|--------|------------------------------|
| MC-185a, 225a (225AF) | AI-180 | 4 pcs required per contactor |
| MC-265a, 330a, 400a (400AF) | | |
| MC-500a, 630a, 800a (800AF) | AI-600 | |



Interlock unit



Wire kit



Interlocks

Component parts for assembling by customer

Interlock unit, UR-02

UR-02 is a mechanical interlock unit and provides 2NC contacts for use in electrical interlocking

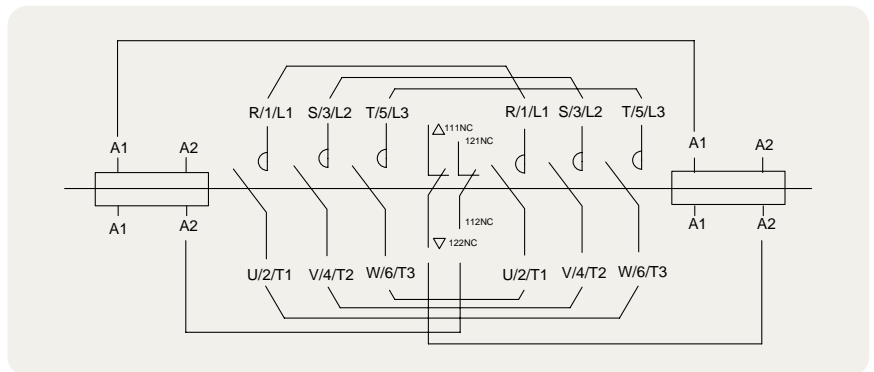
Wire kit, UW

UW is used for making reversing circuit between two contactors.

| Contactor | Wire kit | | Interlock unit | |
|-------------|----------|--------|----------------|--------|
| | Type | Weight | Type | Weight |
| MC-6a~18a | UW-18 | 0.05kg | UR-02 | 0.06kg |
| MC-9b~22b | UW-22 | 0.04kg | | |
| MC-32a~40a | UW-32 | 0.05kg | | |
| MC-50a, 65a | UW-63 | 0.12kg | | |
| MC-75a~100a | UW-95 | 0.33kg | | |

Rating of the contacts in the interlocks

| | | |
|--------------------------|-------------|-------|
| Rated operation voltage | 600V | |
| Rated insulation voltage | 600V | |
| Rated frequency | 50/60Hz | |
| Rated thermal current | 10A | |
| Rated operation current | | |
| AC15 duty | 120V | 6A |
| (A600) | 240V | 3A |
| | 380V | 1.9A |
| | 480V | 1.5A |
| | 500V | 1.4A |
| | 600V | 1.2A |
| DC13 duty | 125V | 0.55A |
| | (Q300) 250V | 0.27A |



Typical circuit diagram for reversing contactor



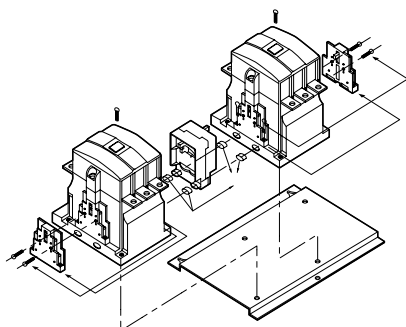
AR-180

Interlock unit, AR-180 and AR-600

AR-180 and AR-600 are mechanical interlock units in which electrical contacts for use in electrical interlocking are not included. Please use the auxiliary contacts on the sides of the contactors for that purpose.

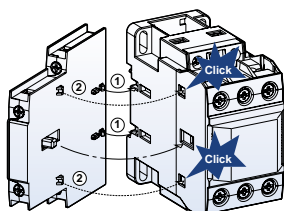


AR-600

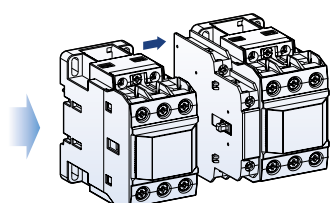


| Contactor | Interlock unit | |
|-----------|----------------|--------|
| | Type | Weight |
| MC-180a | AR-180 | 0.09kg |
| MC-225a | | |
| MC-265a | | |
| MC-330a | | |
| MC-400a | | |
| MC-500a | AR-600 | 15.2kg |
| MC-630a | | |
| MC-800a | | |

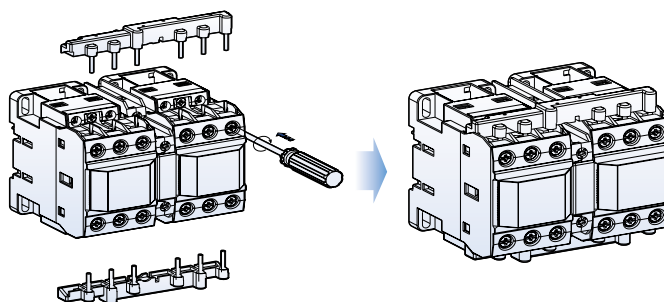
Installation of Interlock and Wire kits



Install the interlock unit on the side of a contactor first. Fit each part as indicated in the fig.



And then install the other contactor on the other side of the interlock unit as shown.

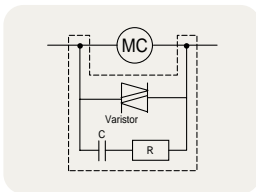


After installing interlock unit wiring kit can be assembled. Wiring kit contains two molded wires - one for line side and the other for load side.

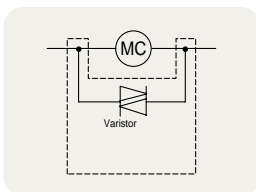
Surge unit

It absorbs the surge arisen out of the coil of the contactor.
It can be installed simply to the contactor.

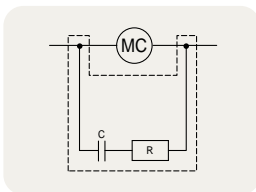
- Rated operation voltage (Ue): AC 24 ~ 440V
DC 24 ~ 125V
- Rated insulation voltage (Ui): 1000V
- Rated impulse withstand voltage (Uimp): 8kV
- Degree of protection: IP20



US-1-6



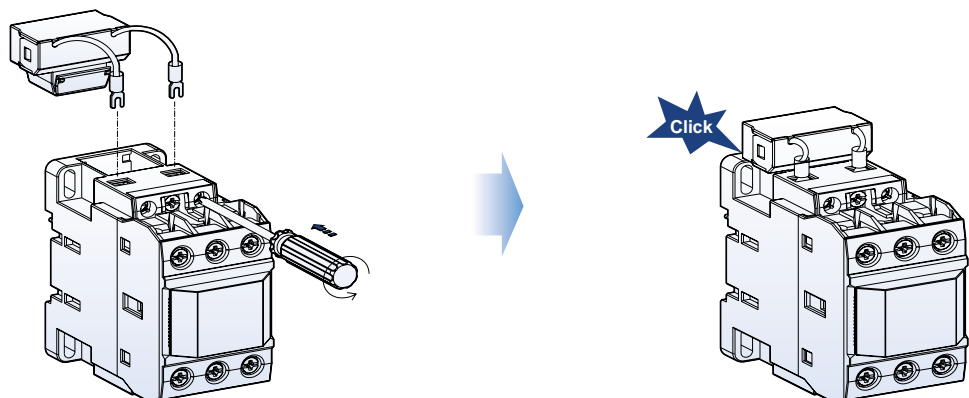
US-11-14



US-22

| Surge unit | | Rated voltage | | Internal elements spec. | | | Weight |
|------------|-------------|-----------------|----------|-------------------------|-------|---------|--------|
| Type | Composition | | | V | R | C | |
| US-1 | Varistor+RC | AC | 24~48V | 120V | 100 Ω | 0.1 μF | 29g |
| US-2 | Varistor+RC | | 100~125V | 270V | 100 Ω | 0.1 μF | |
| US-3 | Varistor+RC | | 200~240V | 470V | 100 Ω | 0.1 μF | |
| US-4 | Varistor+RC | DC | 24~48V | 120V | 100 Ω | 0.47 μF | |
| US-5 | Varistor+RC | | 100~125V | 270V | 100 Ω | 0.47 μF | |
| US-6 | Varistor+RC | | 200~220V | 470V | 100 Ω | 0.47 μF | |
| US-11 | Varistor | AC/DC common | 24~48V | 120V | - | - | |
| US-12 | Varistor | | 100~125V | 270V | - | - | |
| US-13 | Varistor | | 200~240V | 470V | - | - | |
| US-14 | Varistor | | 380~440V | 1000V | - | - | |
| US-22 | RC | AC | 100~125V | - | 56 Ω | 1 μF | |

Installation



Connect the lead wires to the coil terminals of the contactor first.
And then insert the body into the space of the contactor as shown above.

Capacitor unit

Capacitor unit is connected to the terminals of the contactor to reduce the high inrush current.



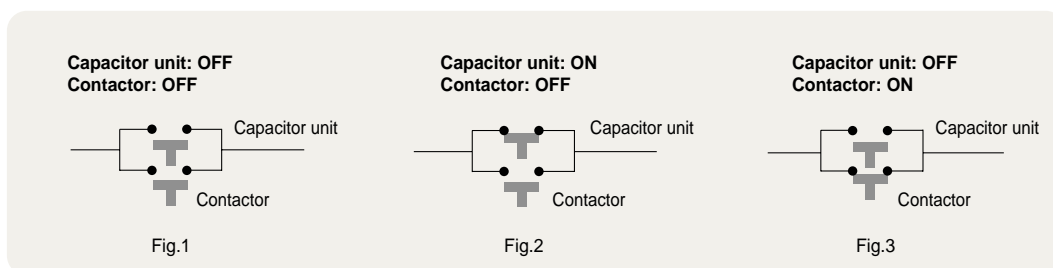
| Type | Contactor | Maximum operating power (kvar) | | | Rated current (A) |
|-------|---------------|--------------------------------|------------|------------|-------------------|
| | | 220 ~ 240V | 400 ~ 440V | 500 ~ 550V | |
| AC-9 | MC-9a/9b(D) | 5 | 9.7 | 14 | 14 |
| | MC-12a/12b(D) | 6.7 | 12.5 | 18 | 18 |
| | MC-18a/18b(D) | 8.5 | 16.7 | 24 | 24 |
| | MC-22b(D) | 10 | 18 | 26 | 26 |
| | MC-32a(D) | 15 | 25 | 36 | 36 |
| | MC-40a(D) | 20 | 33.3 | 48 | 48 |
| AC-50 | MC-50a(D) | 20 | 40 | 58 | 58 |
| | MC-65a(D) | 25 | 45.7 | 66 | 66 |
| | MC-75a(D) | 29.7 | 54 | 78 | 78 |
| | MC-85a(D) | 35 | 60 | 92 | 92 |
| | MC-100a(D) | 37 | 62 | 94 | 94 |

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals $\leq 50V$)
 - To prevent short current, gG type fuse must be 1.5~2 times than rated current.

Features of capacitor unit (Pre-loading resistor)

- Damping resistor that can limit the inrush current upto $60 \times I_n$ is connected to the mechanism that closed earlier than the main contact of the contactor
- No heat loss by the serial resistor
- Eliminate the switching surge
- Improving the performance of the capacitor system

Operation sequence



Note) Closing sequence: Fig.1 => Fig.2 => Fig.3
 Opening sequence: Fig.3 => Fig.1

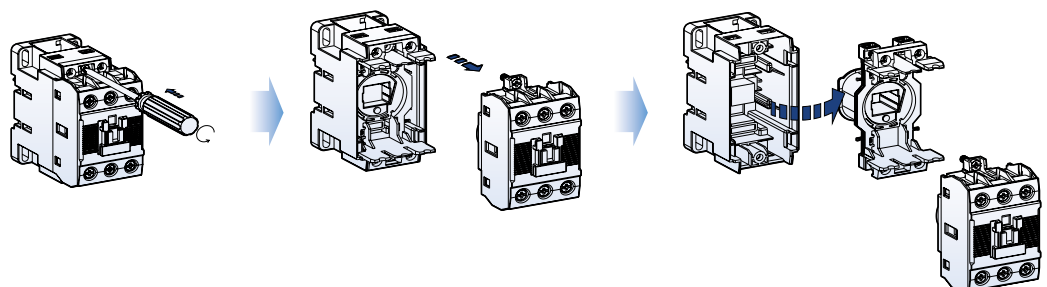
Replacement coils

To replace the existing coil to change voltage or repair.

| Contactor | Coil voltage | | | | | | | |
|-------------------------------------|--------------|-----|-------------|-----|----------------|-----|---------|-----|
| | AC coil | | | | | | DC coil | |
| | AC 60Hz (V) | | AC 50Hz (V) | | AC 50/60Hz (V) | | DC (V) | |
| MC-6a MC-9a MC-12a MC-18a | 24 | 230 | 24 | 230 | 24 | 240 | 12 | 110 |
| | 48 | 240 | 36 | 240 | 48 | 380 | 20 | 125 |
| | 100 | 277 | 42 | 380 | 100 | 415 | 24 | 200 |
| | 110 | 380 | 48 | 400 | 110 | 440 | 48 | 220 |
| | 120 | 440 | 80 | 415 | 120 | 500 | 60 | 250 |
| | 200 | 480 | 100 | 440 | 200 | 550 | 80 | |
| | 208 | 600 | 110 | 500 | 220 | | 100 | |
| | 220 | | 220 | 550 | 230 | | | |
| MC-9b MC-12b MC-18b MC-22b | 24 | 230 | 24 | 230 | 24 | 240 | 12 | 110 |
| | 48 | 240 | 36 | 240 | 48 | 380 | 20 | 125 |
| | 100 | 277 | 42 | 380 | 100 | 415 | 24 | 200 |
| | 110 | 380 | 48 | 400 | 110 | 440 | 48 | 220 |
| | 120 | 440 | 80 | 415 | 120 | 500 | 60 | 250 |
| | 200 | 480 | 100 | 440 | 200 | 550 | 80 | |
| | 208 | 600 | 110 | 500 | 220 | | 100 | |
| | 220 | | 220 | 550 | 230 | | | |
| MC-32a MC-40a | 24 | 230 | 24 | 230 | 24 | 240 | 12 | 110 |
| | 48 | 240 | 36 | 240 | 48 | 380 | 20 | 125 |
| | 100 | 277 | 42 | 380 | 100 | 415 | 24 | 200 |
| | 110 | 380 | 48 | 400 | 110 | 440 | 48 | 220 |
| | 120 | 440 | 80 | 415 | 120 | 500 | 60 | 250 |
| | 200 | 480 | 100 | 440 | 200 | 550 | 80 | |
| | 208 | 600 | 110 | 500 | 220 | | 100 | |
| | 220 | | 220 | 550 | 230 | | | |
| MC-50a MC-65a | 24 | 230 | 24 | 230 | 24 | 240 | 12 | 110 |
| | 48 | 240 | 36 | 240 | 48 | 380 | 20 | 125 |
| | 100 | 277 | 42 | 380 | 100 | 415 | 24 | 200 |
| | 110 | 380 | 48 | 400 | 110 | 440 | 48 | 220 |
| | 120 | 440 | 80 | 415 | 120 | 500 | 60 | 250 |
| | 200 | 480 | 100 | 440 | 200 | 550 | 80 | |
| | 208 | 600 | 110 | 500 | 220 | | 100 | |
| | 220 | | 220 | 550 | 230 | | | |
| MC-75a MC-85a MC-100a | 24 | 230 | 24 | 230 | 24 | 240 | 12 | 110 |
| | 48 | 240 | 36 | 240 | 48 | 380 | 20 | 125 |
| | 100 | 277 | 42 | 380 | 100 | 415 | 24 | 200 |
| | 110 | 380 | 48 | 400 | 110 | 440 | 48 | 220 |
| | 120 | 440 | 80 | 415 | 120 | 500 | 60 | 250 |
| | 200 | 480 | 100 | 440 | 200 | 550 | 80 | |
| | 208 | 600 | 110 | 500 | 220 | | 100 | |
| | 220 | | 220 | 550 | 230 | | | |
| MC-130a MC-150a | | | | | 24 | 300 | 24 | 110 |
| | | | | | 48 | 400 | 48 | 220 |
| | | | | | 110 | 500 | | |
| | | | | | 220 | | | |



Replacement process



To replace the existing coil to change voltage or repair.



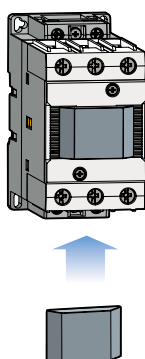
| Contactor | Coil voltage | |
|-------------------------------|-----------------------------|-------------------|
| | AC/DC common coil | AC coil |
| MC-185a MC-225a | 24 48 100-240/100-220 | 300 400 500 |
| MC-265a MC-300a MC-400a | 100-240/100-220 | 300 400 500 |
| MC-500a MC-630a MC-800a | 100/100 200/200 | 300 400 500 |

Safety cover (Option)

- To prevent arc from coming out from the contactor
- To protect from unintended manual operation
- To prevent dust from entering into the inside of the contactor



| Type | Contactor |
|------|-----------|
| AP-9 | All types |



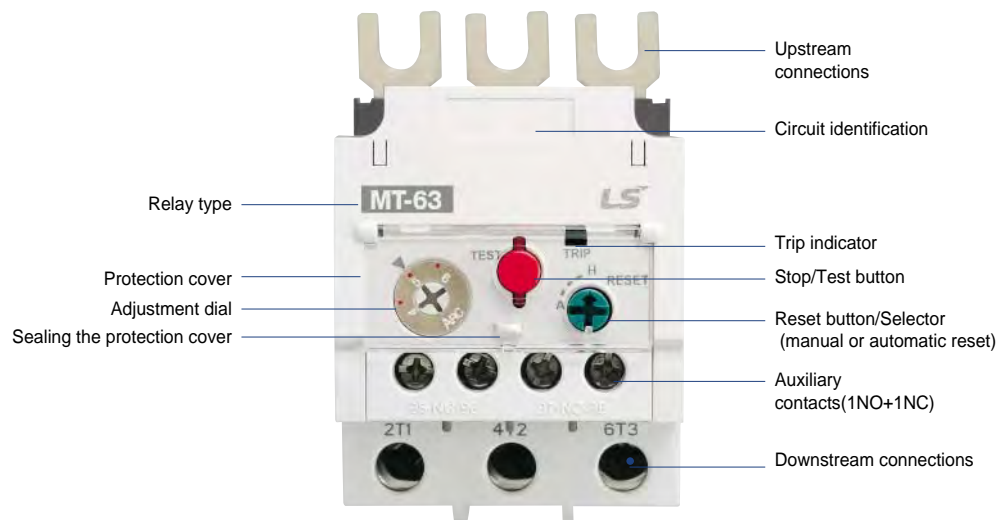
General descriptions

Type MT, bimetal-style, overload relays are designed to protect AC circuits and motors against overloads, phase failure, long starting times and prolonged stalling of the motor.

Four versions are available according to the protection function and trip class as below.

1. Non-differential: 3pole-2bimetal(heater) and trip class 10A
2. Non-differential: 3pole-3bimetal(heater) and trip class 10A
3. Differential: 3pole-3bimetal(heater) and trip class 10A
4. Differential: 3pole-3bimetal(heater) and trip class 20

Configuration of the front



Environment and auxiliary circuit

| Environment | | MT-12-150 | MT-225-800 |
|-----------------------------------------------------------|-----------|----------------------------------|----------------------------------|
| Standards | | IEC/EN 60947-1, IEC/EN 60947-4-1 | IEC/EN 60947-1, IEC/EN 60947-4-1 |
| Certifications | | CE, CSA, UL | CE, CSA, UL |
| Rated operation voltage | | Max. 690V | Max. 690V |
| Rated insulation voltage | | 690V | 690V |
| Rated frequency | | 50/60Hz | 50/60Hz |
| Degree of protection (Conforming to IEC 60 529) | | IP 20 | IP 20 |
| Ambient air temperature | Storage | -55 ~ +80° C | -55 ~ +80° C |
| | Operation | -5 ~ +60° C | -5 ~ +60° C |
| Mounting position | | Vertical plane | Vertical plane |
| Shock resistance (Conforming to IEC 68-2-7) | | 15gn - 11ms | 15gn - 11ms |
| Vibration resistance (Conforming to IEC68-2-6) | | 6G | 6G |
| Insulation strength (Conforming to IEC 255-5) | | 6kV | 6kV |
| Rated impulse withstand voltage (Conforming to IEC 801-5) | | 6kV | 6kV |
| Auxiliary contacts characteristics | | | |
| Composition | | 1a1b (1NO +1NC) | 1NO+1NC |
| Rated thermal current | | 5A | 5A |
| Rated operation current | | C600, R300 | C600, R300 |
| AC15 duty (C600) | 120V | 1.5A | 2.5A |
| | 240V | 0.75A | 2A |
| | 380V | 0.47A | 0.47A |
| | 480V | 0.375A | 0.375A |
| | 500V | 0.35A | 0.35A |
| | 600V | 0.3A | 1A |
| DC13 duty (R300) | 120V | 0.22A | 0.28A |
| | 240V | 0.1A | 0.14A |
| Connecting conductor | Size | 18AWG /1 mm ² | 18AWG /1 mm ² |
| Connection to screw clamp terminals | Type | 65/75° C Cu-wire | 65/75° C Cu-wire |

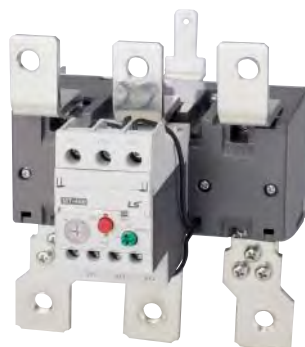
MT-150



MT-225



MT-400



MT-800



Overload relay specifications

MT type Thermal Overload Relays



MT-12/3K□

| Frame size | | |
|-----------------------------------|-------------------------------------------------------------------------------------|-------|
| Trip class | | |
| Type | Non-differential(3P-2 heater) Non-differential(3P-3 heater) Differential type | |
| Terminal type | | |
| Number of poles | | |
| Rated operational voltage (Ue) | | |
| Rated insulation voltage (Ui) | | |
| Rated impulse voltage (Uimp) | | |
| Degree of protection (IEC 60 529) | | |
| Temperature compensation (° C) | | |
| Functions | Trip indicating Stop Test Manual/Automatic Reset | |
| Setting range(A) | | |
| Nominal current rating | Wire size | |
| | mm ² | AWG |
| 0.14 | 1 | 18 |
| 0.21 | | |
| 0.33 | | |
| 0.52 | | |
| 0.82 | | |
| 1.3 | | |
| 2.1 | | |
| 3.3 | | |
| 5 | | |
| 6.5 | | |
| 7.5 | 1~1.5 | 18~16 |
| 8.5 | 1.5~2.5 | 16~14 |
| 15 | 2.5 | 14~12 |
| 19 | 2.5~4 | 12~10 |
| 21.5 | | |
| 27 | 4~6 | 10 |
| 30 | 4~10 | 10~8 |
| 34 | 6~10 | 10~8 |
| 42 | 10 | 8 |
| 54 | | |
| 65 | 16~25 | 6~4 |
| 74 | | |
| 83 | 25~35 | 4~3 |
| 90 | | |
| Applied contactors | | |
| Separate mounting unit | | |

| 18AF | |
|---------------------|-----------|
| 10A | 20 |
| MT-12/2H□ | - |
| MT-12/3H□ | - |
| MT-12/3K□ | MT-12/3D□ |
| Screw clamp | |
| 3 | |
| 690V | |
| Up to 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| - | |
| ■ | |
| ■ | |
| 0.1~18A | 1~18A |
| 0.1~0.16 | |
| 0.16~0.25 | |
| 0.25~0.4 | |
| 0.4~0.63 | |
| 0.63~1 | |
| 1~1.6 | 1~1.6 |
| 1.6~2.5 | 1.6~2.5 |
| 2.5~4 | 2.5~4 |
| 4~6 | 4~6 |
| 5~8 | 5~8 |
| 6~9 | 6~9 |
| 7~10 | 7~10 |
| 9~13 | 9~13 |
| 12~18 | 12~18 |
| MC-6a, 9a, 12a, 18a | |
| - | |



MT-32/3K□

40AF

| | |
|--------------------------------|-----------|
| 10A | 20 |
| MT-32/2H□ | - |
| MT-32/3H□ | - |
| MT-32/3K□ | MT-32/3D□ |
| Screw clamp | |
| 3 | |
| 690V | |
| Up to 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| 0.1~40A | 1~40A |
| 0.1~0.16 | |
| 0.16~0.25 | |
| 0.25~0.4 | |
| 0.4~0.63 | |
| 0.63~1 | |
| 1~1.6 | 1~1.6 |
| 1.6~2.5 | 1.6~2.5 |
| 2.5~4 | 2.5~4 |
| 4~6 | 4~6 |
| 5~8 | 5~8 |
| 6~9 | 6~9 |
| 7~10 | 7~10 |
| 9~13 | 9~13 |
| 12~18 | 12~18 |
| 16~22 | 16~22 |
| 18~25 | 18~25 |
| 22~32 | 22~32 |
| - | - |
| 28~40 | 28~40 |
| MC-9b, 12b, 18b, 22b, 32a, 40a | |
| UZ-32 | |



MT-63/3K□S

65AF

| | |
|-------------|------------|
| 10A | 20 |
| MT-63/2H□S | - |
| MT-63/3H□S | - |
| MT-63/3K□S | MT-63/3D□S |
| Screw clamp | |
| 3 | |
| 690V | |
| Up to 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| 4~65A | |
| 4~6 | 4~6 |
| 5~8 | 5~8 |
| 6~9 | 6~9 |
| 7~10 | 7~10 |
| 9~13 | 9~13 |
| 12~18 | 12~18 |
| 16~22 | 16~22 |
| 18~25 | 18~25 |
| - | - |
| 24~36 | 24~36 |
| 28~40 | 28~40 |
| 34~50 | 34~50 |
| 45~65 | 45~65 |
| MC-50a, 65a | |
| UZ-63/S | |



MT-95/3K□S

100AF

| | |
|-------------------|------------|
| 10A | 20 |
| MT-95/2H□S | - |
| MT-95/3H□S | - |
| MT-95/3K□S | MT-95/3D□S |
| Screw clamp | |
| 3 | |
| 690V | |
| Up to 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| 7~100A | |
| 7~10 | 7~10 |
| 9~13 | 9~13 |
| 12~18 | 12~18 |
| 16~22 | 16~22 |
| 18~25 | 18~25 |
| - | - |
| 24~36 | 24~36 |
| 28~40 | 28~40 |
| 34~50 | 34~50 |
| 45~65 | 45~65 |
| 54~75 | 54~75 |
| 63~85 | 63~85 |
| 70~95 | 70~95 |
| 80~100 | 80~100 |
| MC-75a, 85a, 100a | |
| UZ-95/S | |

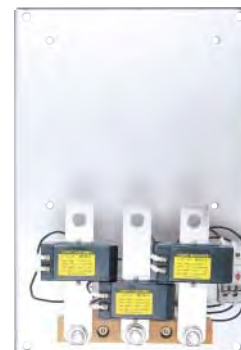
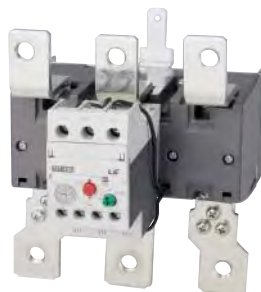
Overload relay specifications

MT type Thermal Overload Relays



| Frame size | | |
|-----------------------------------|-------------------------------|----------|
| Trip class | | |
| Type | Non-differential(3P-2 heater) | |
| | Non-differential(3P-3 heater) | |
| | Differential type | |
| Terminal type | | |
| Number of poles | | |
| Rated operational voltage (Ue) | | |
| Rated insulation voltage (Ui) | | |
| Rated impulse voltage (Uimp) | | |
| Degree of protection (IEC 60 529) | | |
| Temperature compensation (°C) | | |
| Functions | Trip indicating | |
| | Stop | |
| | Test | |
| | Manual/Automatic Reset | |
| Setting range(A) | | |
| Nominal current rating | Wire size | |
| | mm ² | AWG |
| 42 | 10 | 8 |
| 55 | 16 | 6 |
| 65 | 25 | 4 |
| 74 | 25 | 4 |
| 80 | 35 | 3 |
| 93 | 35 | 2 |
| 107 | 50 | 1 |
| 113 | 50 | 1 |
| 130 | 50 | 0 |
| 130 | 70 | 00 |
| 153 | 95 | 000 |
| 200 | 120 | 250 |
| 265 | 185 | 350 |
| 350 | 240 | 500 |
| 515 | 185 × 2n | 350 × 2n |
| 660 | 240 × 2n | 300 × 3n |
| Applied contactors | | |
| Separate mounting unit | | |

| 150AF | |
|---------------|------------|
| 10A | 20 |
| MT-150/2H□ | - |
| MT-150/3H□ | - |
| MT-150/3K□ | MT-150/3D□ |
| Screw clamp | |
| 3 | |
| 690V | |
| 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |
| 34~150A | 34~150A |
| 34~50 | |
| 45~65 | |
| 54~75 | |
| 63~85 | |
| - | |
| 80~105 | |
| - | |
| 95~130 | |
| 110~150 | |
| MC-130a, 150a | |
| UZ-150/S | |



225AF

| 10A | 20 |
|-------------|------------|
| MT-225/2H□ | - |
| MT-225/3H□ | - |
| MT-225/3K□ | MT-225/3D□ |
| Screw clamp | |
| 3 | |
| 690V | |
| 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |

| | |
|---------|---------|
| 65~240A | 65~240A |
|---------|---------|

| |
|---------|
| 65~100 |
| - |
| 85~125 |
| - |
| - |
| 100~160 |
| 120~185 |
| 160~240 |

| |
|---------------|
| MC-185a, 225a |
| - |

400AF

| 10A | 20 |
|-------------|-------------|
| MT-400/2H□S | - |
| MT-400/3H□S | - |
| MT-400/3K□S | MT-400/3D□S |
| Screw clamp | |
| 3 | |
| 690V | |
| 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |

| | |
|---------|---------|
| 85~400A | 85~400A |
|---------|---------|

| |
|---------|
| 85~125 |
| - |
| - |
| 100~160 |
| 120~185 |
| 160~240 |
| 200~330 |
| 260~400 |

| |
|---------------------|
| MC-265a, 330a, 400a |
| - |

800AF

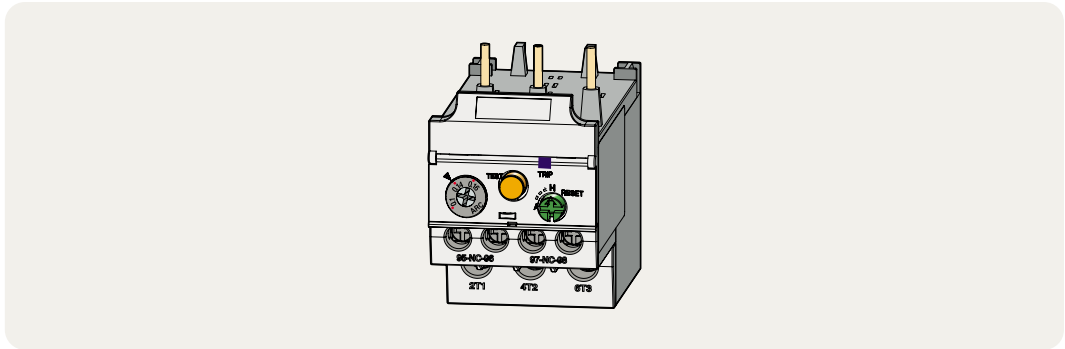
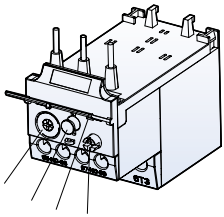
| 10A | 20 |
|-------------|-------------|
| MT-800/2H□S | - |
| MT-800/3H□S | - |
| MT-800/3K□S | MT-800/3D□S |
| Screw clamp | |
| 3 | |
| 690V | |
| 690V | |
| 6kV | |
| IP 20 | |
| -5~+40°C | |
| ■ | |
| ■ | |
| ■ | |
| ■ | |

| | |
|----------|----------|
| 200~800A | 200~800A |
|----------|----------|

| |
|---------|
| 200~300 |
| 260~400 |
| 400~600 |
| 520~800 |

| |
|---------------------|
| MC-500a, 630a, 800a |
| - |

Overload relay operation

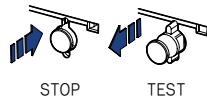


1. Adjustment dial



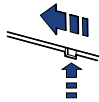
Before adjusting the dial open the protection cover.
Current setting can be done easily by using (+) or (-) driver.
Do not rotate the dial out of the setting range.

2. Stop/Test button



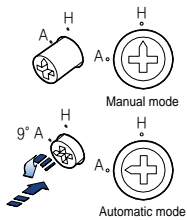
STOP function is executed by pushing the button, which causes the next sequence.
In case of operation test pull this button.

3. Trip indicator



If relay is tripped it comes out.

4. Reset button/Selector



Using a driver the reset mode can be set.
In case of Manual mode(H) push the button to reset the relay.
To change to Automatic mode(A) from Manual mode push the button and rotate as shown in the fig.

5. Auxiliary contact operation

| Terminal no. | Normal | STOP | TEST/TRIP | RESET |
|--------------|--------|------|-----------|-------|
| NC 95-96 | | | | |
| NO 97-98 | | | | |

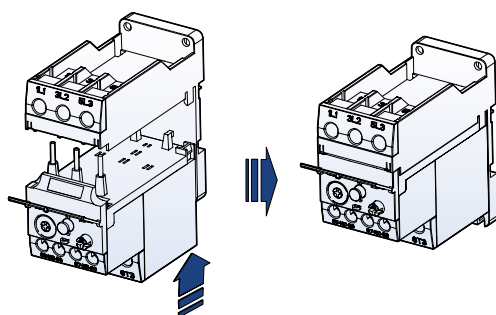
Accessories for overload relay

Separate mounting units

These accessories are used to mount the relays separately from contactors. If a relay is combined with a unit, it can be mounted on DIN rail or panel by fixing screws.



| Relay | Unit | |
|------------------------------------------------------|----------|--------|
| | Type | Weight |
| MT-32/2H□ MT-32/3H□ MT-32/3K□ MT-32/3D□ | UZ-32 | 38g |
| MT-63/2H□S MT-63/3H□S MT-63/3K□S MT-63/3D□S | UZ-63/S | 134g |
| MT-95/2H□S MT-95/3H□S MT-95/3K□S MT-95/3D□S | UZ-95/S | 230g |
| MT-150/2H□ MT-150/3H□ MT-150/3K□ MT-150/3D□ | UZ-150/S | 284g |



Terminal cover units for overload relays



| Relay | Unit type | Remarks |
|--------|-----------|----------------|
| MT-225 | APT-225 | 2 pcs included |
| MT-400 | APT-400 | |
| MT-800 | APT-600 | |

Accessories for overload relay

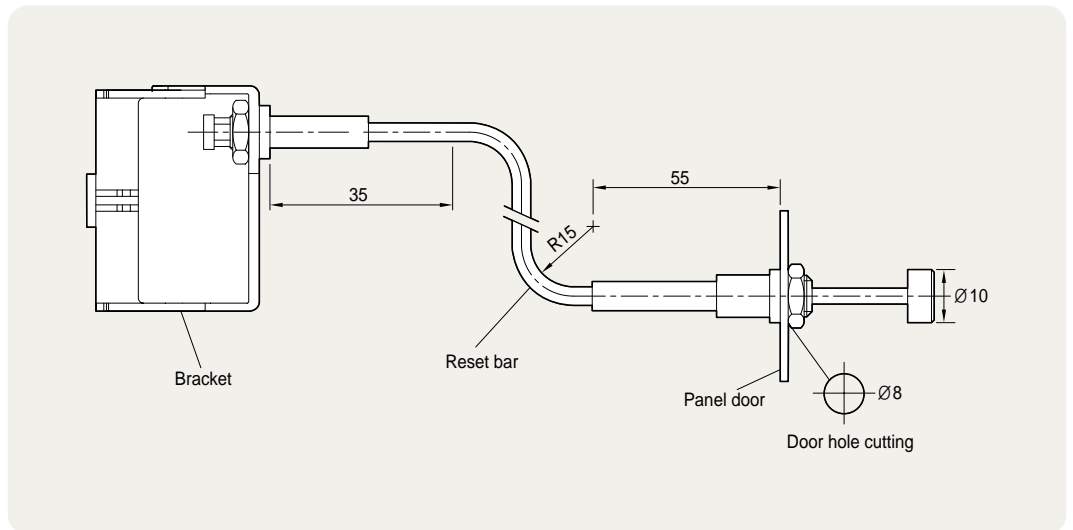
Remote reset units

These accessories are used to reset the relays on the panel door.



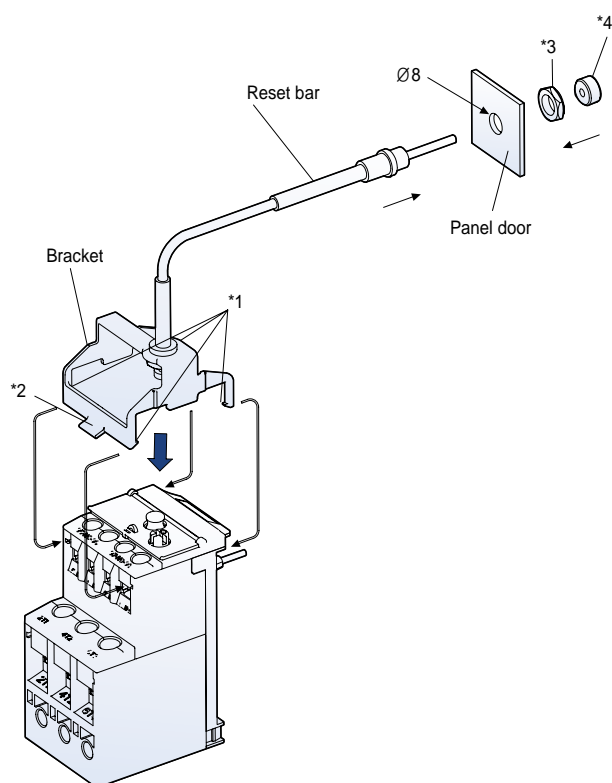
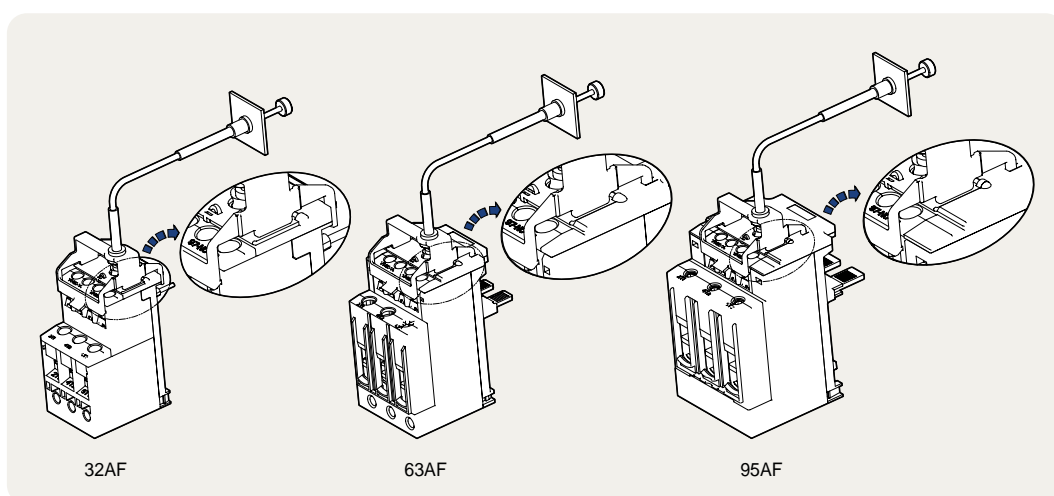
| Type | Cable length (L) |
|-------|------------------|
| UM-4R | 400 mm |
| UM-5R | 500 mm |
| UM-6R | 600 mm |

1. Make the reset bar straight at least 55mm from the panel door and 35mm from the bracket.
2. The bending radius of the flexible reset bar should not be less than 15mm.



Installation

1. Fit the bracket with the relay as indicated(*1) below.
2. Separate Nut(*3) and Head cap(*4) from the reset bar first.
Insert the reset bar into the panel hole and then fix it with the Nut and Head.
3. To separate the bracket from the relay lift the *2 part as shown in the fig.



Overload relay ordering types

Trip class 10A

Direct mounting type



MT-12/□

| Setting range (A) | Ordering type | | | Contactor | Separate mounting unit |
|----------------------|-----------------------------------|-----------------------------------|--------------|------------------------------------|---------------------------|
| | Non-differential (3P-2 heater) | Non-differential (3P-3 heater) | Differential | | |
| 0.1~0.16 | MT-12/2H0.14 | MT-12/3H0.14 | MT-12/3K0.14 | MC-6a MC-9a MC-12a MC-18a | |
| 0.16~0.25 | MT-12/2H0.21 | MT-12/3H0.21 | MT-12/3K0.21 | | |
| 0.25~0.4 | MT-12/2H0.33 | MT-12/3H0.33 | MT-12/3K0.33 | | |
| 0.4~0.63 | MT-12/2H0.52 | MT-12/3H0.52 | MT-12/3K0.52 | | |
| 0.63~1 | MT-12/2H0.82 | MT-12/3H0.82 | MT-12/3K0.82 | | |
| 1~1.6 | MT-12/2H1.3 | MT-12/3H1.3 | MT-12/3K1.3 | | |
| 1.6~2.5 | MT-12/2H2.1 | MT-12/3H2.1 | MT-12/3K2.1 | | |
| 2.5~4 | MT-12/2H3.3 | MT-12/3H3.3 | MT-12/3K3.3 | | |
| 4~6 | MT-12/2H5 | MT-12/3H5 | MT-12/3K5 | | |
| 5~8 | MT-12/2H6.5 | MT-12/3H6.5 | MT-12/3K6.5 | | |
| 6~9 | MT-12/2H7.5 | MT-12/3H7.5 | MT-12/3K7.5 | | |
| 7~10 | MT-12/2H8.5 | MT-12/3H8.5 | MT-12/3K8.5 | | |
| 9~13 | MT-12/2H11 | MT-12/3H11 | MT-12/3K11 | | |
| 12~18 | MT-12/2H15 | MT-12/3H15 | MT-12/3K15 | | |



MT-32/□

| Setting range (A) | Ordering type | | | Contactor | Separate mounting unit |
|----------------------|-----------------------------------|-----------------------------------|--------------|---------------------------------------------------------|---------------------------|
| | Non-differential (3P-2 heater) | Non-differential (3P-3 heater) | Differential | | |
| 0.1~0.16 | MT-32/2H0.14 | MT-32/3H0.14 | MT-32/3K0.14 | MC-9b MC-12b MC-18b MC-22b MC-32a MC-40a | UZ-32 |
| 0.16~0.25 | MT-32/2H0.21 | MT-32/3H0.21 | MT-32/3K0.21 | | |
| 0.25~0.4 | MT-32/2H0.33 | MT-32/3H0.33 | MT-32/3K0.33 | | |
| 0.4~0.63 | MT-32/2H0.52 | MT-32/3H0.52 | MT-32/3K0.52 | | |
| 0.63~1 | MT-32/2H0.82 | MT-32/3H0.82 | MT-32/3K0.82 | | |
| 1~1.6 | MT-32/2H1.3 | MT-32/3H1.3 | MT-32/3K1.3 | | |
| 1.6~2.5 | MT-32/2H2.1 | MT-32/3H2.1 | MT-32/3K2.1 | | |
| 2.5~4 | MT-32/2H3.3 | MT-32/3H3.3 | MT-32/3K3.3 | | |
| 4~6 | MT-32/2H5 | MT-32/3H5 | MT-32/3K5 | | |
| 5~8 | MT-32/2H6.5 | MT-32/3H6.5 | MT-32/3K6.5 | | |
| 6~9 | MT-32/2H7.5 | MT-32/3H7.5 | MT-32/3K7.5 | | |
| 7~10 | MT-32/2H8.5 | MT-32/3H8.5 | MT-32/3K8.5 | | |
| 9~13 | MT-32/2H11 | MT-32/3H11 | MT-32/3K11 | | |
| 12~18 | MT-32/2H15 | MT-32/3H15 | MT-32/3K15 | | |
| 16~22 | MT-32/2H19 | MT-32/3H19 | MT-32/3K19 | | |
| 18~25 | MT-32/2H21.5 | MT-32/3H21.5 | MT-32/3K21.5 | | |
| 22~32 | MT-32/2H27 | MT-32/3H27 | MT-32/3K27 | | |
| 28~40 | MT-32/2H34 | MT-32/3H34 | MT-32/3K34 | | |

Trip class 10A

Direct mounting type



MT-63/□

| Setting range (A) | Ordering type | | | Contactor | Separate mounting unit |
|----------------------|-----------------------------------|-----------------------------------|---------------|------------------|---------------------------|
| | Non-differential (3P-2 heater) | Non-differential (3P-3 heater) | Differential | | |
| 4~6 | MT-63/2H5S | MT-63/3H5S | MT-63/3K5S | MC-50a MC-65a | UZ-63/S |
| 5~8 | MT-63/2H6.5S | MT-63/3H6.5S | MT-63/3K6.5S | | |
| 6~9 | MT-63/2H7.5S | MT-63/3H7.5S | MT-63/3K7.5S | | |
| 7~10 | MT-63/2H8.5S | MT-63/3H8.5S | MT-63/3K8.5S | | |
| 9~13 | MT-63/2H11S | MT-63/3H11S | MT-63/3K11S | | |
| 12~18 | MT-63/2H15S | MT-63/3H15S | MT-63/3K15S | | |
| 16~22 | MT-63/2H19S | MT-63/3H19S | MT-63/3K19S | | |
| 18~25 | MT-63/2H21.5S | MT-63/3H21.5S | MT-63/3K21.5S | | |
| 24~36 | MT-63/2H30S | MT-63/3H30S | MT-63/3K30S | | |
| 28~40 | MT-63/2H34S | MT-63/3H34S | MT-63/3K34S | | |
| 34~50 | MT-63/2H42S | MT-63/3H42S | MT-63/3K42S | | |
| 45~65 | MT-63/2H55S | MT-63/3H55S | MT-63/3K55S | | |



MT-95/□

| Setting range (A) | Ordering type | | | Contactor | Separate mounting unit |
|----------------------|-----------------------------------|-----------------------------------|---------------|-----------------------------|---------------------------|
| | Non-differential (3P-2 heater) | Non-differential (3P-3 heater) | Differential | | |
| 7~10 | MT-95/2H8.5S | MT-95/3H8.5S | MT-95/3K8.5S | MC-75a MC-85a MC-100a | UZ-95/S |
| 9~13 | MT-95/2H11S | MT-95/3H11S | MT-95/3K11S | | |
| 12~18 | MT-95/2H15S | MT-95/3H15S | MT-95/3K15S | | |
| 16~22 | MT-95/2H19S | MT-95/3H19S | MT-95/3K19S | | |
| 18~25 | MT-95/2H21.5S | MT-95/3H21.5S | MT-95/3K21.5S | | |
| 24~36 | MT-95/2H30S | MT-95/3H30S | MT-95/3K30S | | |
| 28~40 | MT-95/2H34S | MT-95/3H34S | MT-95/3K34S | | |
| 34~50 | MT-95/2H42S | MT-95/3H42S | MT-95/3K42S | | |
| 45~65 | MT-95/2H55S | MT-95/3H55S | MT-95/3K55S | | |
| 54~75 | MT-95/2H65S | MT-95/3H65S | MT-95/3K65S | | |
| 63~85 | MT-95/2H74S | MT-95/3H74S | MT-95/3K74S | | |
| 70~95 | MT-95/2H83S | MT-95/3H83S | MT-95/3K83S | | |
| 80~100 | MT-95/2H90S | MT-95/3H90S | MT-95/3K90S | | |

Overload relay ordering types

Trip class 10A



MT-150



MT-150/□

| Setting range (A) | Ordering type | | | Contactor | Separate mounting unit |
|----------------------|------------------|---------------|--------------|--------------------|------------------------|
| | Non-differential | | Differential | | |
| | (3P-2 heater) | (3P-3 heater) | | | |
| 34-50 | MT-150/2H42 | MT-150/3H42 | MT-150/3K42 | MC-130a MC-150a | UZ-150/S |
| 45-65 | MT-150/2H55 | MT-150/3H55 | MT-150/3K55 | | |
| 54-75 | MT-150/2H65 | MT-150/3H65 | MT-150/3K65 | | |
| 63-85 | MT-150/2H74 | MT-150/3H74 | MT-150/3K74 | | |
| 80-105 | MT-150/2H93 | MT-150/3H93 | MT-150/3K93 | | |
| 95-130 | MT-150/2H113 | MT-150/3H113 | MT-150/3K113 | | |
| 110-150 | MT-150/2H130 | MT-150/3H130 | MT-150/3K130 | | |

MT-225



MT-225/□

| Setting range (A) | Ordering type | | | Contactor | Remarks |
|----------------------|------------------|---------------|--------------|--------------------|---------|
| | Non-differential | | Differential | | |
| | (3P-2 heater) | (3P-3 heater) | | | |
| 65-100 | MT-225/2H80 | MT-225/3H80 | MT-225/3K80 | MC-185a MC-225a | - |
| 85-125 | MT-225/2H107 | MT-225/3H107 | MT-225/3K107 | | |
| 100-160 | MT-225/2H130 | MT-225/3H130 | MT-225/3K130 | | |
| 120-185 | MT-225/2H153 | MT-225/3H153 | MT-225/3K153 | | |
| 160-240 | MT-225/2H200 | MT-225/3H200 | MT-225/3K200 | | |

MT-400



MT-400/□

| Setting range (A) | Ordering type | | | Contactor | Remarks |
|----------------------|------------------|---------------|--------------|-------------------------------|---------|
| | Non-differential | | Differential | | |
| | (3P-2 heater) | (3P-3 heater) | | | |
| 85-125 | MT-400/2H107 | MT-400/3H107 | MT-400/3K107 | MC-265a MC-330a MC-400a | - |
| 100-160 | MT-400/2H130 | MT-400/3H130 | MT-400/3K130 | | |
| 120-185 | MT-400/2H153 | MT-400/3H153 | MT-400/3K153 | | |
| 160-240 | MT-400/2H200 | MT-400/3H200 | MT-400/3K200 | | |
| 200-330 | MT-400/2H265 | MT-400/3H265 | MT-400/3K265 | | |
| 260-400 | MT-400/2H350 | MT-400/3H350 | MT-400/3K350 | | |

MT-800



MT-800/□

| Setting range (A) | Ordering type | | | Contactor | Remarks |
|----------------------|------------------|---------------|--------------|-------------------------------|---------|
| | Non-differential | | Differential | | |
| | (3P-2 heater) | (3P-3 heater) | | | |
| 200-330 | MT-800/2H265 | MT-800/3H265 | MT-800/3K265 | MC-500a MC-630a MC-800a | - |
| 260-400 | MT-800/2H350 | MT-800/3H350 | MT-800/3K350 | | |
| 400-630 | MT-800/2H515 | MT-800/3H515 | MT-800/3K515 | | |
| 520-800 | MT-800/2H660 | MT-800/3H660 | MT-800/3K660 | | |

Trip class 20

Direct mounting type



MT-12/3D□

| Setting range (A) | Ordering type | Contactor | Separate mounting unit |
|-------------------|---------------|------------------------------------|------------------------|
| | Differential | | |
| 1~1.6 | MT-12/3D1.3 | MC-6a MC-9a MC-12a MC-18a | - |
| 1.6~2.5 | MT-12/3D2.1 | | |
| 2.5~4 | MT-12/3D3.3 | | |
| 4~6 | MT-12/3D5 | | |
| 5~8 | MT-12/3D6.5 | | |
| 6~9 | MT-12/3D7.5 | | |
| 7~10 | MT-12/3D8.5 | | |
| 9~13 | MT-12/3D11 | | |
| 12~18 | MT-12/3D15 | | |



MT-32/3D□

| Setting range (A) | Ordering type | Contactor | Separate mounting unit |
|-------------------|---------------|---------------------------------------------------------|------------------------|
| | Differential | | |
| 1~1.6 | MT-32/3D1.3 | MC-9b MC-12b MC-18b MC-22b MC-32a MC-40a | UZ-32 |
| 1.6~2.5 | MT-32/3D2.1 | | |
| 2.5~4 | MT-32/3D3.3 | | |
| 4~6 | MT-32/3D5 | | |
| 5~8 | MT-32/3D6.5 | | |
| 6~9 | MT-32/3D7.5 | | |
| 7~10 | MT-32/3D8.5 | | |
| 9~13 | MT-32/3D11 | | |
| 12~18 | MT-32/3D15 | | |
| 16~22 | MT-32/3D19 | | |
| 18~25 | MT-32/3D21.5 | | |
| 22~32 | MT-32/3D27 | | |
| 28~40 | MT-32/3D34 | | |

Overload relay ordering types

Trip class 20

Direct mounting type



MT-63/3D□S

| Setting range (A) | Ordering type | Contactor | Separate mounting unit |
|-------------------|---------------|------------------|------------------------|
| | Differential | | |
| 4~6 | MT-63/3D5S | MC-50a MC-65a | UZ-63/S |
| 5~8 | MT-63/3D6.5S | | |
| 6~9 | MT-63/3D7.5S | | |
| 7~10 | MT-63/3D8.5S | | |
| 9~13 | MT-63/3D11S | | |
| 12~18 | MT-63/3D15S | | |
| 16~22 | MT-63/3D19S | | |
| 18~25 | MT-63/3D21.5S | | |
| 24~36 | MT-63/3D30S | | |
| 28~40 | MT-63/3D34S | | |
| 34~50 | MT-63/3D42S | | |
| 45~65 | MT-63/3D55S | | |



MT-95/3D□S

| Setting range (A) | Ordering type | Contactor | Separate mounting unit |
|-------------------|---------------|-----------------------------|------------------------|
| | Differential | | |
| 7~10 | MT-95/3D8.5S | MC-75a MC-85a MC-100a | UZ-95/S |
| 9~13 | MT-95/3D11S | | |
| 12~18 | MT-95/3DK15S | | |
| 16~22 | MT-95/3D19S | | |
| 18~25 | MT-95/3D21.5S | | |
| 24~36 | MT-95/3D30S | | |
| 28~40 | MT-95/3D34S | | |
| 34~50 | MT-95/3D42S | | |
| 45~65 | MT-95/3D55S | | |
| 54~75 | MT-95/3D65S | | |
| 63~85 | MT-95/3D74S | | |
| 70~95 | MT-95/3D83S | | |
| 80~100 | MT-95/3D90S | | |

Trip class 20



MT-150



MT-150/3D □

| Setting range (A) | Ordering type | Contactor | Separate mounting unit |
|-------------------|---------------|--------------------|------------------------|
| | Differential | | |
| 34~50 | MT-150/3D42 | MC-130a MC-150a | UZ-150/S |
| 45~65 | MT-150/3D55 | | |
| 54~75 | MT-150/3D65 | | |
| 63~85 | MT-150/3D74 | | |
| 80~105 | MT-150/3D93 | | |
| 95~130 | MT-150/3D113 | | |
| 110~150 | MT-150/3D130 | | |

MT-225



MT-225/3D □

| Setting range (A) | Ordering type | Contactor | Remarks |
|-------------------|---------------|--------------------|---------|
| | Differential | | |
| 65~100 | MT-225/3D80 | MC-185a MC-225a | - |
| 85~125 | MT-225/3D107 | | |
| 100~160 | MT-225/3D130 | | |
| 120~185 | MT-225/3D153 | | |
| 160~240 | MT-225/3D200 | | |

MT-400



MT-400/3D □

| Setting range (A) | Ordering type | Contactor | Remarks |
|-------------------|---------------|-------------------------------|---------|
| | Differential | | |
| 85~125 | MT-400/3D107 | MC-265a MC-330a MC-400a | - |
| 100~160 | MT-400/3D130 | | |
| 120~185 | MT-400/3D153 | | |
| 160~240 | MT-400/3D200 | | |
| 200~330 | MT-400/3D265 | | |
| 260~400 | MT-400/3D350 | | |

MT-800



MT-800/3D □

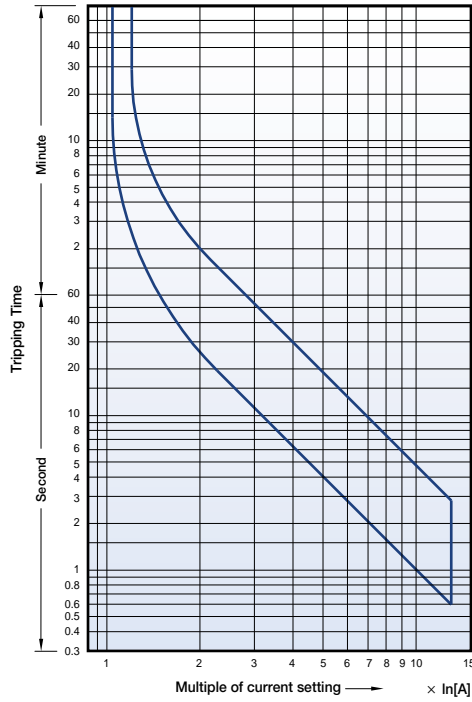
| Setting range (A) | Ordering type | Contactor | Remarks |
|-------------------|---------------|-------------------------------|---------|
| | Differential | | |
| 200~330 | MT-800/3D265 | MC-500a MC-630a MC-800a | - |
| 260~400 | MT-800/3D350 | | |
| 400~630 | MT-800/3D515 | | |
| 520~800 | MT-800/3D660 | | |

Overload relay trip curves

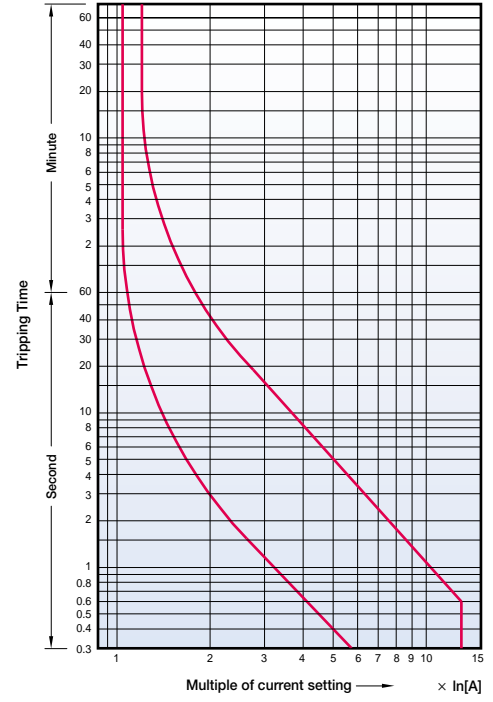
Class 10A, 18AF

- MT-12/2H
- MT-12/3H
- MT-12/3K

Cold starting



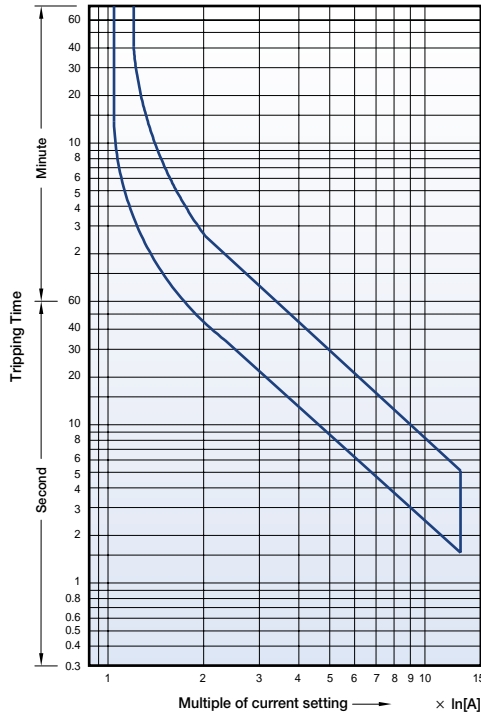
Hot starting



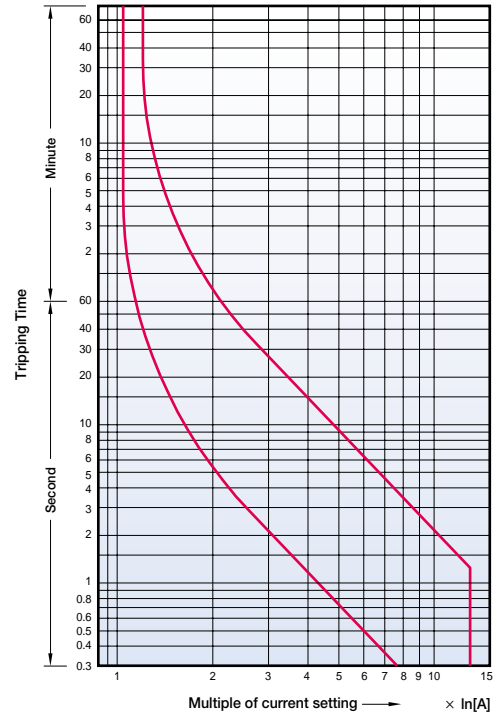
Class 20, 18AF

- MT-12/3D

Cold starting



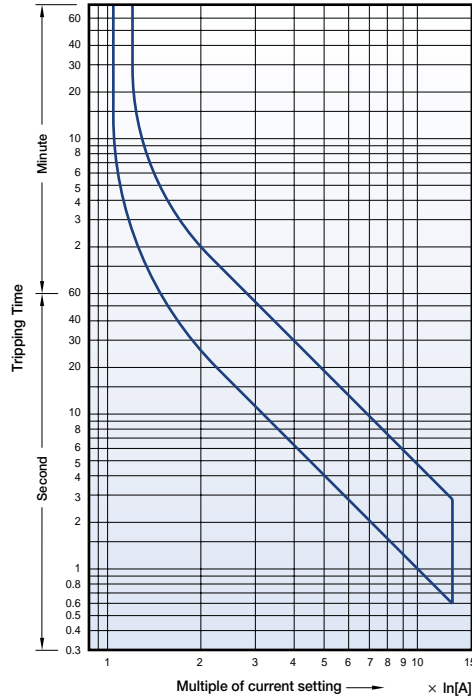
Hot starting



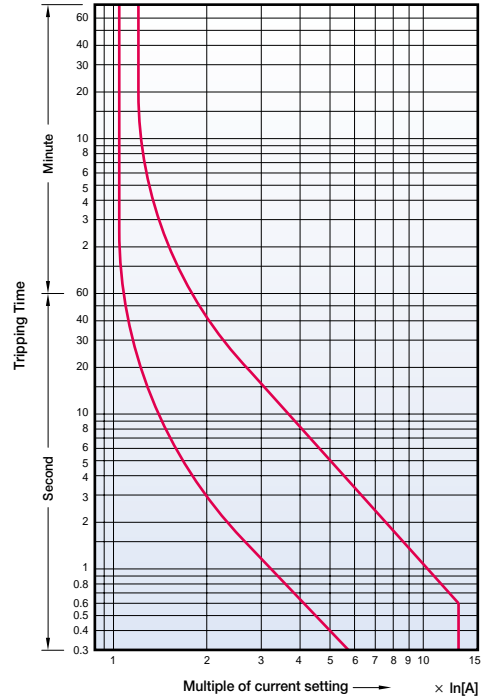
Class 10A, 40AF

- MT-32/2H
- MT-32/3H
- MT-32/3K

Cold starting



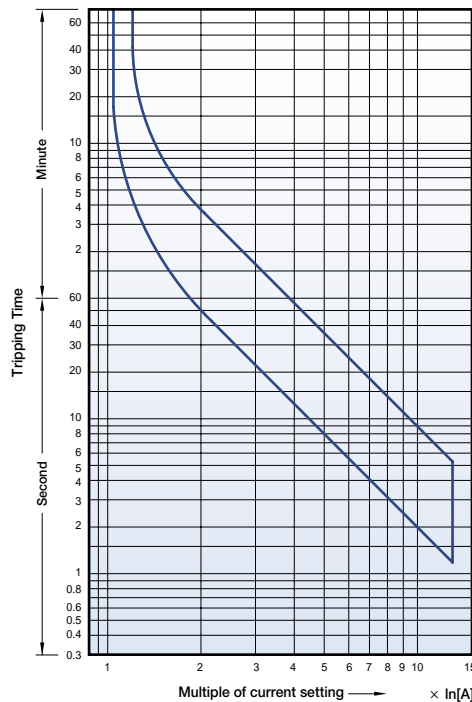
Hot starting



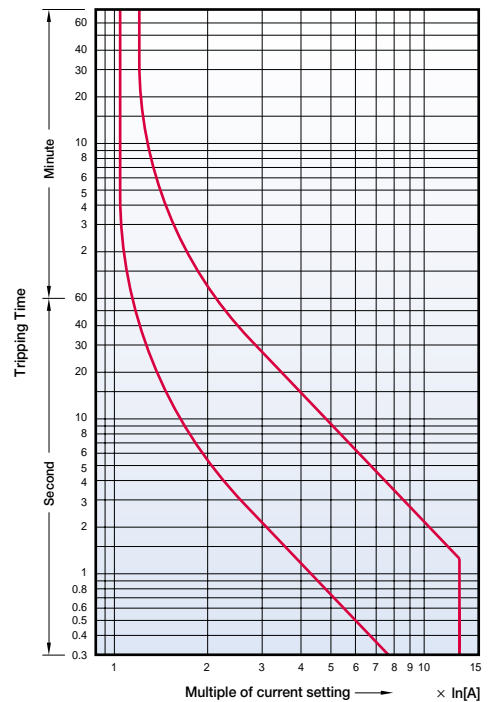
Class 20, 40AF

- MT-32/3D

Cold starting



Hot starting

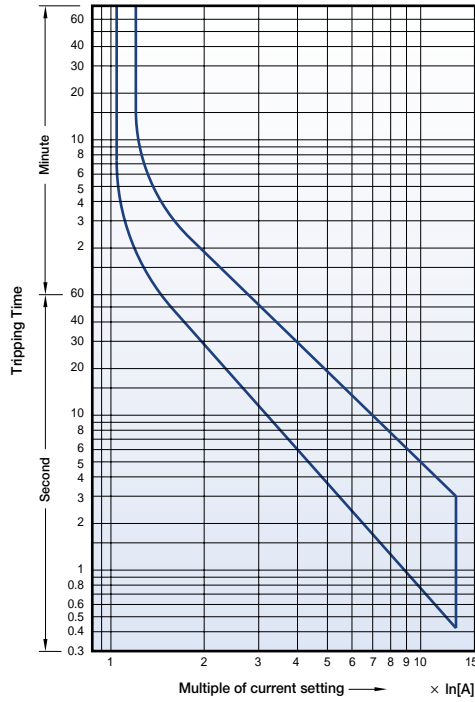


Overload relay trip curves

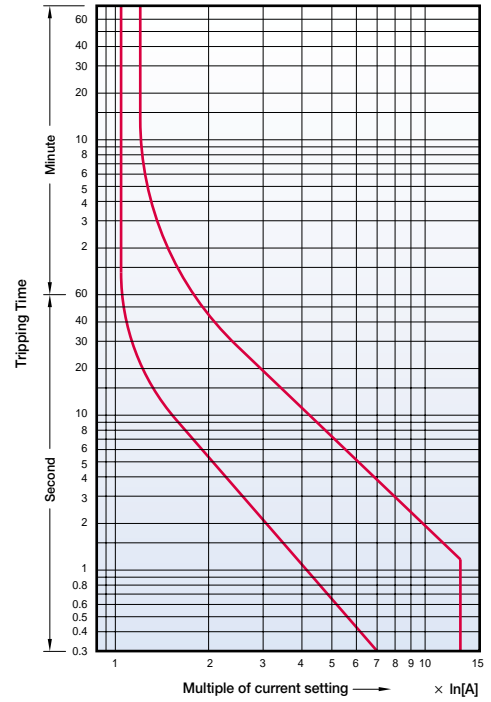
Class 10A, 65AF

- MT-63/2H
- MT-63/3H
- MT-63/3K

Cold starting



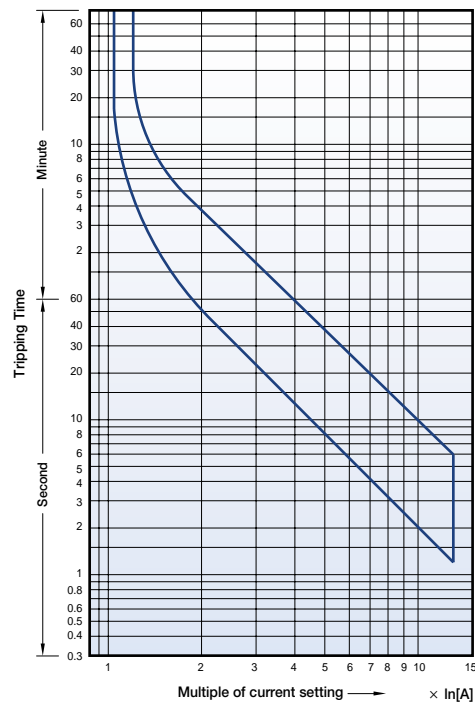
Hot starting



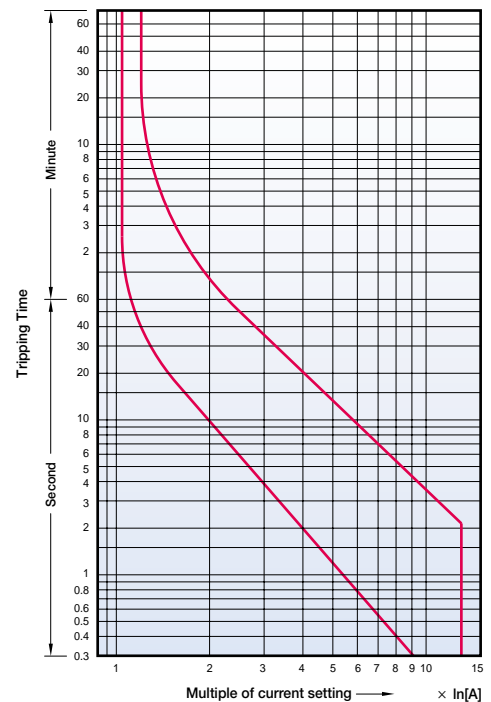
Class 20, 65AF

- MT-63/3D

Cold starting



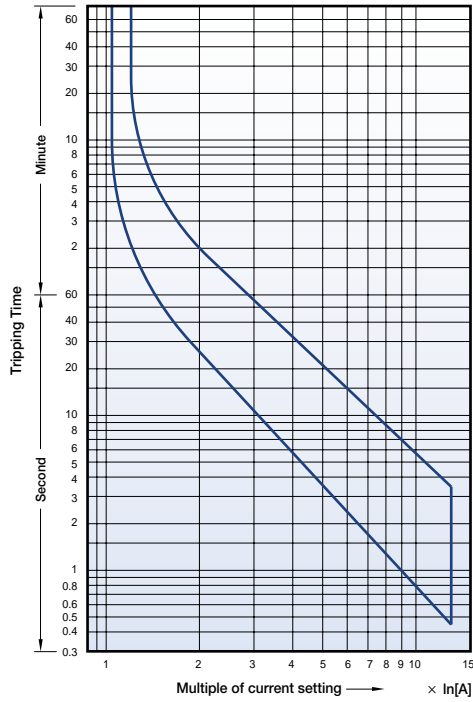
Hot starting



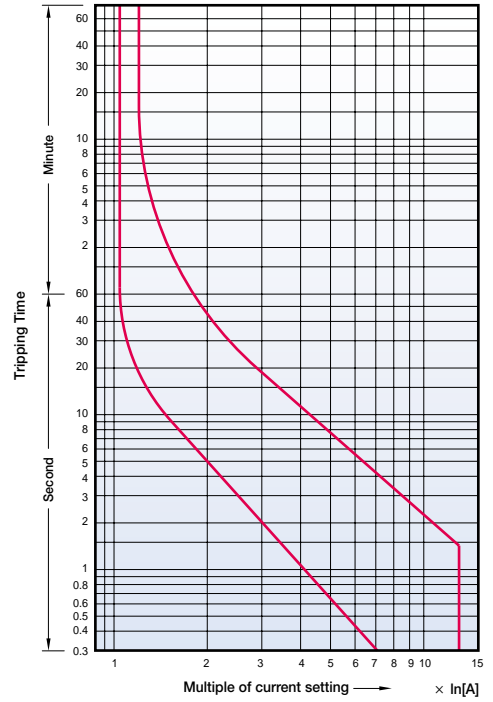
Class 10A, 100AF

- MT-95/2H
- MT-95/3H
- MT-95/3K

Cold starting



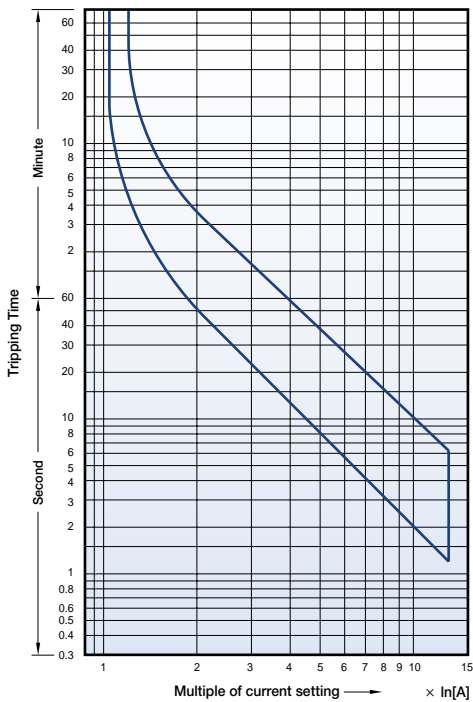
Hot starting



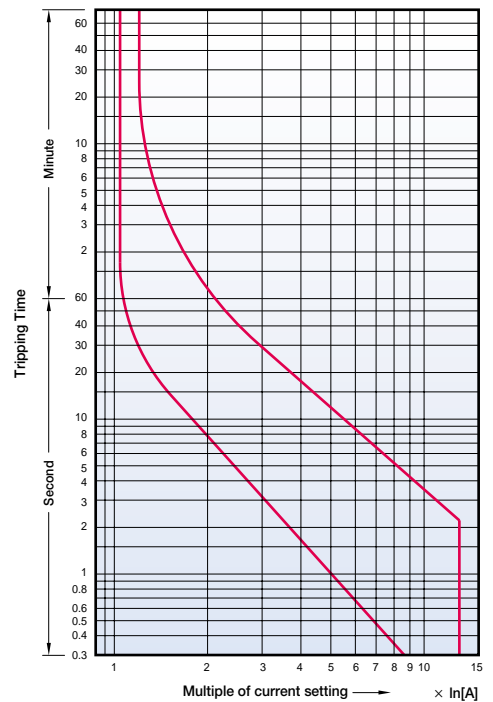
Class 20, 100AF

- MT-95/3D

Cold starting



Hot starting

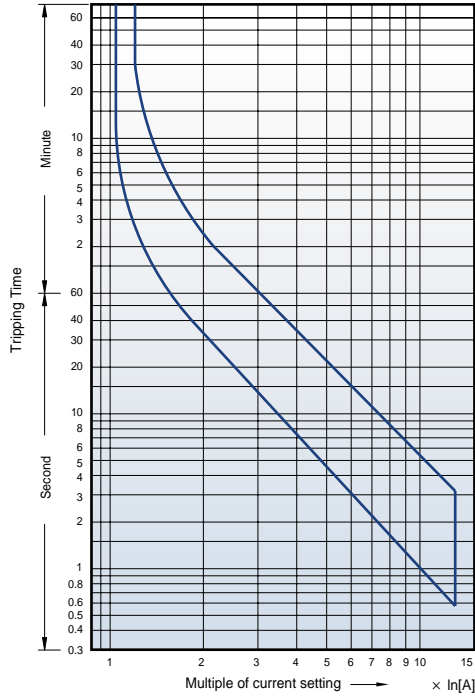


Overload relay trip curves

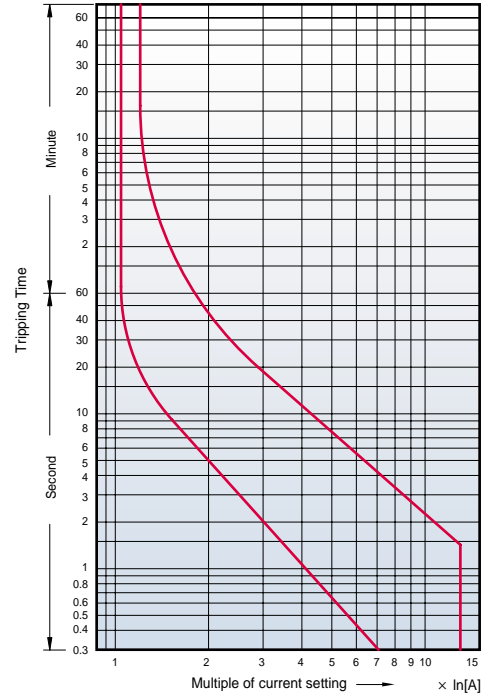
Class 10A, 150AF

- MT-150/2H
- MT-150/3H
- MT-150/3K

Cold starting



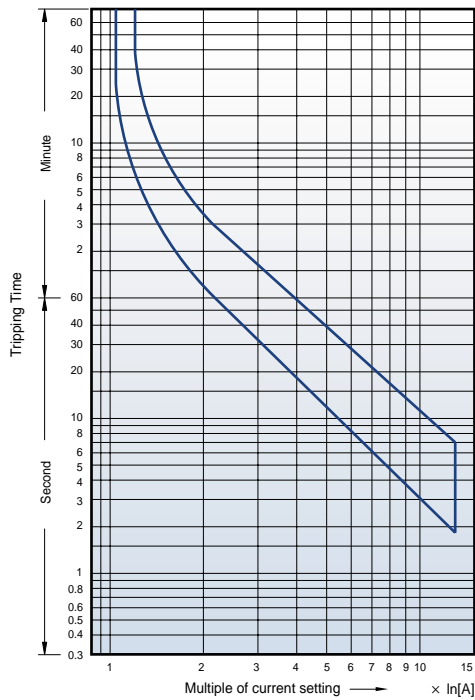
Hot starting



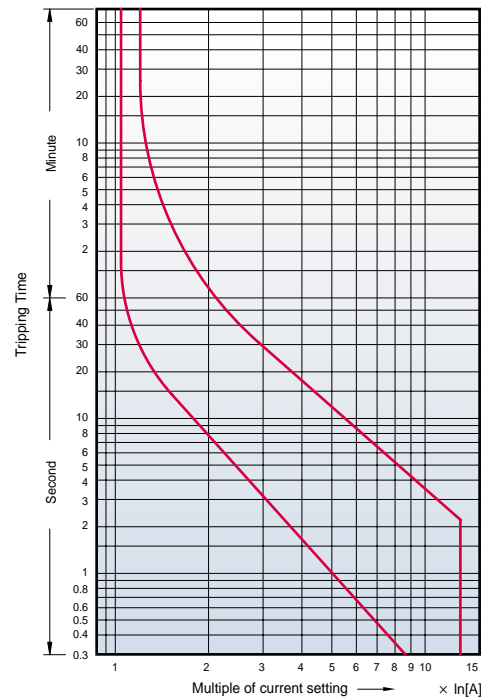
Class 20, 150AF

- MT-150/3D

Cold starting



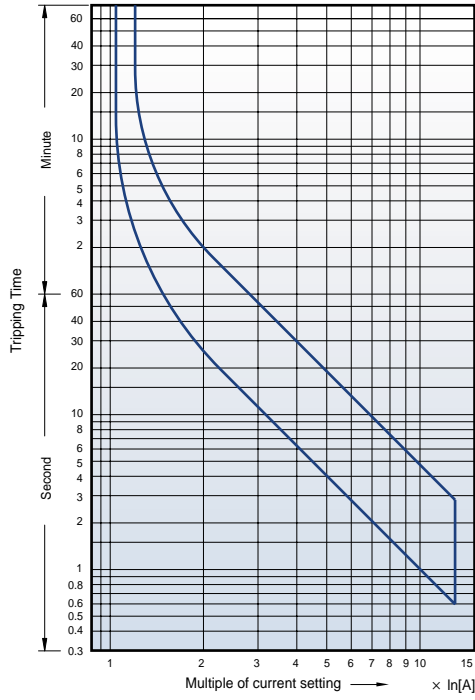
Hot starting



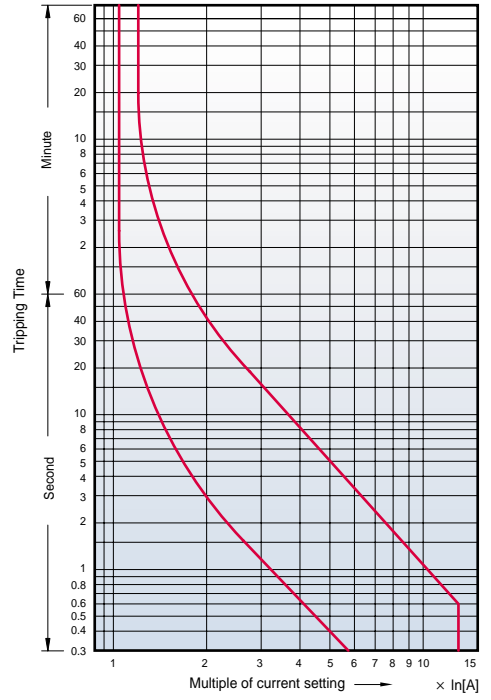
Class 10A, 225AF

- MT-225/2H
- MT-225/3H
- MT-225/3K

Cold starting



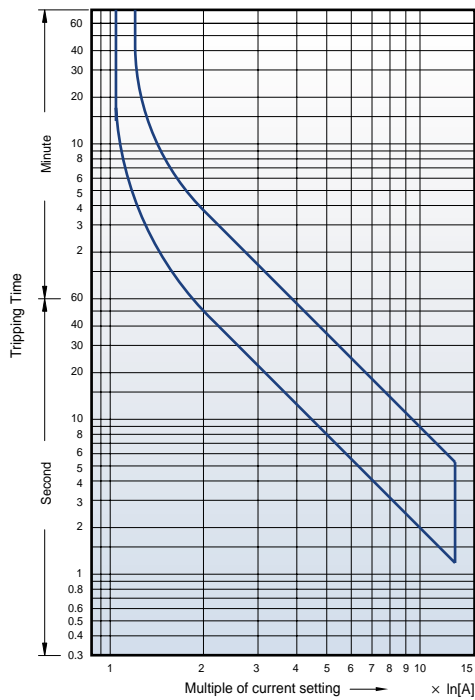
Hot starting



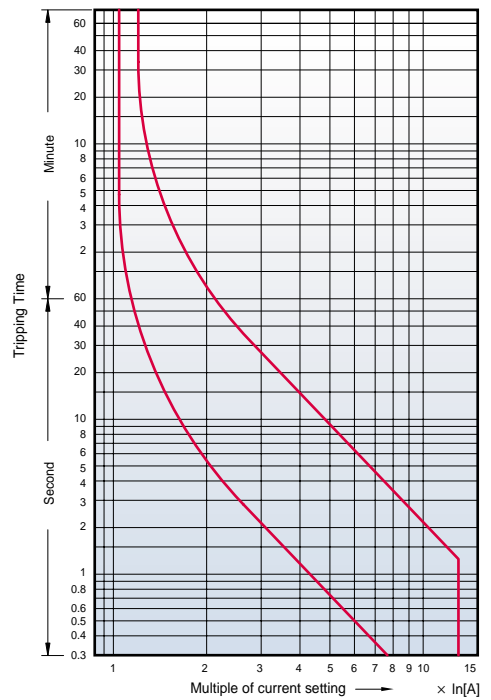
Class 20, 225AF

- MT-225/3D

Cold starting



Hot starting



Overload relay trip curves

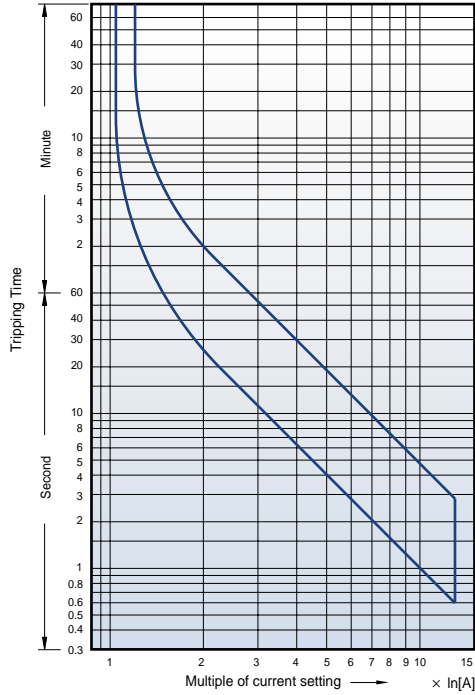
Class 10A, 400AF

MT-400/2H

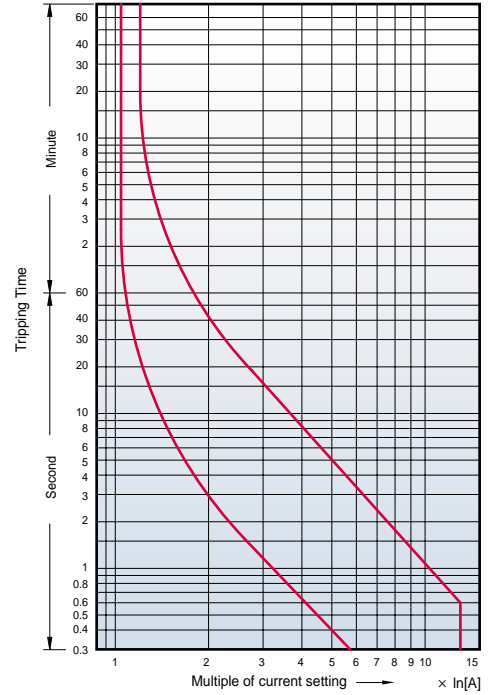
MT-400/3H

MT-400/3K

Cold starting



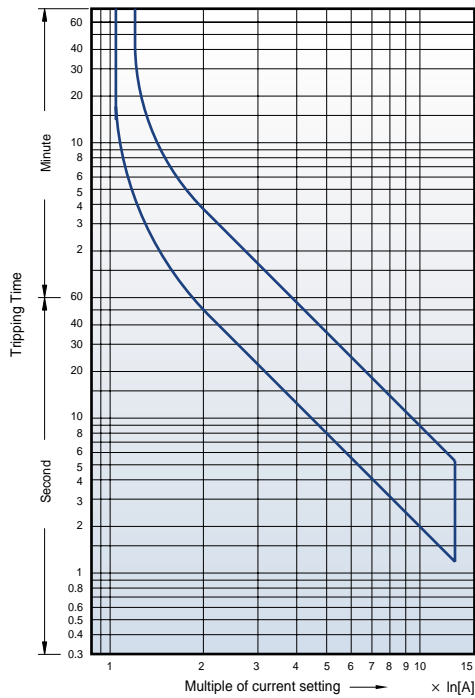
Hot starting



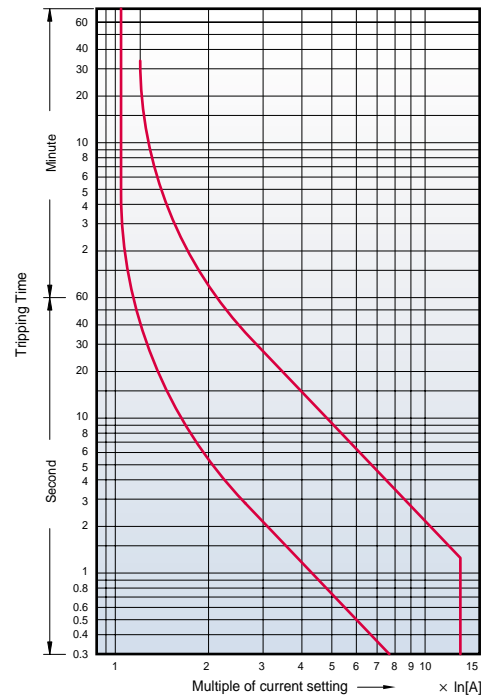
Class 20, 400AF

MT-400/3D

Cold starting



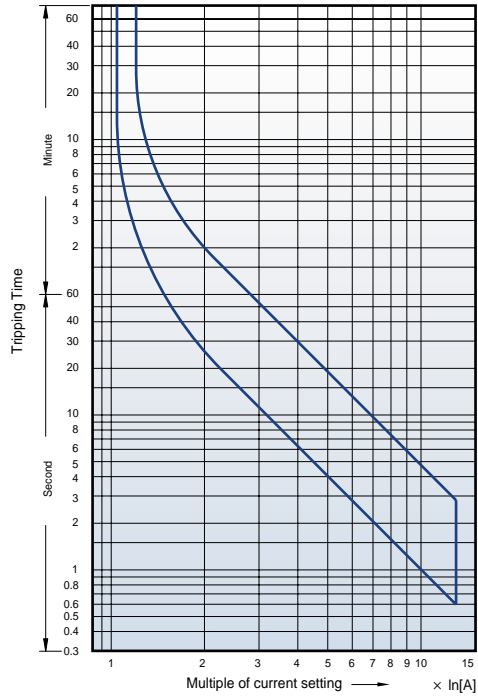
Hot starting



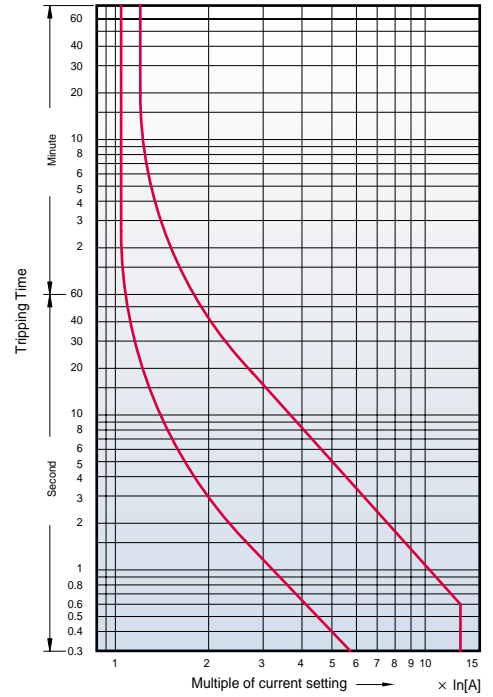
Class 10A, 800AF

- MT-800/2H
- MT-800/3H
- MT-800/3K

Cold starting



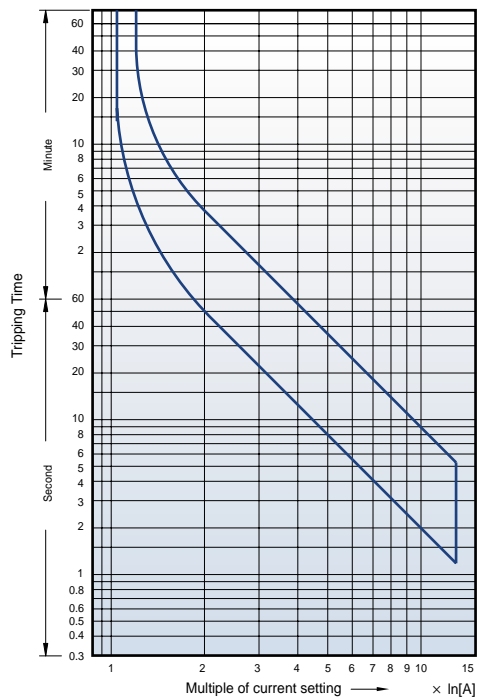
Hot starting



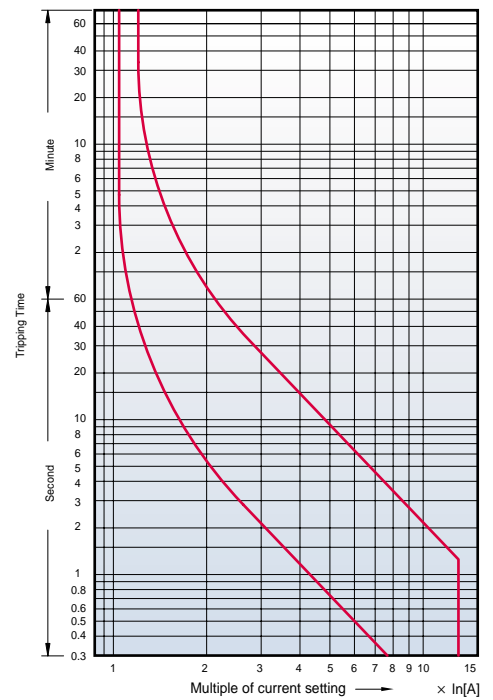
Class 20, 800AF

- MT-800/3D

Cold starting



Hot starting



Type 2 Coordination (380/415V)

415V

HI type MMS + Susol MCCB

| kW | Rated Operational Power | | | Circuit Breaker | | Contactor | Thermal Overload Relays | | Short Circuit Breaking Capacity | |
|------|-------------------------|------|------|-----------------|------------|------------|-------------------------|-------------------|---------------------------------|---------|
| | Current [A] | | | Type | Rating [A] | Type | Type | Setting Range [A] | Ir [kA] | Iq [kA] |
| | 380V | 400V | 415V | | | | | | | |
| 0.06 | 0.21 | 0.20 | 0.19 | MMS-32HI | 0.25 | MC-6a | MT-12 | 0.16~0.25 | 1 | 50 |
| 0.09 | 0.32 | 0.30 | 0.29 | MMS-32HI | 0.4 | MC-6a | MT-12 | 0.25~0.4 | 1 | 50 |
| 0.12 | 0.46 | 0.44 | 0.42 | MMS-32HI | 0.63 | MC-6a | MT-12 | 0.4~0.63 | 1 | 50 |
| 0.18 | 0.63 | 0.60 | 0.58 | MMS-32HI | 0.63 | MC-6a | MT-12 | 0.4~0.63 | 1 | 50 |
| 0.25 | 0.89 | 0.85 | 0.82 | MMS-32HI | 1 | MC-6a | MT-12 | 0.63~1 | 1 | 50 |
| 0.37 | 1.16 | 1.10 | 1.06 | MMS-32HI | 1.6 | MC-12a,12b | MT-12 | 1~1.6 | 1 | 50 |
| 0.55 | 1.6 | 1.5 | 1.4 | MMS-32HI | 1.6 | MC-12a,12b | MT-12 | 1~1.6 | 1 | 50 |
| 0.75 | 2.0 | 1.9 | 1.8 | MMS-32HI | 2.5 | MC-12a,12b | MT-12 | 1.6~2.5 | 1 | 50 |
| 1.1 | 2.8 | 2.7 | 2.6 | MMS-32HI | 4 | MC-22b | MT-32 | 2.5~4 | 1 | 50 |
| 1.5 | 3.8 | 3.6 | 3.5 | MMS-32HI | 4 | MC-22b | MT-32 | 2.5~4 | 1 | 50 |
| 2.2 | 5.2 | 4.9 | 4.7 | MMS-32HI | 6 | MC-22b | MT-32 | 4~6 | 1 | 50 |
| 3.0 | 6.8 | 6.5 | 6.3 | MMS-32HI | 8 | MC-40a | MT-32 | 5~8 | 1 | 50 |
| 4.0 | 8.9 | 8.5 | 8.2 | MMS-32HI | 10 | MC-40a | MT-32 | 6~9 | 1 | 50 |
| 5.5 | 12.1 | 11.5 | 11.1 | MMS-32HI | 13 | MC-40a | MT-32 | 9~13 | 3 | 50 |
| 7.5 | 16.3 | 15.5 | 14.9 | MMS-32HI | 17 | MC-40a | MT-32 | 12~18 | 3 | 50 |
| 11.0 | 23.2 | 22.0 | 21.2 | TD100 | 25 | MC-50a | MT-63 | 18~25 | 3 | 70 |
| 15.0 | 31 | 29 | 28 | TD100 | 32 | MC-50a | MT-63 | 24~36 | 3 | 70 |
| 18.5 | 37 | 35 | 34 | TD100 | 40 | MC-50a | MT-63 | 28~40 | 3 | 70 |
| 22 | 43 | 41 | 40 | TD100 | 50 | MC-50a | MT-63 | 34~50 | 3 | 70 |
| 30 | 58 | 55 | 53 | TD100 | 63 | MC-65a | MT-63 | 45~65 | 3 | 70 |
| 37 | 69 | 66 | 64 | TD100 | 80 | MC-75a | MT-95 | 54~75 | 5 | 70 |
| 45 | 84 | 80 | 77 | TD100 | 100 | MC-85a | MT-95 | 63~85 | 5 | 70 |
| 55 | - | - | 93 | TD100 | 100 | MC-100a | MT-95 | 70~95 | 5 | 70 |

415V

H type MMS + Susol MCCB

| Rated Operational Power | | | | Circuit Breaker | | Contactor | Thermal Overload Relays | | Short Circuit Breaking Capacity | |
|-------------------------|-------------|------|------|-----------------|------------|------------|-------------------------|-------------------|---------------------------------|---------|
| kW | Current [A] | | | Type | Rating [A] | Type | Type | Setting Range [A] | Ir [kA] | Iq [kA] |
| | 380V | 400V | 415V | | | | | | | |
| 0.06 | 0.21 | 0.20 | 0.19 | MMS-32H | 0.25 | MC-6a | | | 1 | 50 |
| 0.09 | 0.32 | 0.30 | 0.29 | MMS-32H | 0.4 | MC-6a | | | 1 | 50 |
| 0.12 | 0.46 | 0.44 | 0.42 | MMS-32H | 0.63 | MC-6a | | | 1 | 50 |
| 0.18 | 0.63 | 0.60 | 0.58 | MMS-32H | 0.63 | MC-6a | | | 1 | 50 |
| 0.25 | 0.89 | 0.85 | 0.82 | MMS-32H | 1 | MC-6a | | | 1 | 50 |
| 0.37 | 1.16 | 1.10 | 1.06 | MMS-32H | 1.6 | MC-12a,12b | | | 1 | 50 |
| 0.55 | 1.6 | 1.5 | 1.4 | MMS-32H | 1.6 | MC-12a,12b | | | 1 | 50 |
| 0.75 | 2.0 | 1.9 | 1.8 | MMS-32H | 2.5 | MC-12a,12b | | | 1 | 50 |
| 1.1 | 2.8 | 2.7 | 2.6 | MMS-32H | 4 | MC-22b | | | 1 | 50 |
| 1.5 | 3.8 | 3.6 | 3.5 | MMS-32H | 4 | MC-22b | | | 1 | 50 |
| 2.2 | 5.2 | 4.9 | 4.7 | MMS-32H | 6 | MC-22b | | | 1 | 50 |
| 3.0 | 6.8 | 6.5 | 6.3 | MMS-32H | 8 | MC-40a | | | 1 | 50 |
| 4.0 | 8.9 | 8.5 | 8.2 | MMS-32H | 10 | MC-40a | | | 1 | 50 |
| 5.5 | 12.1 | 11.5 | 11.1 | MMS-32H | 13 | MC-40a | | | 3 | 50 |
| 7.5 | 16.3 | 15.5 | 14.9 | MMS-32H | 17 | MC-40a | | | 3 | 50 |
| 11.0 | 23.2 | 22.0 | 21.2 | TD100 | 25 | MC-50a | MT-63 | 18-25 | 3 | 70 |
| 15.0 | 31 | 29 | 28 | TD100 | 32 | MC-50a | MT-63 | 24-36 | 3 | 70 |
| 18.5 | 37 | 35 | 34 | TD100 | 40 | MC-50a | MT-63 | 28-40 | 3 | 70 |
| 22 | 43 | 41 | 40 | TD100 | 50 | MC-50a | MT-63 | 34-50 | 3 | 70 |
| 30 | 58 | 55 | 53 | TD100 | 63 | MC-65a | MT-63 | 45-65 | 3 | 70 |
| 37 | 69 | 66 | 64 | TD100 | 80 | MC-75a | MT-95 | 54-75 | 5 | 70 |
| 45 | 84 | 80 | 77 | TD100 | 100 | MC-85a | MT-95 | 63-85 | 5 | 70 |
| 55 | - | - | 93 | TD100 | 100 | MC-100a | MT-95 | 70-95 | 5 | 70 |

Type 2 Coordination (380/415V)

415V

Susol MCCB

| kW | Rated Operational Power | | | Circuit Breaker | | Contactor | Thermal Overload Relays | | Short Circuit Breaking Capacity | |
|------|-------------------------|------|------|-----------------|------------|------------|-------------------------|-------------------|---------------------------------|---------|
| | Current [A] | | | Type | Rating [A] | Type | Type | Setting Range [A] | Ir [kA] | Iq [kA] |
| | 380V | 400V | 415V | | | | | | | |
| 0.06 | 0.21 | 0.20 | 0.19 | TS100 (1) | 1.6 | MC-6a | MT-12 | 0.16~0.25 | 1 | 50 |
| 0.09 | 0.32 | 0.30 | 0.29 | TS100 (1) | 1.6 | MC-6a | MT-12 | 0.25~0.4 | 1 | 50 |
| 0.12 | 0.46 | 0.44 | 0.42 | TS100 (1) | 1.6 | MC-6a | MT-12 | 0.4~0.63 | 1 | 50 |
| 0.18 | 0.63 | 0.60 | 0.58 | TS100 (1) | 1.6 | MC-6a | MT-12 | 0.4~0.63 | 1 | 50 |
| 0.25 | 0.89 | 0.85 | 0.82 | TS100 (1) | 1.6 | MC-6a | MT-12 | 0.63~1 | 1 | 50 |
| 0.37 | 1.16 | 1.10 | 1.06 | TS100 (1) | 1.6 | MC-12a,12b | MT-12 | 1~1.6 | 1 | 50 |
| 0.55 | 1.6 | 1.5 | 1.4 | TS100 (1) | 1.6 | MC-12a,12b | MT-12 | 1~1.6 | 1 | 50 |
| 0.75 | 2.0 | 1.9 | 1.8 | TS100 (1) | 1.6 | MC-12a,12b | MT-12 | 1.6~2.5 | 1 | 50 |
| 1.1 | 2.8 | 2.7 | 2.6 | TS100 (1) | 3.2 | MC-22b | MT-32 | 2.5~4 | 1 | 50 |
| 1.5 | 3.8 | 3.6 | 3.5 | TS100 (1) | 3.2 | MC-22b | MT-32 | 2.5~4 | 1 | 50 |
| 2.2 | 5.2 | 4.9 | 4.7 | TS100 (1) | 3.2 | MC-22b | MT-32 | 4~6 | 1 | 50 |
| 3.0 | 6.8 | 6.5 | 6.3 | TS100 (1) | 6.3 | MC-40a | MT-32 | 5~8 | 1 | 50 |
| 4.0 | 8.9 | 8.5 | 8.2 | TS100 (1) | 6.3 | MC-40a | MT-32 | 6~9 | 1 | 50 |
| 5.5 | 12.1 | 11.5 | 11.1 | TS100 (1) | 12 | MC-40a | MT-32 | 9~13 | 3 | 50 |
| 7.5 | 16.3 | 15.5 | 14.9 | TS100 (1) | 12 | MC-40a | MT-32 | 12~18 | 3 | 50 |
| 11.0 | 23.2 | 22.0 | 21.2 | TD100 | 25 | MC-50a | MT-63 | 18~25 | 3 | 70 |
| 15.0 | 31 | 29 | 28 | TD100 | 32 | MC-50a | MT-63 | 24~36 | 3 | 70 |
| 18.5 | 37 | 35 | 34 | TD100 | 40 | MC-50a | MT-63 | 28~40 | 3 | 70 |
| 22 | 43 | 41 | 40 | TD100 | 50 | MC-50a | MT-63 | 34~50 | 3 | 70 |
| 30 | 58 | 55 | 53 | TD100 | 63 | MC-65a | MT-63 | 45~65 | 3 | 70 |
| 37 | 69 | 66 | 64 | TD100 | 80 | MC-75a | MT-95 | 54~75 | 5 | 70 |
| 45 | 84 | 80 | 77 | TD100 | 100 | MC-85a | MT-95 | 63~85 | 5 | 70 |
| 55 | - | - | 93 | TD100 | 100 | MC-100a | MT-95 | 70~95 | 5 | 70 |

Note) (1) This marks admit for motor protection MTU trip unit only.

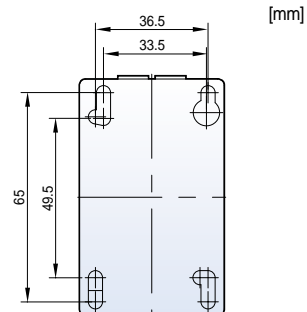
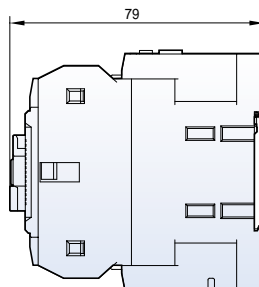
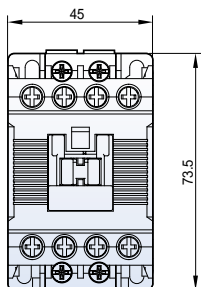
Rated short circuit breaking capacity of installation

| Manual Motor Starter | Adjustment Range (A) | Manual Motor Controller Group Installation | | | Applied Contactor (Susol MC) | Applied Contactor (Metasol MC) | Applied Contactor (Meta-MEC GMC) |
|------------------------------------------------------|----------------------|--------------------------------------------|-----------|-----------|------------------------------|--------------------------------|----------------------------------|
| | | Short Circuit Rating(KAIC) | | | | | |
| | | 240V | 480Y/277V | 600Y/347V | | | |
| 32AF Rotary operation, standard interruption | | | | | | | |
| MMS-32H-0.16 | 0.1~0.16 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-6M/GMC-9 |
| MMS-32H-0.25 | 0.16~0.25 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-6M/GMC-9 |
| MMS-32H-0.4 | 0.25~0.4 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-6M/GMC-9 |
| MMS-32H-0.63 | 0.4~0.63 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-6M/GMC-9 |
| MMS-32H-1 | 0.63~1 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-6M/GMC-9 |
| MMS-32H-1.6 | 1~1.6 | 100 | 65 | 25 | MC-9 | MC-6a/MC-9a/MC-9b | GMC-9M/GMC-9 |
| MMS-32H-2.5 | 1.6~2.5 | 100 | 65 | 25 | MC-12 | MC-12a/MC-12b | GMC-12M/GMC-12 |
| MMS-32H-4 | 2.5~4 | 100 | 65 | 25 | MC-12 | MC-12a/MC-12b | GMC-12M/GMC-12 |
| MMS-32H-6 | 4~6 | 100 | 65 | 25 | MC-18 | MC-18a/MC-18b | GMC-18 |
| MMS-32H-8 | 5~8 | 100 | 65 | 10 | MC-18 | MC-18a/MC-18b | GMC-18 |
| MMS-32H-10 | 6~10 | 100 | 65 | 10 | MC-18 | MC-18a/MC-18b | GMC-18 |
| MMS-32H-13 | 9~13 | 100 | 65 | 10 | MC-25 | MC-22b/MC-25a | GMC-22 |
| MMS-32H-17 | 11~17 | 100 | 30 | 10 | MC-25 | MC-22b/MC-25a | GMC-22 |
| MMS-32H-22 | 14~22 | 100 | 30 | 10 | MC-25 | MC-22b/MC-25a | GMC-32 |
| MMS-32H-26 | 18~26 | 100 | 30 | 10 | MC-32 | MC-32a | GMC-32 |
| MMS-32H-32 | 22~32 | 100 | 30 | 10 | MC-32 | MC-32a | GMC-32 |
| MMS-32H-40 | 28~40 | 100 | 30 | 10 | - | MC-35a/MC-40a | - |
| 63AF Rotary operation, standard interruption | | | | | | | |
| MMS-63S-10 | 6~10 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-13 | 9~13 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-17 | 11~17 | 100 | 40 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-22 | 14~22 | 100 | 40 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-26 | 18~26 | 100 | 40 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-32 | 22~32 | 100 | 40 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63S-40 | 28~40 | 100 | 40 | 10 | MC-40 | MC-50a | GMC-40 |
| MMS-63S-50 | 34~50 | 100 | 40 | 10 | MC-50 | MC-50a | GMC-50 |
| MMS-63S-63 | 45~63 | 100 | 40 | 10 | MC-63 | MC-65a | GMC-65 |
| MMS-63S-65 | 47~65 | 100 | 40 | 10 | - | MC-65a | - |
| 63AF Rotary operation, High interruption | | | | | | | |
| MMS-63H-10 | 6~10 | 100 | 65 | 25 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-13 | 9~13 | 100 | 65 | 25 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-17 | 11~17 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-22 | 14~22 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-26 | 18~26 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-32 | 22~32 | 100 | 50 | 10 | MC-35 | MC-50a | GMC-32 |
| MMS-63H-40 | 28~40 | 100 | 50 | 10 | MC-40 | MC-50a | GMC-40 |
| MMS-63H-50 | 34~50 | 100 | 50 | 10 | MC-50 | MC-50a | GMC-50 |
| MMS-63H-63 | 45~63 | 100 | 50 | 10 | MC-63 | MC-65a | GMC-65 |
| MMS-63H-65 | 47~65 | 100 | 40 | 10 | - | MC-65a | - |
| 100AF Rotary operation, Standard interruption | | | | | | | |
| MMS-100S-17 | 11~17 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-22 | 14~22 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-26 | 18~26 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-32 | 22~32 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-40 | 28~40 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-50 | 34~50 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-50 |
| MMS-100S-63 | 45~63 | 100 | 40 | 10 | MC-65 | MC-75a | GMC-65 |
| MMS-100S-75 | 55~75 | 100 | 40 | 10 | MC-75 | MC-75a | GMC-75 |
| MMS-100S-90 | 70~90 | 100 | 40 | 10 | MC-85 | MC-85a | GMC-85 |
| MMS-100S-100 | 80~100 | 100 | 40 | 10 | MC-95 | MC-100a | GMC-85 |
| 100AF Rotary operation, High interruption | | | | | | | |
| MMS-100H-17 | 11~17 | 100 | 65 | 25 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-22 | 14~22 | 100 | 65 | 20 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-26 | 18~26 | 100 | 65 | 20 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-32 | 22~32 | 100 | 65 | 20 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-40 | 28~40 | 100 | 65 | 20 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-50 | 34~50 | 100 | 65 | 20 | MC-65 | MC-75a | GMC-50 |
| MMS-100H-63 | 45~63 | 100 | 50 | 10 | MC-65 | MC-75a | GMC-65 |
| MMS-100H-75 | 55~75 | 100 | 50 | 10 | MC-75 | MC-75a | GMC-75 |
| MMS-100H-90 | 70~90 | 100 | 50 | 10 | MC-85 | MC-85a | GMC-85 |
| MMS-100H-100 | 80~100 | 100 | 50 | 10 | MC-95 | MC-100a | GMC-85 |

Contactors (18AF/22AF)

MC-6a-18a AC

1a or 1b

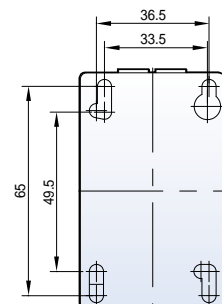
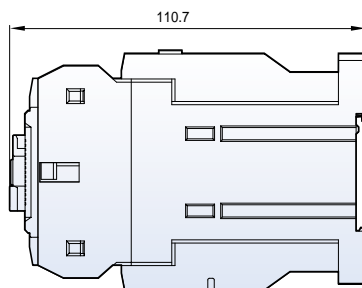
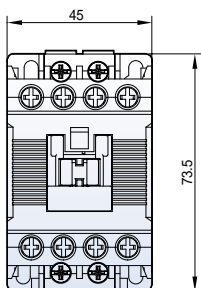


[mm]

0.3kg

MC-6a-18a DC

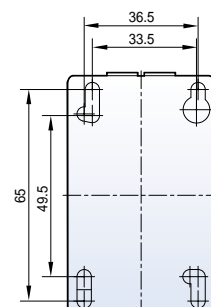
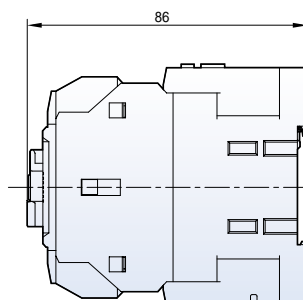
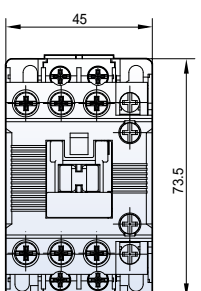
1a or 1b



0.5kg

MC-9b-22b AC

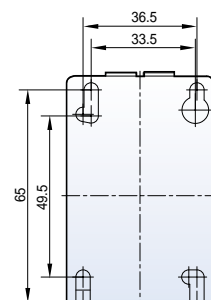
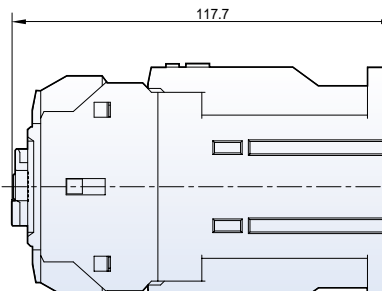
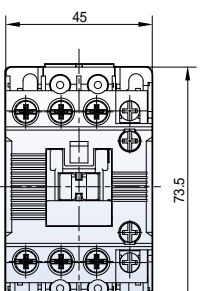
1a1b



0.3kg

MC-9b-22b DC

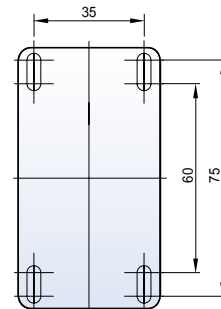
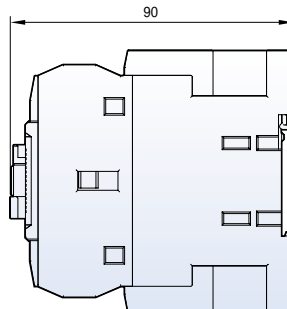
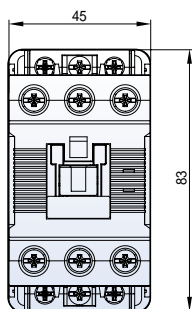
1a1b



0.5kg

Contactors (40AF)

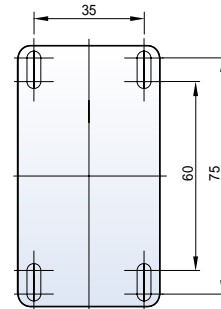
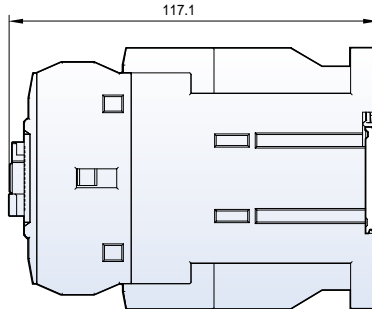
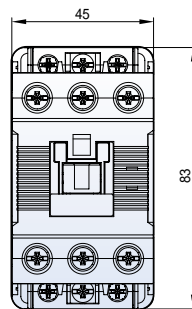
MC-32a-40a AC



[mm]

0.4kg

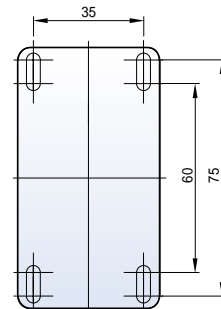
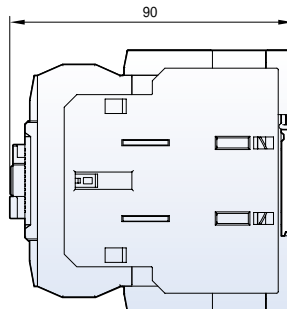
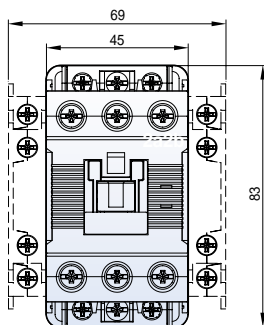
MC-32a-40a DC



0.6kg

MC-32a-40a AC

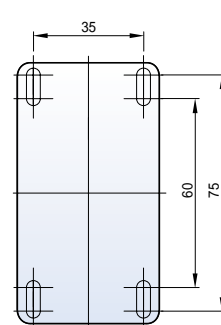
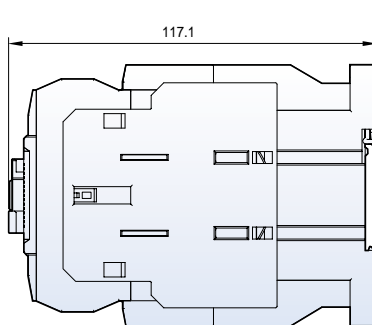
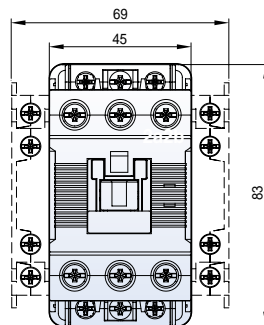
2a2b



0.5kg

MC-32a-40a DC

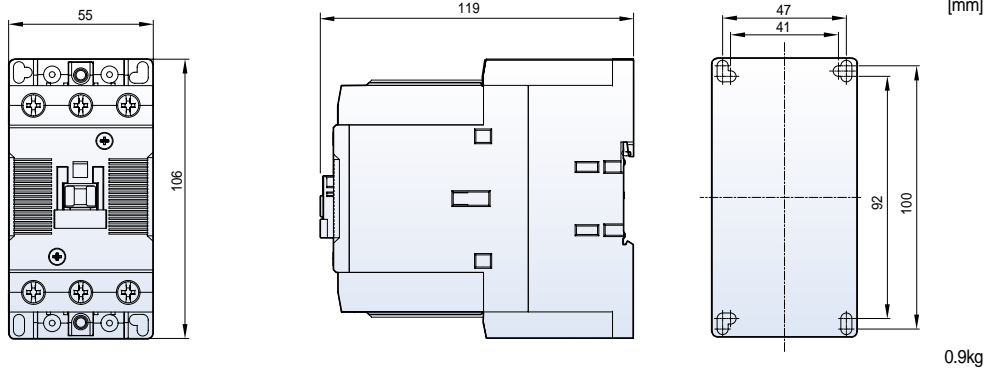
2a2b



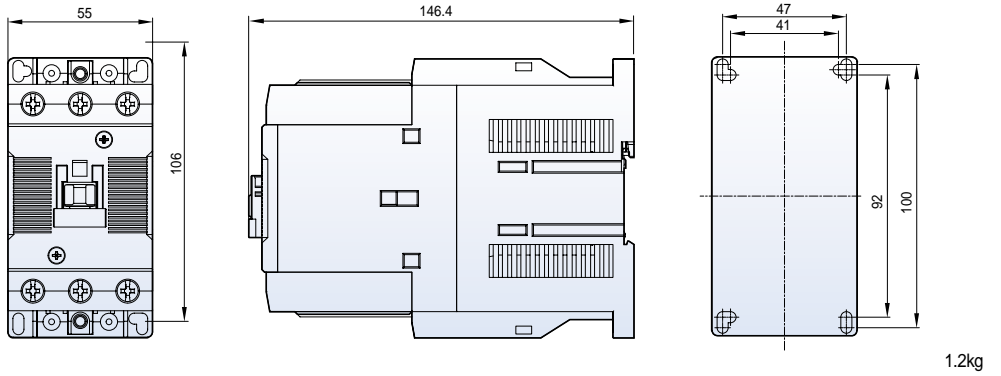
0.8kg

Contactors (65AF)

MC-50a-65a AC

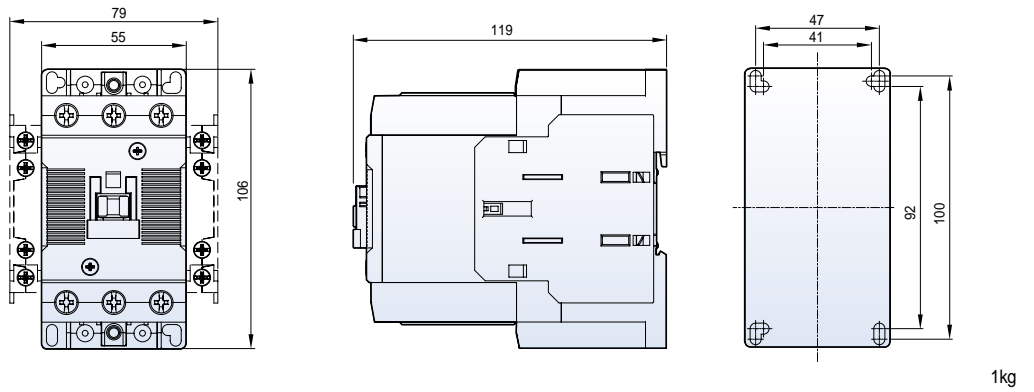


MC-50a-65a DC



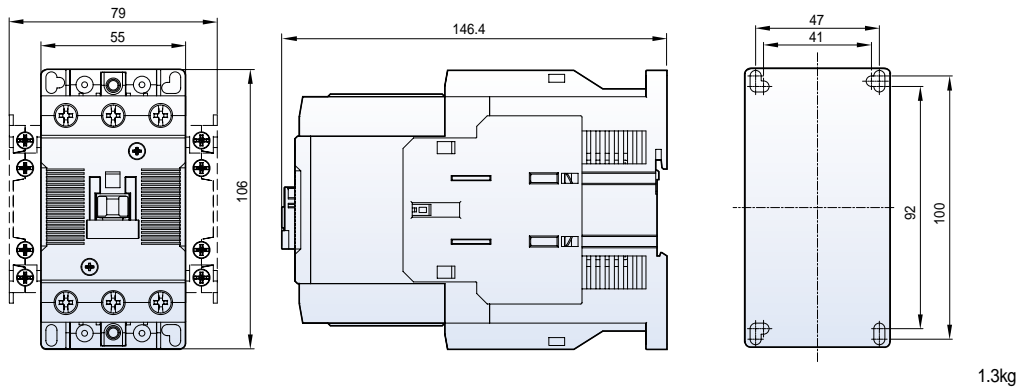
MC-50a-65a AC

2a2b



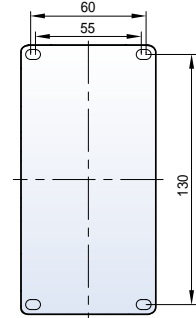
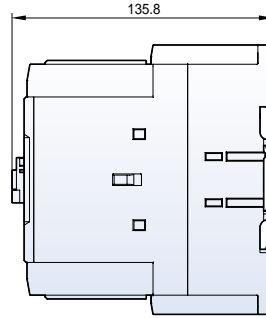
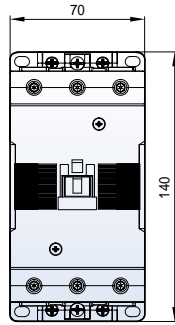
MC-50a-65a DC

2a2b



Contactors (100AF)

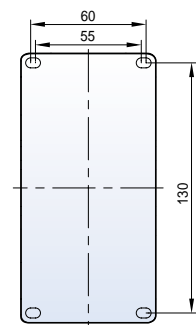
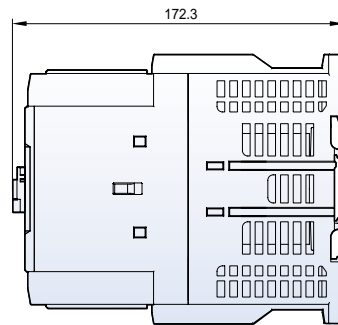
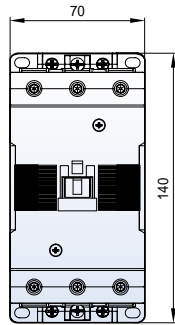
MC-75a~100a AC



[mm]

1.8kg

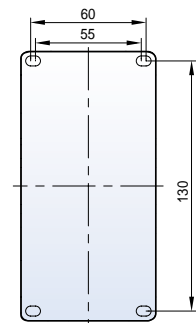
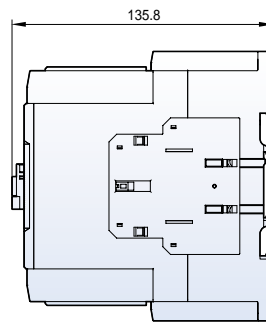
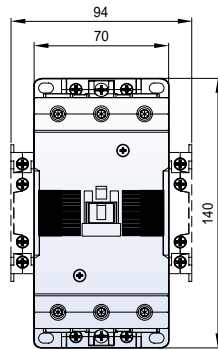
MC-75a~100a DC



2.7kg

MC-75a~100a AC

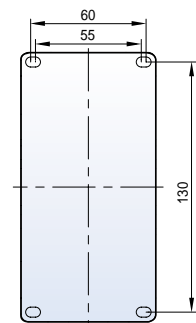
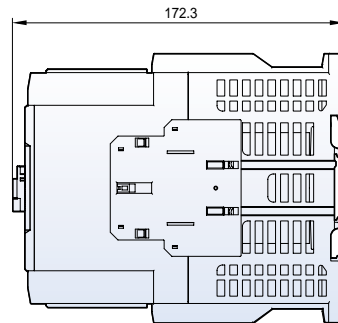
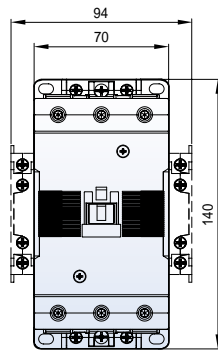
2a2b



1.9kg

MC-75a~100a DC

2a2b

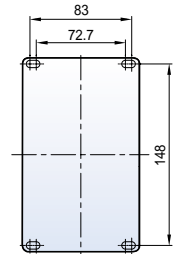
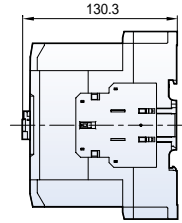
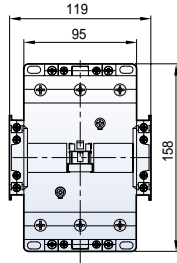


2.8kg

Contactors (150AF~800AF)

MC-130a

MC-150a

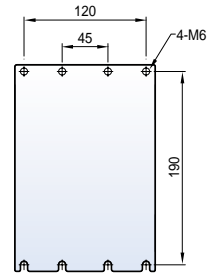
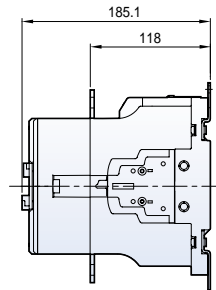
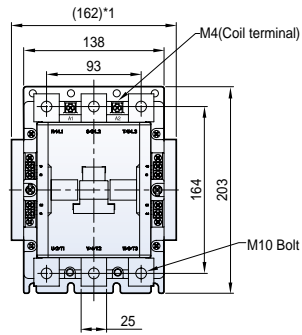


[mm]

2.4kg

MC-185a

MC-225a

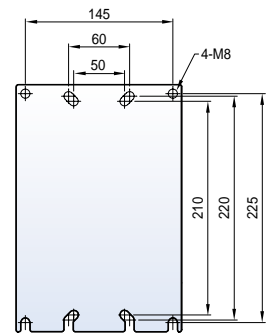
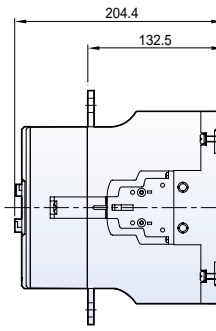
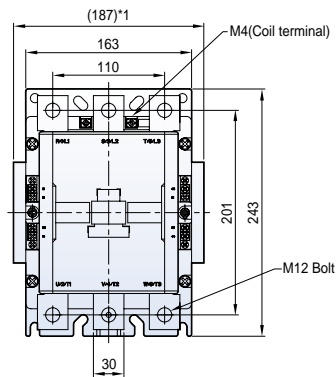


5.4kg

MC-265a

MC-330a

MC-400a

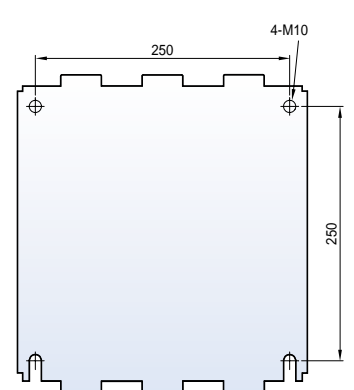
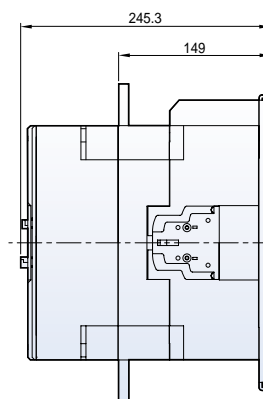
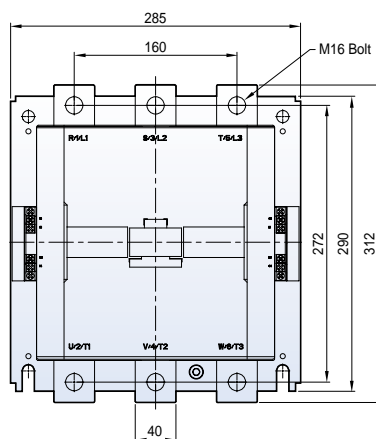


9.2kg

MC-500a

MC-630a

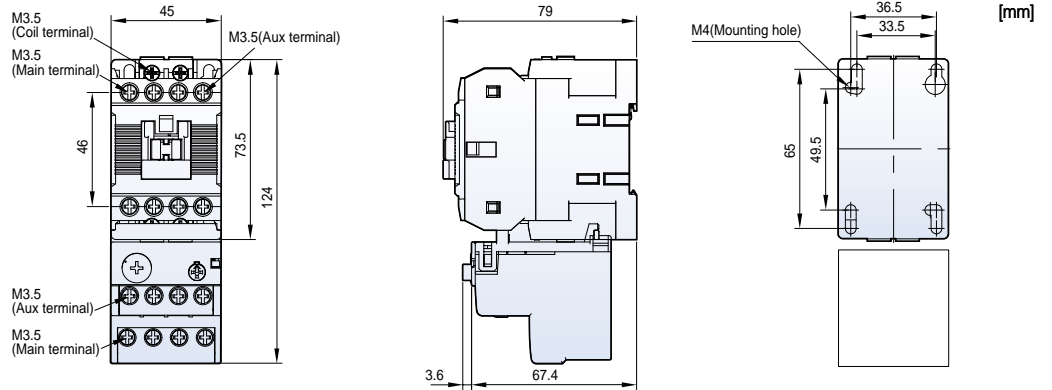
MC-800a



22.4kg

Motor starters (18AF~40AF)

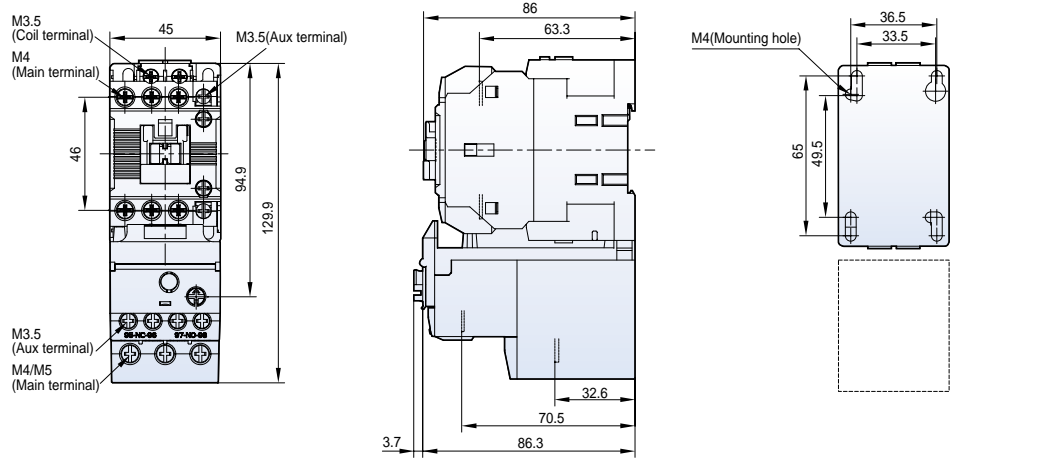
MS-6a~18a



[mm]

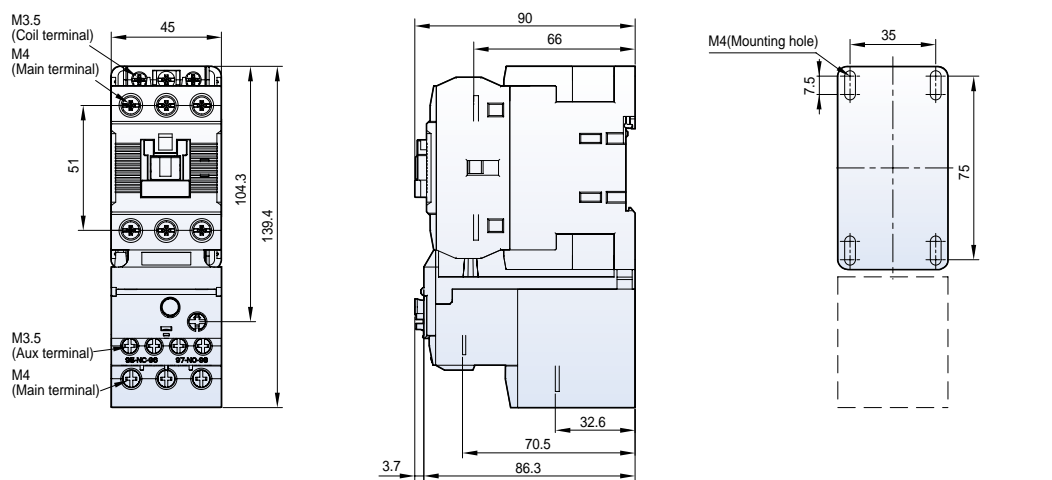
0.5kg

MS-9b~22b



0.5kg

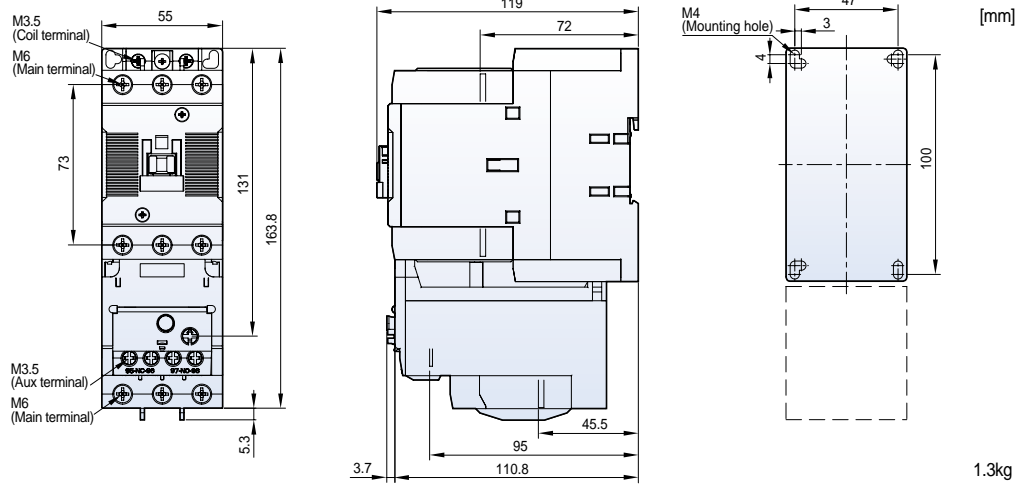
MS-32a~40a



0.6kg

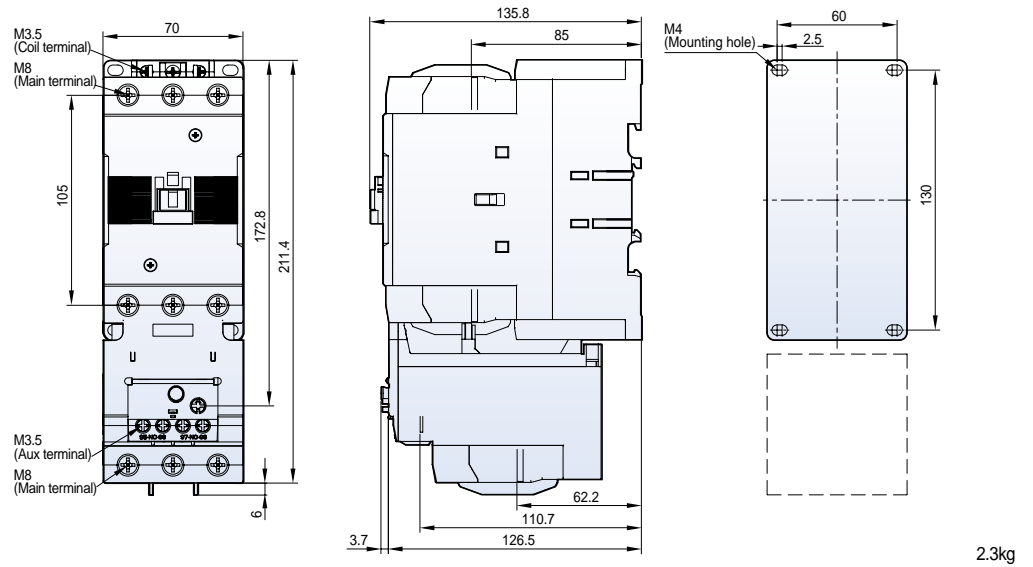
Motor starters (65AF~150AF)

MS-50a~65a



1.3kg

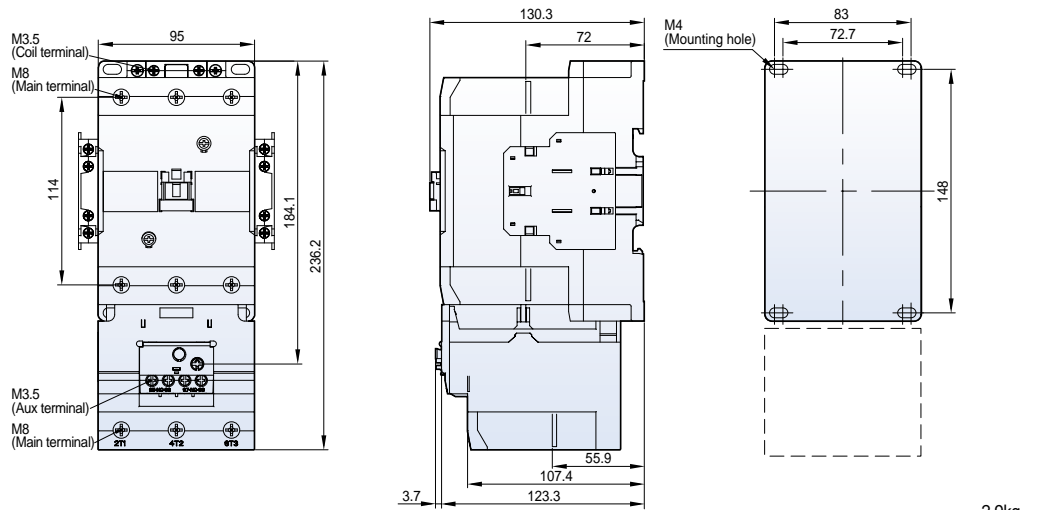
MS-75a~100a



2.3kg

MS-130a

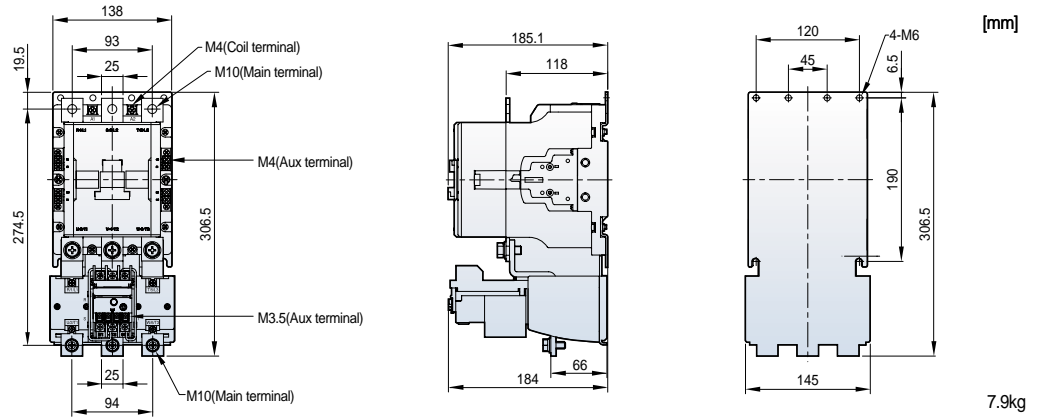
MS-150a



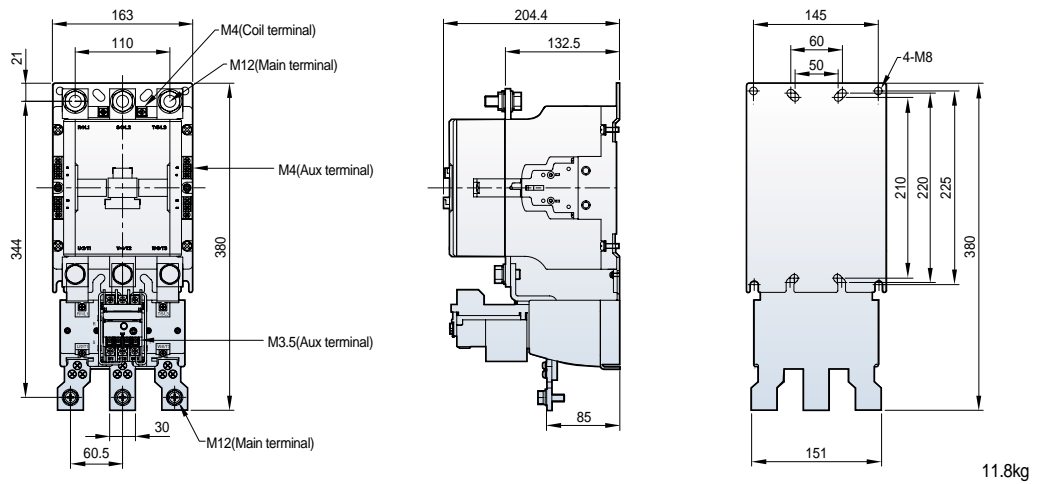
2.9kg

Motor starters (185AF~800AF)

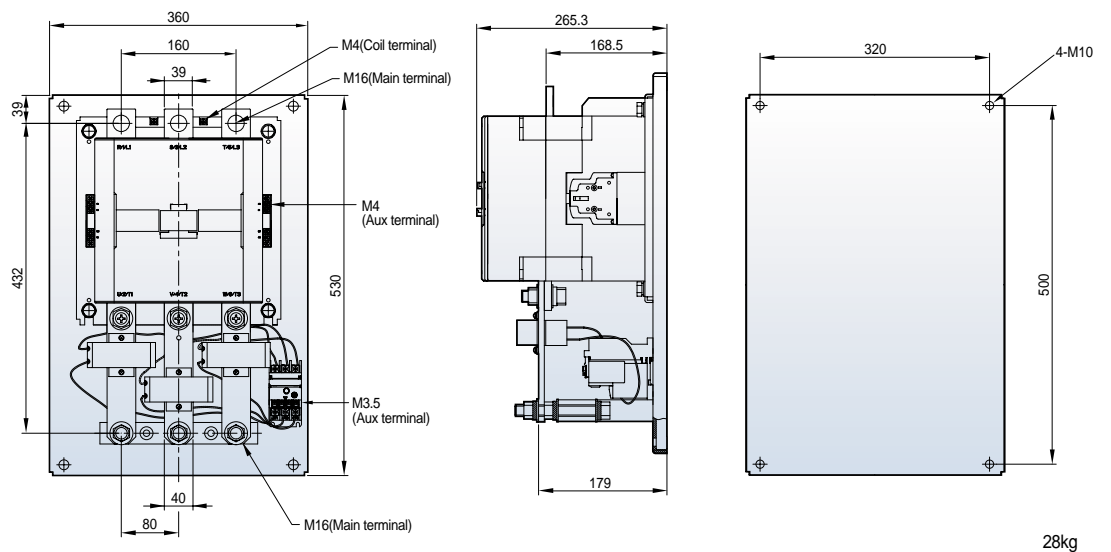
- MS-185a
- MS-225a



- MS-265a
- MS-330a
- MS-400a



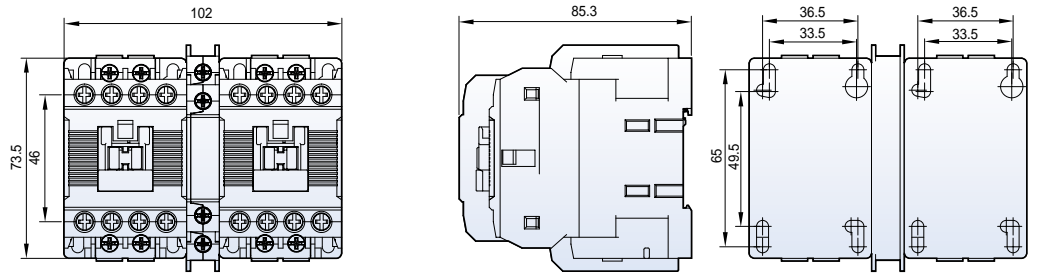
- MS-500a
- MS-630a
- MS-800a



Reversing contactors and starters (18AF)

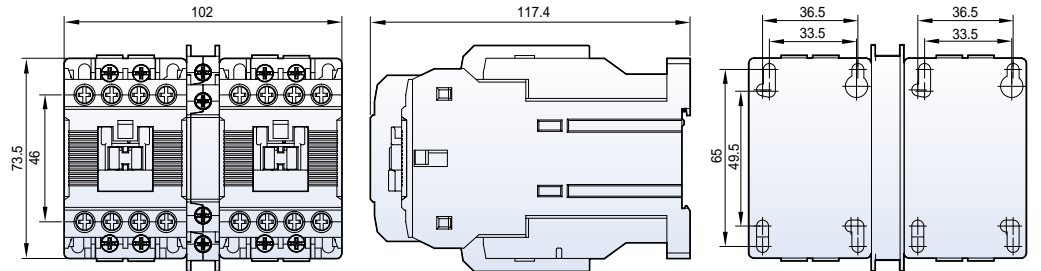
[mm]

MC-6aR-18aR AC



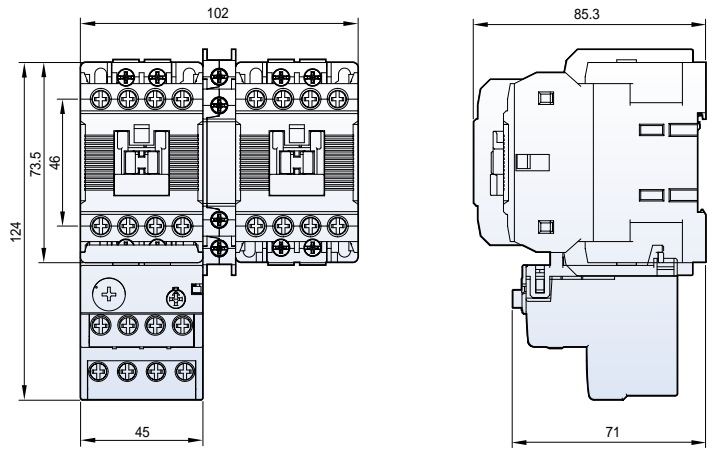
0.7kg

MC-6aR-18aR DC



1kg

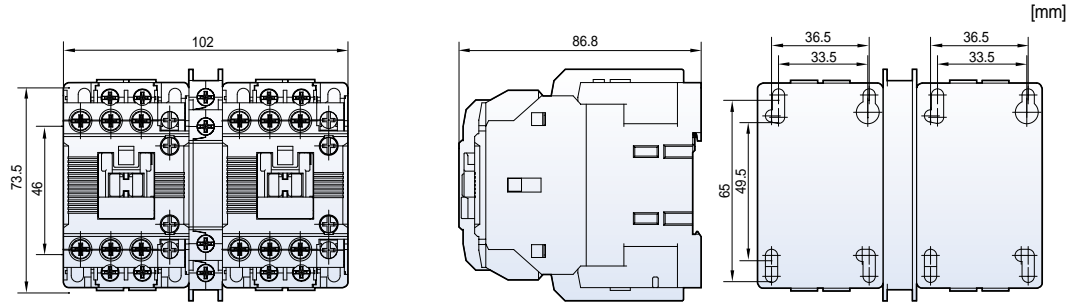
MS-6aR-18aR AC



0.9kg

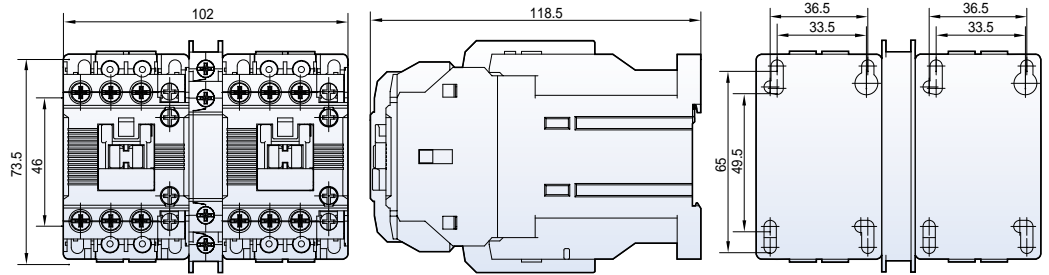
Reversing contactors and starters (22AF)

MC-9bR-22bR AC



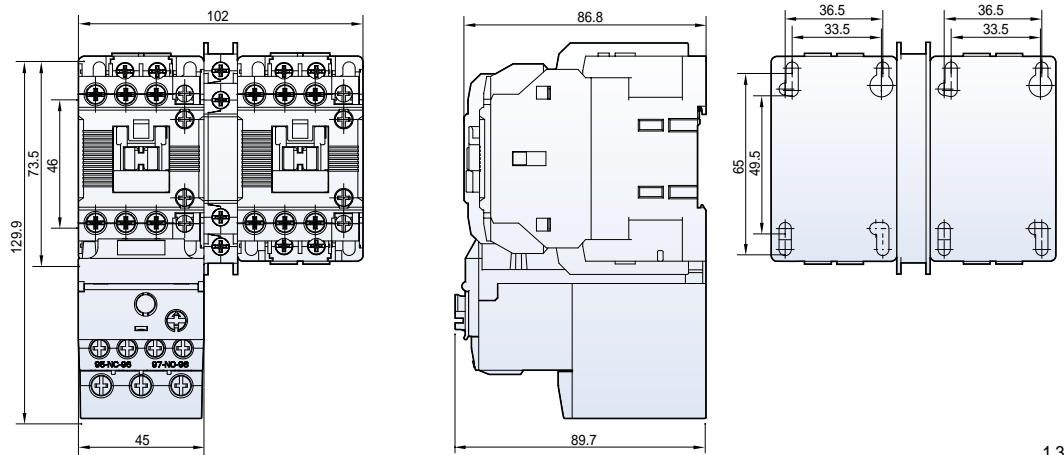
0.7kg

MC-9bR-22bR DC



1.1kg

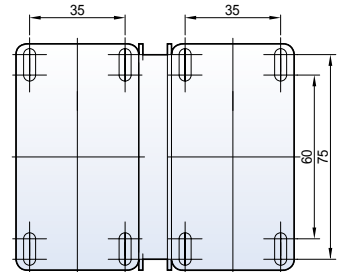
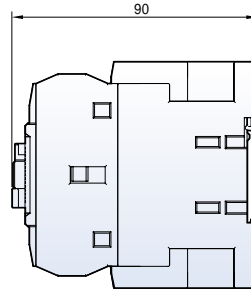
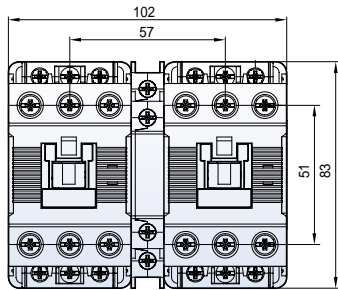
MS-9bR-22bR AC



1.3kg

Reversing contactors and starters (40AF)

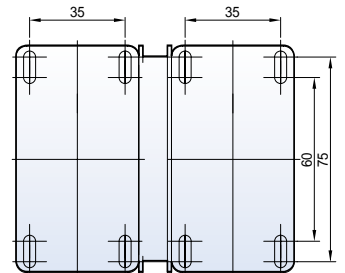
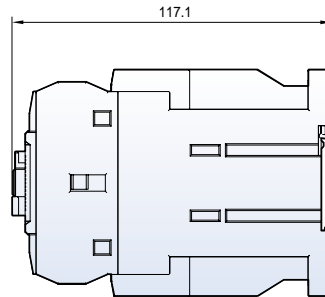
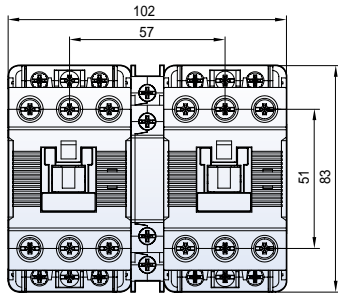
MC-32aR~40aR AC



[mm]

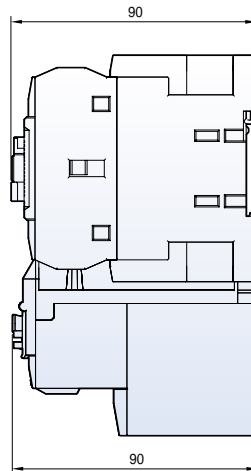
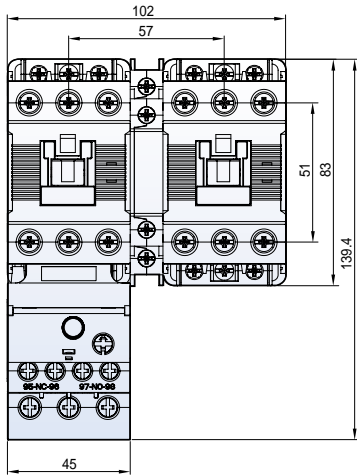
0.9kg

MC-32aR~40aR DC



1.4kg

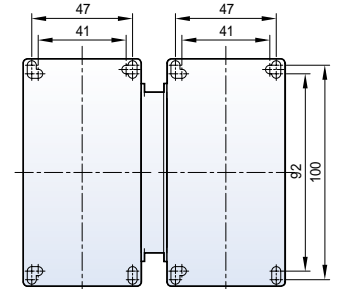
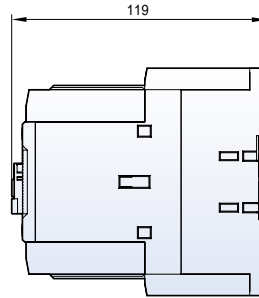
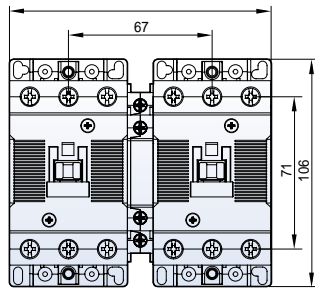
MS-32aR~40aR AC



1.1kg

Reversing contactors and starters (65AF)

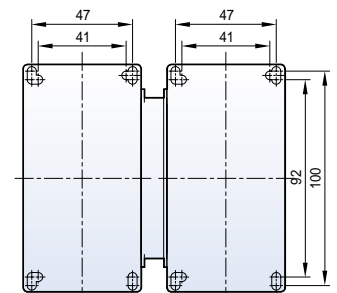
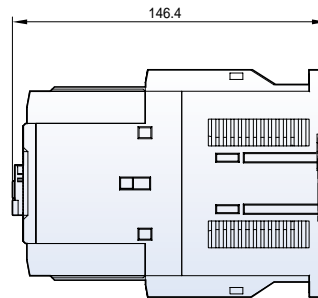
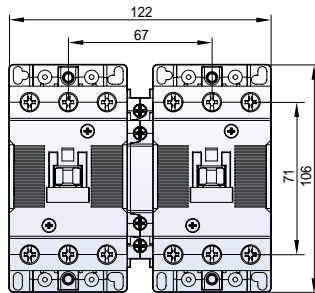
MC-50aR-65aR AC



[mm]

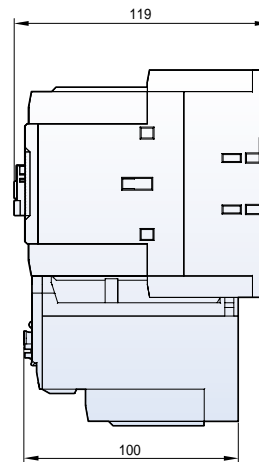
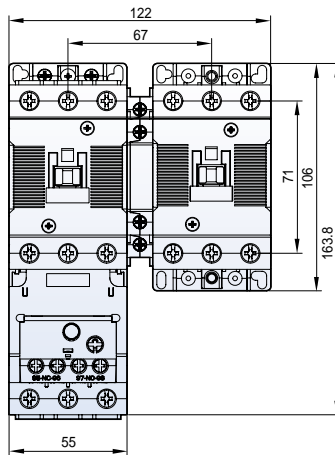
1.8kg

MC-50aR-65aR DC



2.4kg

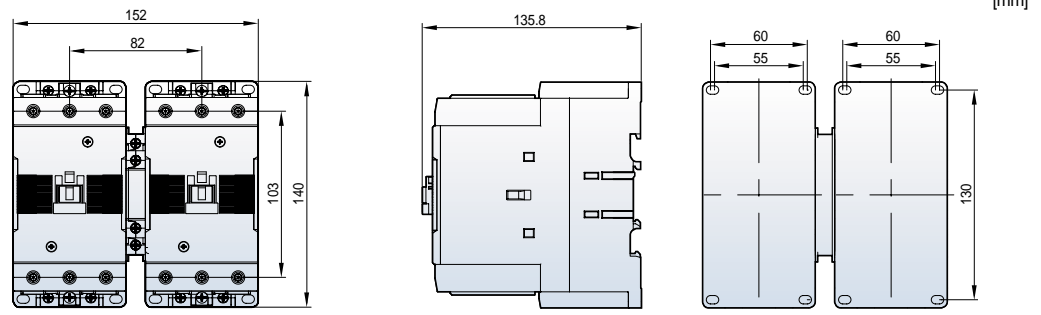
MS-50aR-65aR AC



1.9kg

Reversing contactors and starters (100AF)

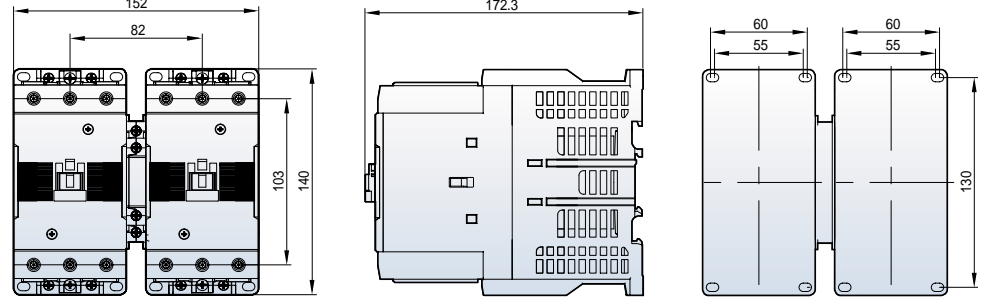
MC-75aR-100aR AC



[mm]

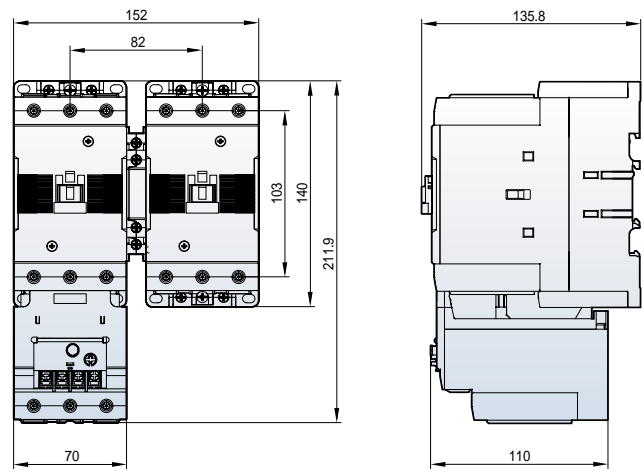
3.3kg

MC-75aR-100aR DC



5.2kg

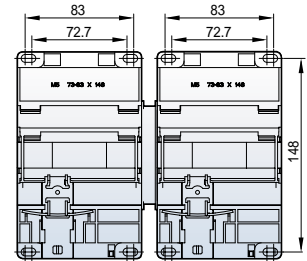
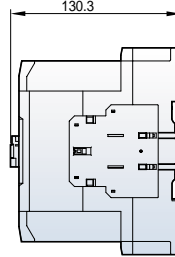
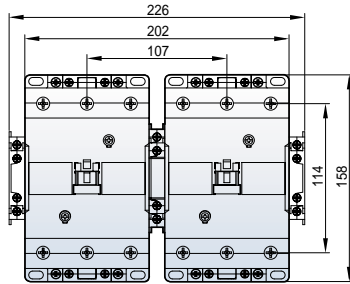
MS-75aR-100aR AC



3.8kg

Reversing contactors and starters (150~800AF)

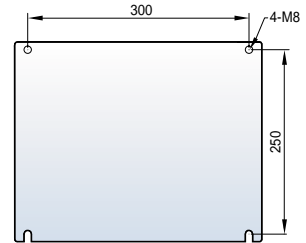
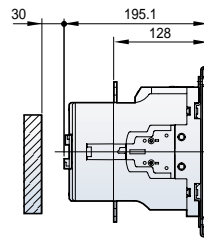
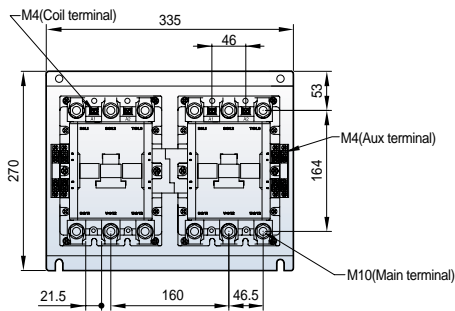
MC-130aR
MC-150aR



[mm]

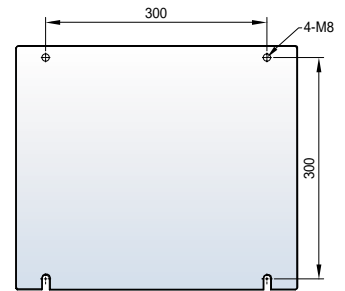
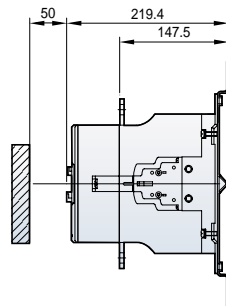
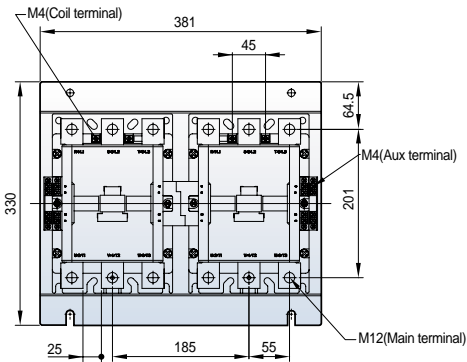
4.3kg

MC-185aR
MC-225aR



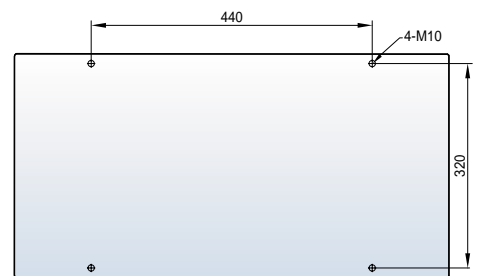
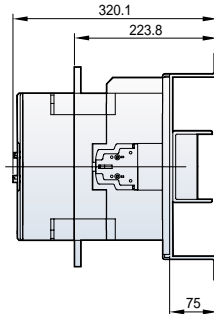
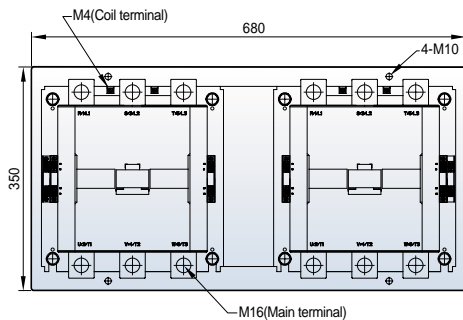
12.9kg

MC-265aR
MC-330aR
MC-400aR



21.4kg

MC-500aR
MC-630aR
MC-800aR



60kg

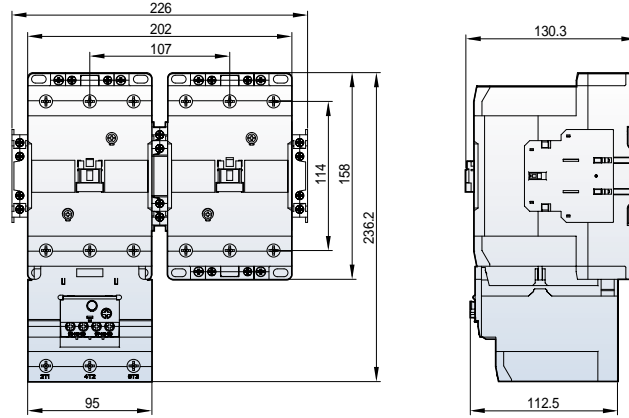
Reversing contactors and starters (150~400AF)

Metasol

[mm]

MS-130aR AC

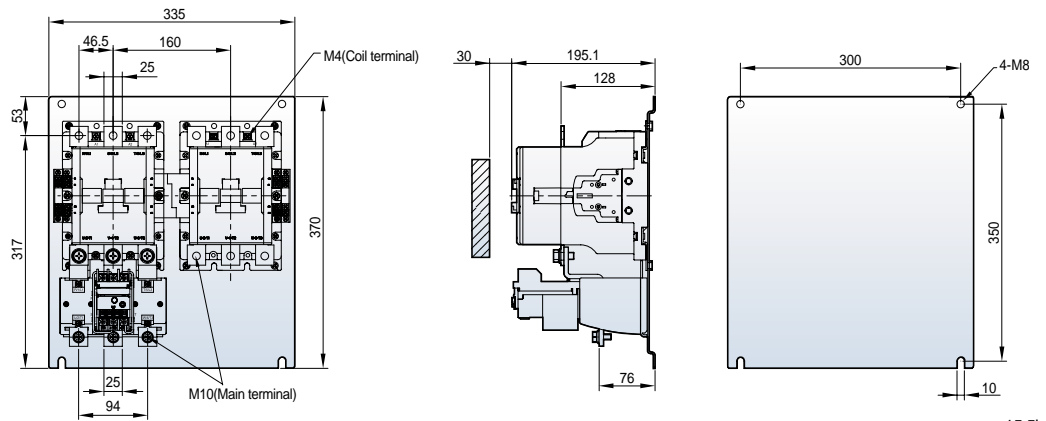
MS-150aR AC



5kg

MS-185aR AC

MS-225aR AC

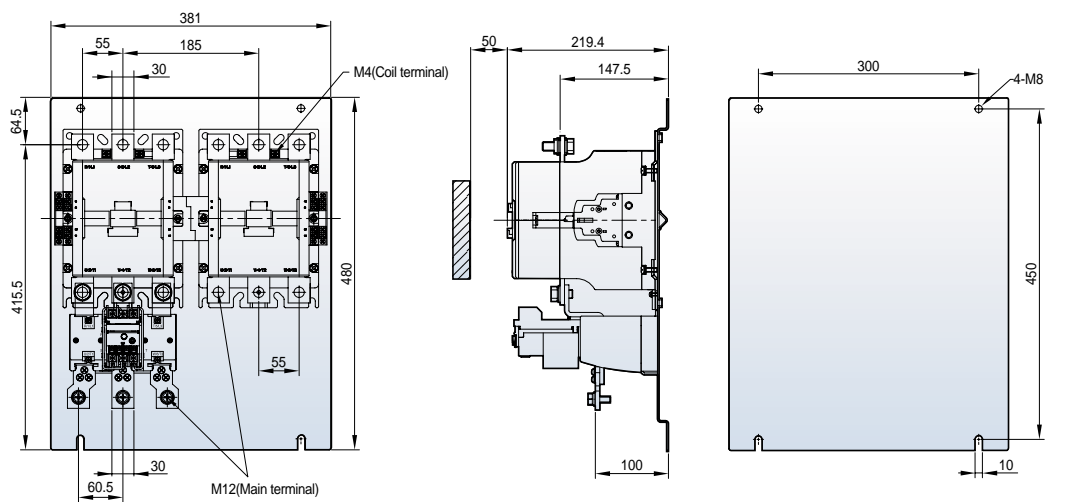


15.5kg

MS-265aR DC

MS-330aR DC

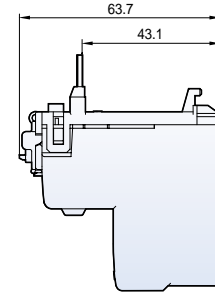
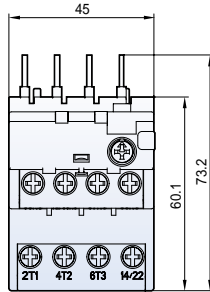
MS-400aR DC



23kg

Overload relays

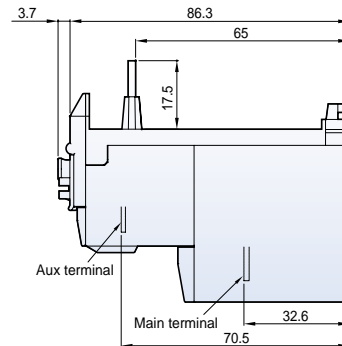
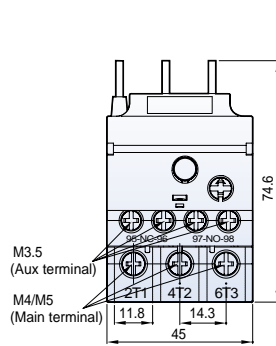
MT-12



[mm]

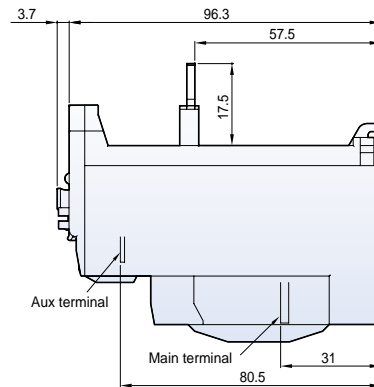
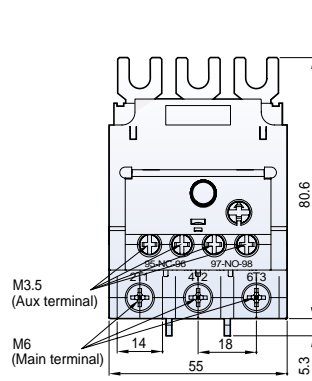
100g

MT-32



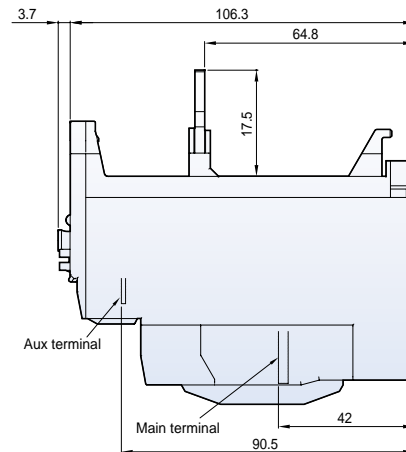
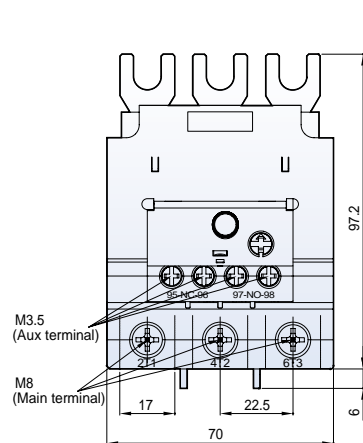
167g

MT-63



303g

MT-95

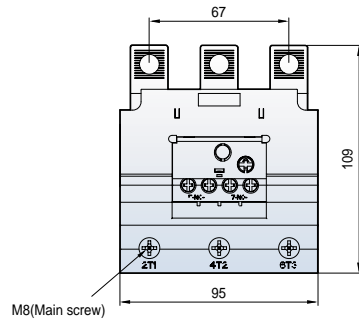


474g

Overload relays

Metasol

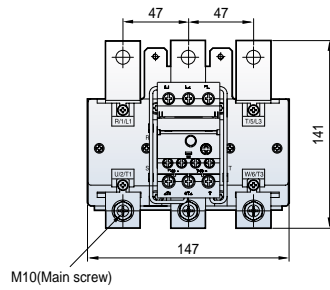
MT-150



[mm]

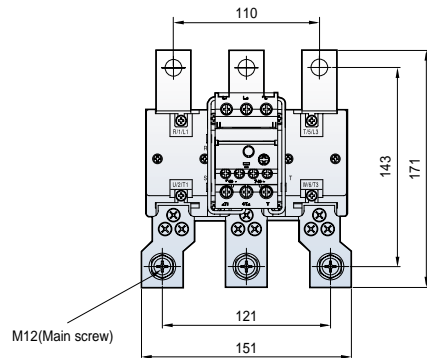
0.7kg

MT-225



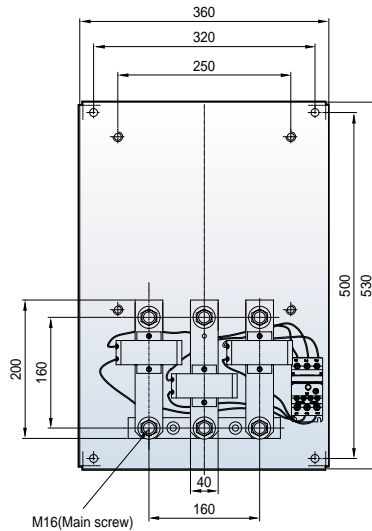
2.5kg

MT-400



2.6kg

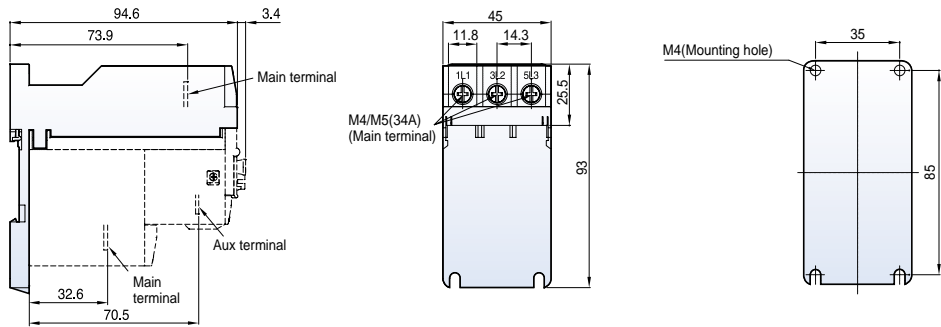
MT-800



11.5kg

Overload relays (Separate mount)

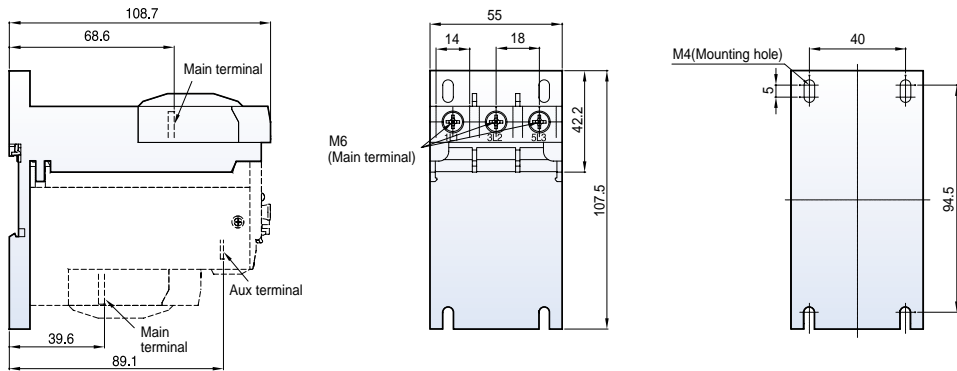
UZ-32



[mm]

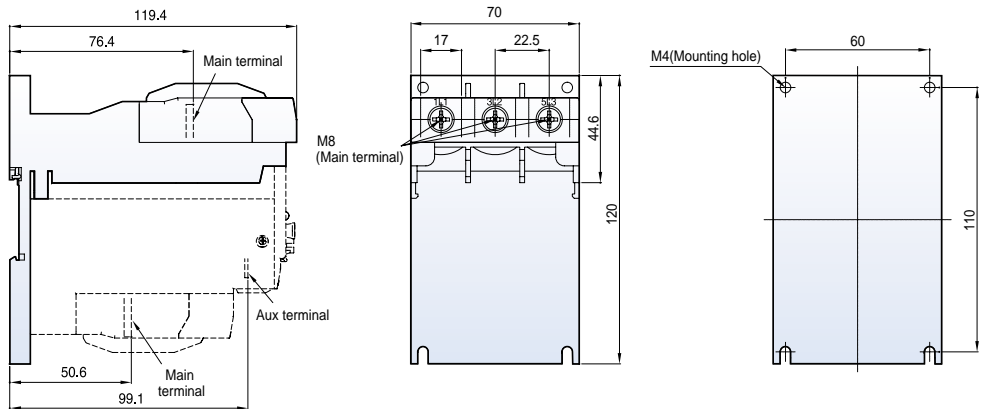
68g

UZ-63



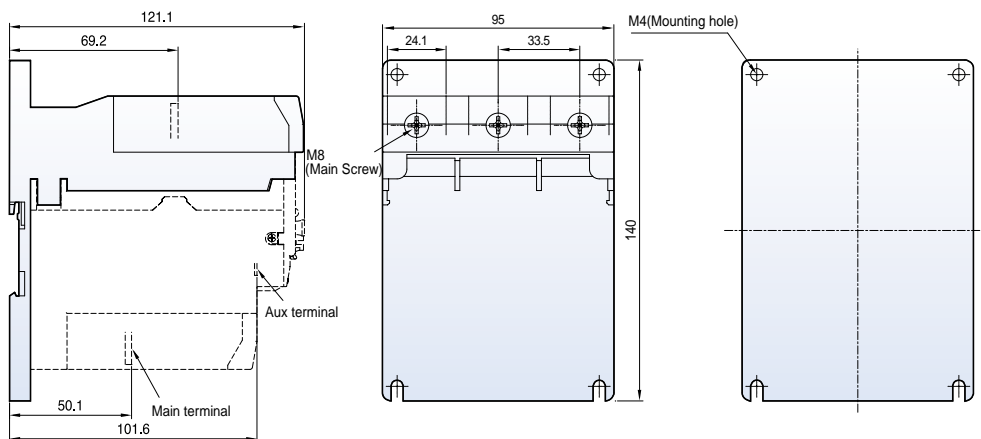
134g

UZ-95



230g

UZ-150



284g

Contact arrangement

Contactors

MC-6a~18a

1a

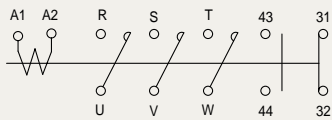


1b



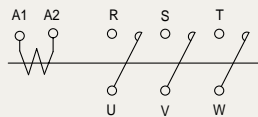
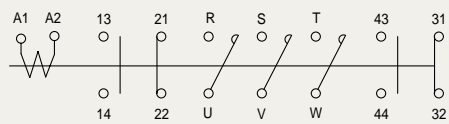
MC-9b~22b

1a1b



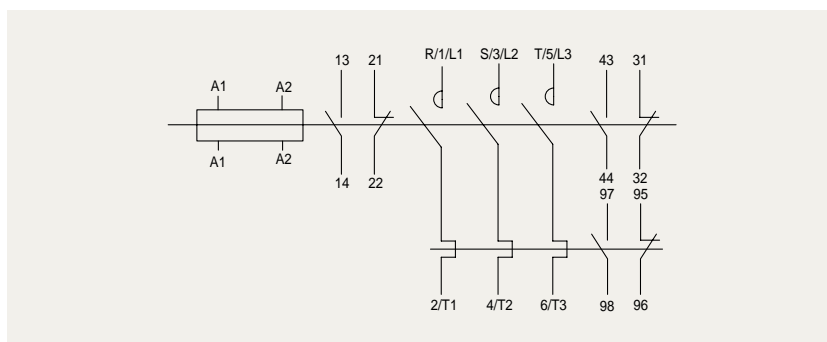
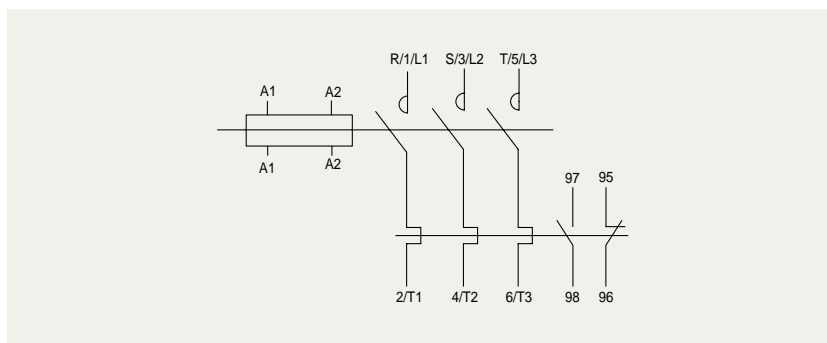
MC-32a~150a

2a2b

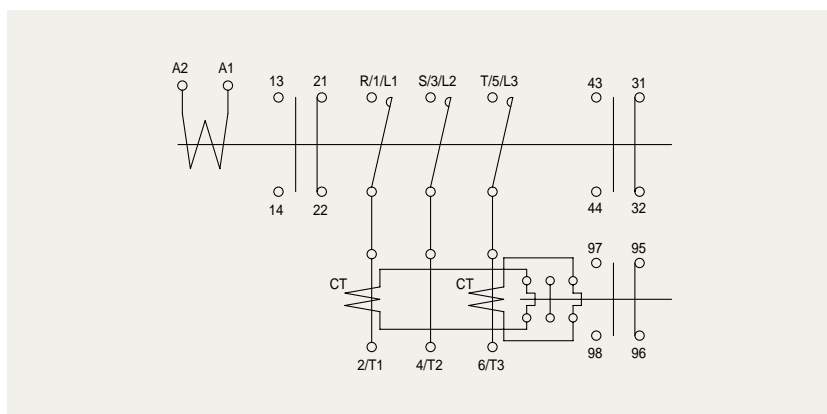


Motor starters

MS-6a~150a

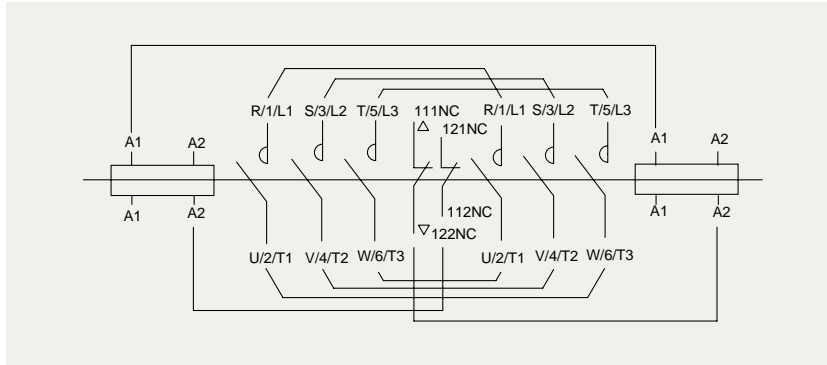


MS-185a~800a

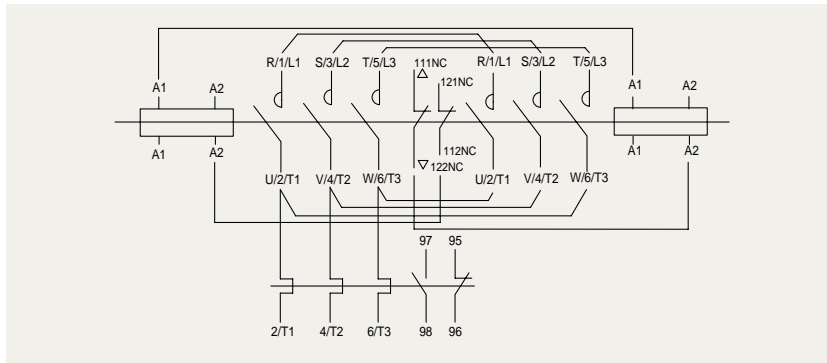


Reversing contactors

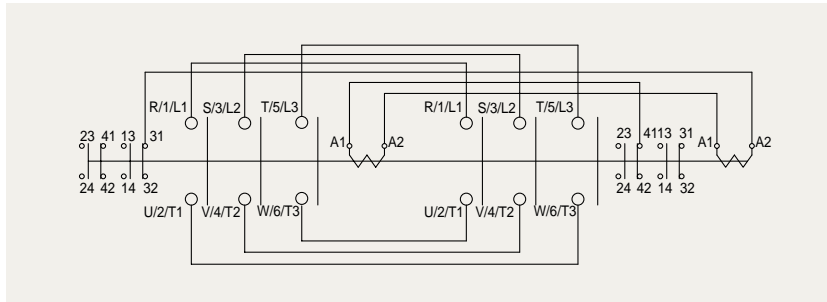
MC-6aR~150aR



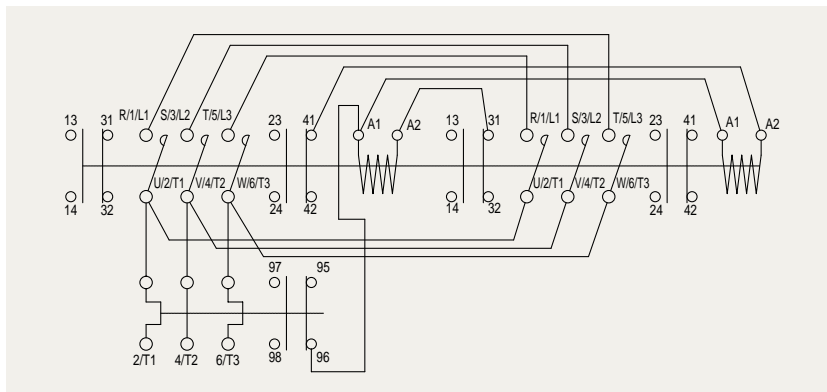
MS-6aR~150aR



MC-185aR~800aR



MS-185aR~400aR





Mini Contactor



Contents :

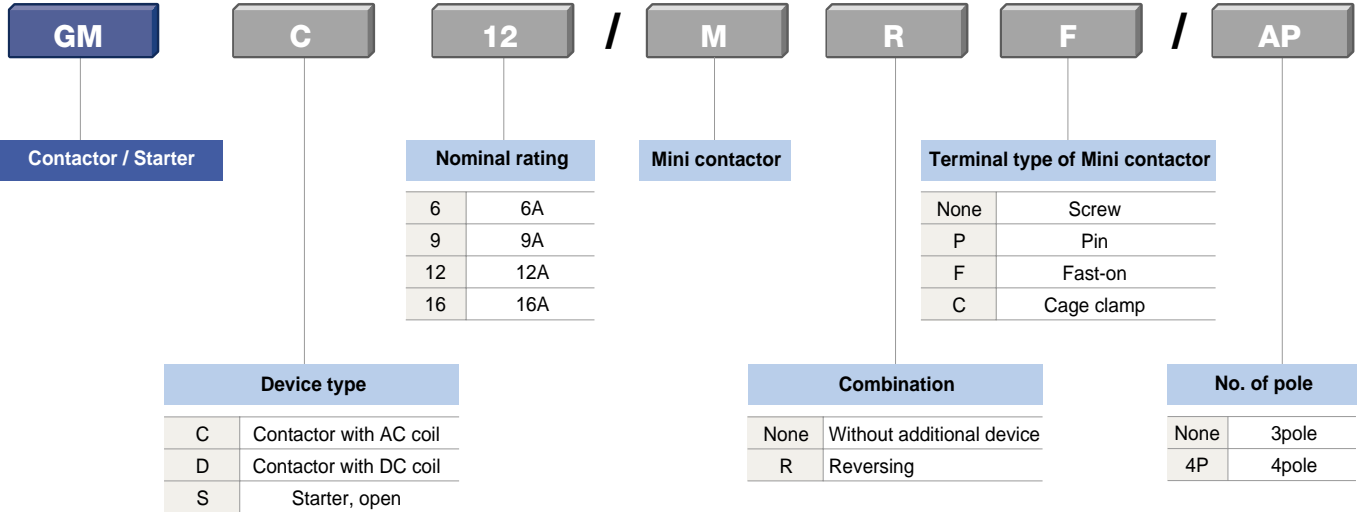
Mini Contactor & Thermal Overload Relay

| | |
|----------------------------------------------|-----|
| Catalog numbering system | 108 |
| Quick selection table | 109 |
| AC coil | 110 |
| DC coil | 112 |
| Motor starters, open | 114 |
| Mini contactors, Reversing type | 115 |
| Bimetallic style | 119 |
| 2-pole DC Contactors | 120 |
| 2-pole AC Contactors, Definite purpose | 121 |
| Accessories for mini contactors | 122 |
| Accessories | 124 |
| Dimensions | 125 |

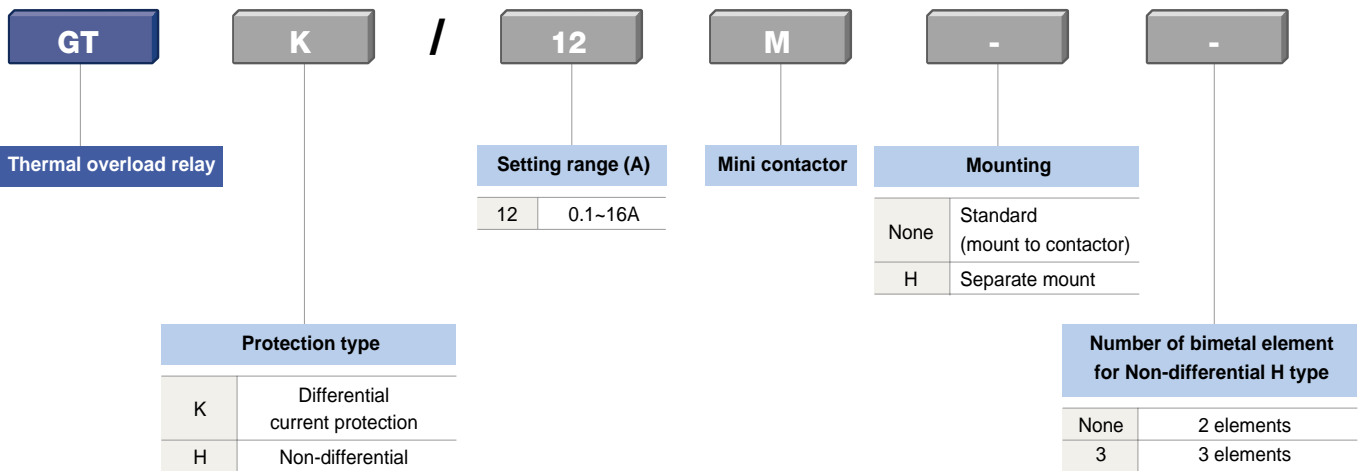


Catalog numbering system

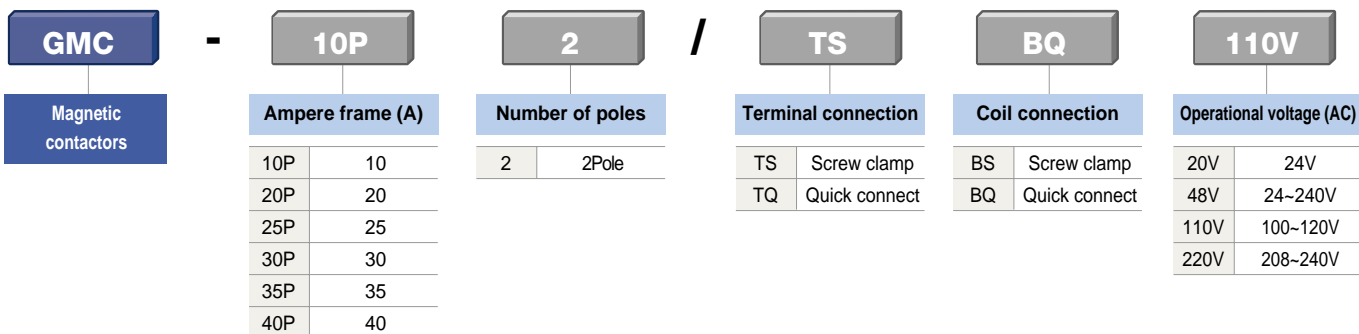
Contactor & Starters



Thermal overload relay



2-pole Contactors



Quick selection table

Mini contactors

3NO main contacts
1 auxiliary contacts



Screw clamp type



Fast-on type



Cage clamp type



Solder pin type

| Frame size | | 6A | | 9A | | 12A | | 16A | |
|-----------------------------------------------|-----------------|------------------------------------------------------------|----------|---------------------|----------|------------------------|-----------|------------------------|-----------|
| Screw clamp type | AC coil | GMC-6M | | GMC-9M | | GMC-12M | | GMC-16M | |
| | DC coil | GMD-6M | | GMD-9M | | GMD-12M | | GMD-16M | |
| Fast-on type | AC coil | GMC-6MF | | GMC-9MF | | GMC-12MF | | GMC-16MF | |
| | DC coil | GMD-6MF | | GMD-9MF | | GMD-12MF | | GMD-16MF | |
| Cage clamp type | AC coil | GMC-6MC | | GMC-9MC | | GMC-12MC | | GMC-16MC | |
| | DC coil | GMD-6MC | | GMD-9MC | | GMD-12MC | | GMD-16MC | |
| Solder pin type | AC coil | GMC-6MP | | GMC-9MP | | GMC-12MP | | GMC-16MP | |
| | DC coil | GMD-6MP | | GMD-9MP | | GMD-12MP | | GMD-16MP | |
| Ratings / IEC60947-4 | | kW | A | kW | A | kW | A | kW | A |
| AC1 | | 20 | | 20 | | 20 | | 20 | |
| AC3 | 200/240V | 1.5 | 7 | 2.2 | 9 | 3 | 12 | 4 | 15 |
| | 380/440V | 2.2 | 6 | 4 | 9 | 5.5 | 12 | 7.5 | 16 |
| | 500/550V | 3 | 5 | 3.7 | 6 | 4 | 7 | 5.5 | 9 |
| | 690V | 3 | 4 | 4 | 5 | 4 | 5 | 4 | 5 |
| Ratings / UL508 | | hp | A | hp | A | hp | A | hp | A |
| continuous current | | I _{th} = 20A (maximum for cage clamp type is 10A) | | | | | | | |
| single phase | 120V | 1/2 | | 1/2 | | 1 * | | - | |
| | 230V/240V | 1 | | 1.5 | | 2 ** | | - | |
| three phase | 240V | 1.5 | | 3 | | 3 | | - | |
| | 480V | 3 | | 5 | | 7.5 *** | | - | |
| | 600V | 3 | | 5 | | 7.5 | | - | |
| Wire Range : Copper, 75°C, Stranded, 18-12AWG | | | | | | | | | |
| NEMA size | | 00 | | 00 | | 00 | | 0 | |
| Additional auxiliary contacts | | Screw clamp type | | Fast-on type | | Cage clamp type | | Solder pin type | |
| 2-pole, Front mount | AU-2M | | | AU-2MF | | AU-2MC | | | |
| | AU-4M | | | AU-4MF | | AU-4MC | | | |
| 4-pole, Front mount | AU-1M | | | AU-1MF | | AU-1MC | | | |
| 2-pole, Side mount | | | | | | | | | |

Note) * = 1/2 for cage clamp type, ** = 1.5hp for cage clamp type, *** = 5hp for cage clamp type
16AF : not approved from UL

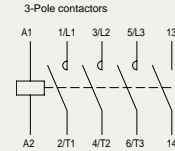
Overload Relays

| | | | | |
|-------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------|
| Bimetallic style Type GT Class 10A | GT-12M | Setting ranges (A) 0.1 - 0.16 0.16 - 0.25 0.25 - 0.4 0.4 - 0.63 0.63 - 1 1 - 1.6 1.6 - 2.5 2.5 - 4 | 4 - 6 5 - 8 6 - 9 7 - 10 9 - 13 12 - 16 | Base for separate mount |
| | Differential | GTK-12M | | |
| | Non-differential (3-heater) | GTH-12M/3 | | |
| | Non-differential (2-heater) | GTH-12M | | |

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : AC

Circuit diagram



Screw clamp connection types

| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|---------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6M |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9M |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12M |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16M |



Fast-on connection types

| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MF |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MF |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MF |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MF |

Coil voltage, AC 50/60Hz
 24, 36, 42, 48, 110, 115, 120, 127, 200 / 208, 220, 220 / 230, 230 / 240, 256, 277, 380 / 400
 400, 440, 480, 500, 550V AC

Performance (at 440VAC)

| Frame size | 6A | 9A | 12A | 16A |
|-------------------|--------------------------------------------------------------------|------|------|------|
| Operation current | 6A | 9A | 12A | 16A |
| Making current | 72A | 108A | 144A | 180A |
| Breaking current | 60A | 90A | 120A | 150A |
| Operation cycle | 1800 operations/hour | | | |
| Endurance | • Electrical : 1 mil. operations • Mechanical : 12 mil. operations | | | |

Note) 16A frame is not UL listed item.

Coil characteristic

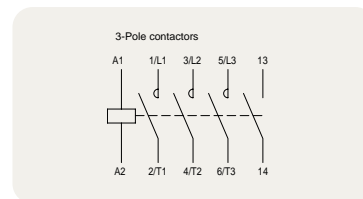
| Coil voltage | AC |
|----------------------|--------|
| Coil consumption (W) | 2 |
| Inrush | 32VA |
| Sealed | 6VA |
| Closing voltage (%) | 80~110 |
| Opening voltage (%) | 30~40 |
| Closing time (ms) | 10~20 |
| Opening time (ms) | 35~45 |

Certificate
CE, ULcUL

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : AC

Circuit diagram



Cage clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MC |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MC |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MC |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MC |

Solder pin connection types



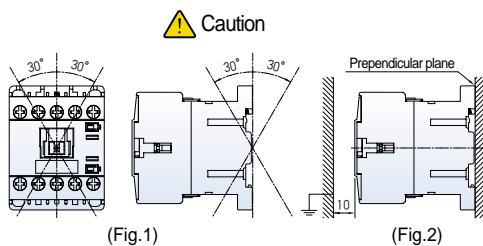
| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MP |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MP |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MP |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MP |

Coil voltage, AC 50/60Hz

24, 36, 42, 48, 110, 115, 120, 127, 200 / 208, 220, 220 / 230, 230 / 240, 256, 277, 380 / 400, 400, 440, 480, 500, 550V AC

Ordering information

Type, Auxiliary contact and Coil voltage



Caution

(Fig.1)

(Fig.2)

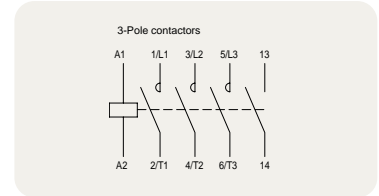
Certificate
CE, ULcUL

*Even installing direction takes the direction of Fig.1 to perpendicular, ip to the direction of the 30°.
Keep the distance more than 10mm with arc space shown Fig.2

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : DC

Circuit diagram



Screw clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating Ith | Auxiliary contact (standard) | Type |
|------------|--------------------------|---------------|---------------|-----------|-------------------|---------------------------------|---------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6M |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9M |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12M |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16M |

Fast-on connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating Ith | Auxiliary contact (standard) | Type |
|------------|--------------------------|---------------|---------------|-----------|-------------------|---------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MF |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MF |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MF |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MF |

Coil voltage, DC

- ① Standard type : 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC
- ② Low consumption type : 12, 20, 24, 48, 72, 110, 120V DC(Low)
- ③ Wide Voltage : 12, 20, 24, 48, 72, 110, 12V DC(Wide)

Ordering information

Type, Auxiliary contact and Coil voltage

Coil characteristic

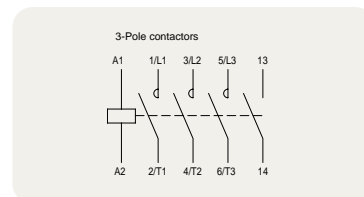
| Coil voltage | DC | | |
|----------------------|----------|-----------------|--------------|
| | Standard | Low consumption | Wide voltage |
| Coil consumption (W) | 3 | 1.2 | 2 |
| Inrush | 3W | 1.2W | 2W |
| Sealed | 3W | 1.2W | 2W |
| Closing voltage (%) | 80~110 | 80~125 | 70~125 |
| Opening voltage (%) | 10~30 | 10~30 | 10~30 |
| Closing time (ms) | 40~50 | 40~50 | 40~50 |
| Opening time (ms) | 35~45 | 35~45 | 35~45 |

Certificate
CE, ULcUL

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : DC

Circuit diagram



Cage clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MC |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MC |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MC |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MC |

Solder pin connection types



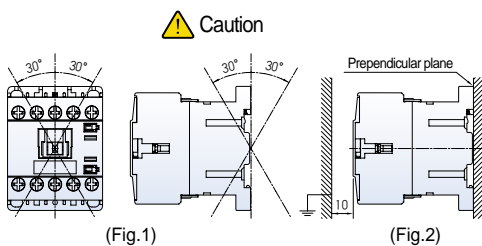
| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MP |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MP |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MP |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MP |

Coil voltage, DC

- ① Standard type : 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC
- ② Low consumption type : 12, 20, 24, 48, 72, 110, 120V DC(Low)
- ③ Wide Voltage : 12, 20, 24, 48, 72, 110, 12V DC(Wide)

Ordering information

Type, Auxiliary contact and Coil voltage



*Even installing direction takes the direction of Fig.1 to perpendicular, ip to the direction of the 30°.
Keep the distance more than 10mm with arc space shown Fig.2

Certificate
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Starters

- Open types
- Direct (Full voltage) types
- Coil voltage : AC
- Contactors : screw clamp connection types
- Overload relays : differential or non-differential types

AC coil contactor + Differential type overload relay

| Devices combined | | AC3 ratings (IEC60947-4) | | | | Auxiliary contacts | Starter Type |
|---------------------|-------------------------|--------------------------|--------------|-------------|-----------|--------------------|--------------|
| Contactor (AC coil) | Overload (differential) | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | |
| GMC-6M | GTK-12M | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 1NO or 1NC | GMS-6M/K |
| GMC-9M | GTK-12M | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 1NO or 1NC | GMS-9M/K |
| GMC-12M | GTK-12M | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 1NO or 1NC | GMS-12M/K |
| GMC-16M | GTK-12M | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 1NO or 1NC | GMS-16M/K |



AC coil contactor + Non-differential type overload relay

| Devices combined | | AC3 ratings (IEC60947-4) | | | | Auxiliary contacts | Starter Type |
|---------------------|-------------------------|--------------------------|--------------|-------------|-----------|--------------------|--------------|
| Contactor (AC coil) | Overload (differential) | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | |
| GMC-6M | GTH-12M/3 | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 1NO or 1NC | GMS-6M |
| GMC-9M | GTH-12M/3 | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 1NO or 1NC | GMS-9M |
| GMC-12M | GTH-12M/3 | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 1NO or 1NC | GMS-12M |
| GMC-16M | GTH-12M/3 | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 1NO or 1NC | GMS-16M |

Coil voltage, AC 50/60Hz

24, 36, 42, 48, 110, 115, 120, 127, 200 / 208, 220, 220 / 230, 230 / 240, 256, 277, 380 / 400, 400, 440, 480, 500, 550V AC

Ordering information

Type, Auxiliary contact and Coil voltage
Overload relay setting range

Certificate
CE, ULcUL

Reversing contactors

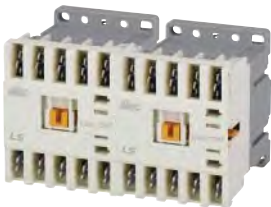
- For motor control
- Mechanically interlocked
- Coil voltage : AC

Screw clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MR |

Fast-on connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MFR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MFR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MFR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MFR |

Coil voltage, AC 50/60Hz

24, 36, 42, 48, 110, 115, 120, 127, 200 / 208, 220, 220 / 230, 230 / 240, 256, 277, 380 / 400, 400, 440, 480, 500, 550V AC

Certificate
CE, ULcUL

Ordering information

Type, Auxiliary contact and Coil voltage

Reversing contactors

- For motor control
- Mechanically interlocked
- Coil voltage : AC

Cage clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MCR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MCR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MCR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MCR |

Solder pin connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMC-6MPR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMC-9MPR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMC-12MPR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMC-16MPR |

Coil voltage, AC 50/60Hz

24, 36, 42, 48, 110, 115, 120, 127, 200 / 208, 220, 220 / 230, 230 / 240, 256, 277, 380 / 400, 400, 440, 480, 500, 550V AC

Certificate
CE, ULcUL

Ordering information

Type, Auxiliary contact and Coil voltage

Reversing contactors

- For motor control
- Mechanically interlocked
- Coil voltage : DC

Screw clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MR |

Fast-on connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating lth | Auxiliary contact (standard) | Type |
|------------|--------------------------|--------------|-------------|-----------|----------------|------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MFR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MFR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MFR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MFR |

Coil voltage, DC

- ① Standard type : 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC
- ② Low consumption type : 12, 20, 24, 48, 72, 110, 120V DC(Low)
- ③ Wide Voltage : 12, 20, 24, 48, 72, 110, 12V DC(Wide)

Certificate
CE, ULcUL

Ordering information

Type, Auxiliary contact and Coil voltage

Reversing contactors

- For motor control
- Mechanically interlocked
- Coil voltage : DC

Cage clamp connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating Ith | Auxiliary contact (standard) | Type |
|------------|--------------------------|---------------|---------------|-----------|-------------------|---------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MCR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MCR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MCR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MCR |

Solder pin connection types



| Frame size | AC3 ratings (IEC60947-4) | | | | AC1 rating Ith | Auxiliary contact (standard) | Type |
|------------|--------------------------|---------------|---------------|-----------|-------------------|---------------------------------|-----------|
| | 220 ~ 240V | 380 ~ 440V | 500 ~ 550V | 690V | | | |
| 6A | 1.5kW 7A | 2.2kW 6A | 3kW 5A | 3kW 4A | 20A | 1NO or 1NC | GMD-6MSR |
| 9A | 2.2kW 9A | 4kW 9A | 3.7kW 6A | 4kW 5A | 20A | 1NO or 1NC | GMD-9MSR |
| 12A | 3kW 12A | 5.5kW 12A | 4kW 7A | 4kW 5A | 20A | 1NO or 1NC | GMD-12MSR |
| 16A | 4kW 15A | 7.5kW 16A | 5.5kW 9A | 4kW 5A | 20A | 1NO or 1NC | GMD-16MSR |

Coil voltage, DC

- ① Standard type : 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC
- ② Low consumption type : 12, 20, 24, 48, 72, 110, 120V DC(Low)
- ③ Wide Voltage : 12, 20, 24, 48, 72, 110, 12V DC(Wide)

Ordering information

Type, Auxiliary contact and Coil voltage

Certificate
CE, ULcUL

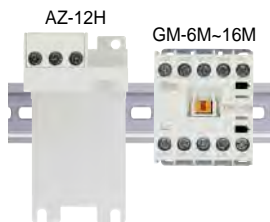
Bimetallic style

Description



GT-12M

- Direct mount on the mini contactors with screw clamp connection.
contactor types : GMC(D)-6M, GMC(D)-9M, GMC(D)-12M, GMC(D)-16M,
- DIN rail or screw mountable with the optional base AZ-22H
- Small physical size : 44 mm wide
- 1NO+1NC trip contacts
- Trip class 10A according to IEC60947-4-1
- Differential current/Phase failure protection : GTK types
- Non-differential GTH types are available for the economic solution
- Ambient compensated -5 to 40 °C
- Manual/Automatic reset convertible.
- Remote reset is optional
- Trip free designed



Separate mount

Direct mount



GT-12M

Catalog No.

| Setting ranges(A) | Differential type | Non-differential type | |
|-------------------|-------------------|-----------------------|------------------|
| | 3-heater | 3-heater | 2-heater |
| | 0.1 - 0.16 | GTK-12M • 0.14 | GTH-12M/3 • 0.14 |
| 0.16 - 0.25 | GTK-12M • 0.21 | GTH-12M/3 • 0.21 | GTH-12M • 0.21 |
| 0.25 - 0.4 | GTK-12M • 0.33 | GTH-12M/3 • 0.33 | GTH-12M • 0.33 |
| 0.4 - 0.63 | GTK-12M • 0.52 | GTH-12M/3 • 0.52 | GTH-12M • 0.52 |
| 0.63 - 1 | GTK-12M • 0.82 | GTH-12M/3 • 0.82 | GTH-12M • 0.82 |
| 1 - 1.6 | GTK-12M • 1.3 | GTH-12M/3 • 1.3 | GTH-12M • 1.3 |
| 1.6 - 2.5 | GTK-12M • 2.1 | GTH-12M/3 • 2.1 | GTH-12M • 2.1 |
| 2.5 - 4 | GTK-12M • 3.3 | GTH-12M/3 • 3.3 | GTH-12M • 3.3 |
| 4 - 6 | GTK-12M • 5 | GTH-12M/3 • 5 | GTH-12M • 5 |
| 5 - 8 | GTK-12M • 6.5 | GTH-12M/3 • 6.5 | GTH-12M • 6.5 |
| 6 - 9 | GTK-12M • 7.5 | GTH-12M/3 • 7.5 | GTH-12M • 7.5 |
| 7 - 10 | GTK-12M • 8.5 | GTH-12M/3 • 8.5 | GTH-12M • 8.5 |
| 9 - 13 | GTK-12M • 12 | GTH-12M/3 • 12 | GTH-12M • 12 |
| 12 - 16 | GTK-12M • 14 | GTH-12M/3 • 14 | GTH-12M • 14 |

Auxiliary (Trip) contact rating

| | AC15(11) duty | | | DC13(11) duty | |
|--|---------------|---------|---------|---------------|-------|
| | 110V | 220V | 550V | 110V | 220V |
| | 2.5(0.3)A | 2(0.3)A | 1(0.3)A | 0.28A | 0.14A |

(Note) Values of () are the ratings of NO contact under auto reset mode.

Certificate
CE, ULcUL

2-pole DC Contactors

Description

- Two normally open main contacts for DC circuit
- Positive and negative poles indicated on the front plate
- Eternal magnet installed for the effective arc extinguishing
- DIN rail or screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- AC/DC control voltage

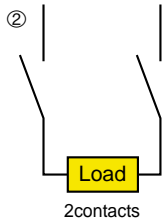
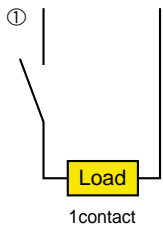
Selection



| Type | | Number of contacts in series | DC2, 4 ratings | | | Continuous current, Ith | Auxiliary contacts |
|----------|-----------|------------------------------|----------------|----------------|---------------|-------------------------|--------------------|
| AC coil | DC coil | | 110V | 220V | 440V | | |
| SMM-30P | SMM-30DP | 1 ① | 2.2kW 30A | 3.7kW 20A | 2.2kW 7.5A | 50A | 2NO+2NC |
| | | 2 ② | 3.7kW 40A | 5.5kW 30A | 7.5kW 20A | | |
| SMM-60P | SMM-60DP | 1 | 5.5kW 60A | 7.5kW 40A | 5.5kW 15A | 90A | 2NO+2NC |
| | | 2 | 7.5kW 80A | 11kW 60A | 15kW 40A | | |
| SMM-100P | SMM-100DP | 1 | 7.5kW 100A | 11kW 60A | 15kW 20A | 120A | 2NO+2NC |
| | | 2 | 11kW 120A | 18.5kW 100A | 22kW 60A | | |

Ratings of auxiliary contacts

| | | AC duty | | | DC duty | | |
|-------------------------|----------------|---------|------|------|---------|------|------|
| | | 110V | 220V | 550V | 48V | 110V | 220V |
| Rated currents | Inductive load | 6A | 5A | 3A | 3A | 1.2A | 0.2A |
| | Resistive load | 10A | 10A | 5A | 2.5A | 1A | |
| Continuous current, Ith | | 16A | | | | | |



Performance

| Contactor types | Breaking current | | | Making current | Endurance |
|-----------------|--------------------|--------|--------|----------------|----------------------------------------------|
| | contacts in series | DC110V | DC220V | | |
| SMM-30P | 1 | 120A | 80A | 30A | Mechanical lifetime : 2.5 mil. operations |
| SMM-30DP | 2 | 160A | 120A | 80A | |
| SMM-60P | 1 | 240A | 160A | 60A | Electrical lifetime : 0.5 mil. operations |
| SMM-60DP | 2 | 320A | 240A | 160A | |
| SMM-100P | 1 | 400A | 240A | 80A | Operation cycle : 1200 operations/hour |
| SMM-100DP | 2 | 480A | 400A | 240A | |

Contactor coil voltage, AC 50/60Hz

48, 100/100~110, 110~120/115~120, 200/200~220, 220~240/230~240, 380~415/400~440V

Coil voltage, DC

24, 48, 100, 110, 200, 220V

Ordering information

Specify type and coil voltage

Example : SMM-30P, AC100V 50Hz

2-pole AC Contactors, Definite purpose

Features and specifications



The single pole contactor is small, light and economical. It is suitable for use in equipment of lower switching frequency such as heaters, lightning equipment and in motor control of air conditioners, refrigerators, drivers, pumps, compressors, industrial cleaner and etc.

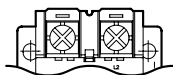
- Space-Saving small and light Design
- Extended Range in same size enables its use in a wide range of application areas
- Sealed structure which Improves Noise
- Equipped with Operation Status display unit
- Rated current: 10, 20, 25, 30, 35, 40A (AC 220V Standard)

Type and rating

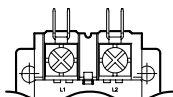


| Type | | | GMC-10P2 | GMC-20P2 | GMC-25P2 | GMC-30P2 | GMC-35P2 | GMC40P2 | |
|------------------------------|-------------|-------------------|----------|----------|----------|----------|----------|---------|----|
| | | | 10A | 20A | 25A | 30A | 35A | 40A | |
| Number of poles | | | 2 | 2 | 2 | 2 | 2 | 2 | |
| Main contact | | | 2a | 2a | 2a | 2a | 2a | 2a | |
| Rated insulation voltage, Ui | | | AC | | | | | | |
| | | | 690 | | | | | | |
| | | | DC | | | | | | |
| | | | 250 | | | | | | |
| Rating | AC3 ratings | Rated current (A) | 200~220V | 10 | 20 | 25 | 30 | 35 | 40 |
| | | | 380~440V | 8 | 17 | 21 | 23 | 26 | 32 |
| | | | 500~550V | 6 | 14 | 17 | 21 | 23 | 26 |
| | AC1 lth (A) | | 20 | 30 | 35 | 40 | 45 | 50 | |

Main contactor

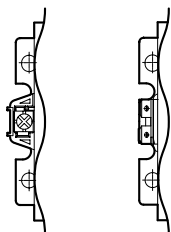


Screw clamp



Quick connect

Coil contactor



Screw clamp

Quick connect

Coil characteristics

| Voltage (AC) | Input (VA) | | Thermal dissipation (W) | Operation voltage (V) | | Coil current (mA) | Operation time (ms) | |
|--------------|------------|--------|-------------------------|-----------------------|----------|-------------------|---------------------|---------|
| | Inrush | Sealed | | Pick-up | Drop-out | | Closing | Opening |
| 24V 50/60Hz | 35 | 6.0 | 2 | 18~20 | 10~15 | 263 | 40 | 30 |
| 48V 50/60Hz | 35 | 6.0 | 2 | 36~40 | 19~27 | 131 | 40 | 30 |
| 100V 50/60Hz | 35 | 6.0 | 2 | 74~81 | 39~57 | 63 | 40 | 30 |
| 110V 50/60Hz | 35 | 6.0 | 2 | 78~90 | 50~64 | 57 | 40 | 30 |
| 120V 50/60Hz | 35 | 6.0 | 2 | 90~100 | 52~66 | 53 | 40 | 30 |
| 200V 50/60Hz | 35 | 6.0 | 2 | 155~165 | 80~115 | 32 | 40 | 30 |
| 220V 50/60Hz | 35 | 6.0 | 2 | 160~175 | 90~120 | 29 | 40 | 30 |
| 230V 50/60Hz | 35 | 6.0 | 2 | 165~180 | 110~130 | 27 | 40 | 30 |
| 240V 50/60Hz | 35 | 6.0 | 2 | 168~185 | 110~135 | 26 | 40 | 30 |

Note) 1. Input VA is average value

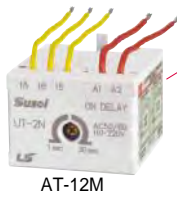
2. The data above consists of test results at 60Hz. (20°C COLD status)

3. The contactor will operate between 85% and 110% of rated voltage. But when continuously Applied, the voltage should remain within the rated voltage.

Timer unit, AT-12M

- Electronic type
- ON/OFF time delay
- Front mount

Timer unit



Surge absorber unit



Electronic Timer

| Type | Control voltage | Delay | Time | Applied contactors |
|-------------|-----------------|-------|---------|--------------------------|
| AT-12M / IN | AC/DC 24~48V | ON | 0.1~30s | GMC-6M~16M GMD-6M~16M |
| AT-12M / IF | AC/DC 24~48V | OFF | 0.1~30s | GMC-6M~16M GMD-6M~16M |
| AT-12M / 2N | AC 100~220V | ON | 0.1~30s | GMC-6M~16M GMD-6M~16M |
| AT-12M / 2F | AC 100~220V | OFF | 0.1~30s | GMC-6M~16M GMD-6M~16M |

Surge absorber unit, AS-12M

- Coil surge suppressor

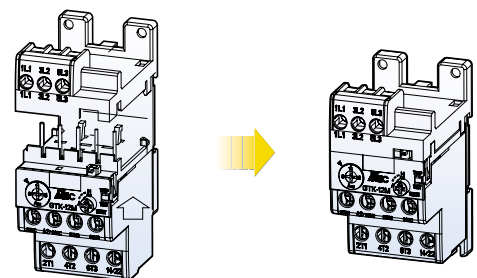
Surge absorber unit



| Type | Internal element | Operational voltage | Applied contactors |
|------------|------------------|---------------------|--------------------|
| AS-12M / 1 | Varistor | AC24~48V | GMC-6M~16M |
| AS-12M / 2 | | AC60~127V | |
| AS-12M / 3 | | AC200~240V | |
| AS-12M / 4 | | DC12~24V | GMD-6M~16M |
| AS-12M / 5 | | DC30~72V | |
| AS-12M / 6 | | DC100~127V | |
| AS-12M / 7 | | DC200~250V | |

Separate mounting unit, AZ-12MH

- To mount a relay separately from a contactor
- Mountable on DIN rail or by screw fixing



Interlock unit, AR-12M

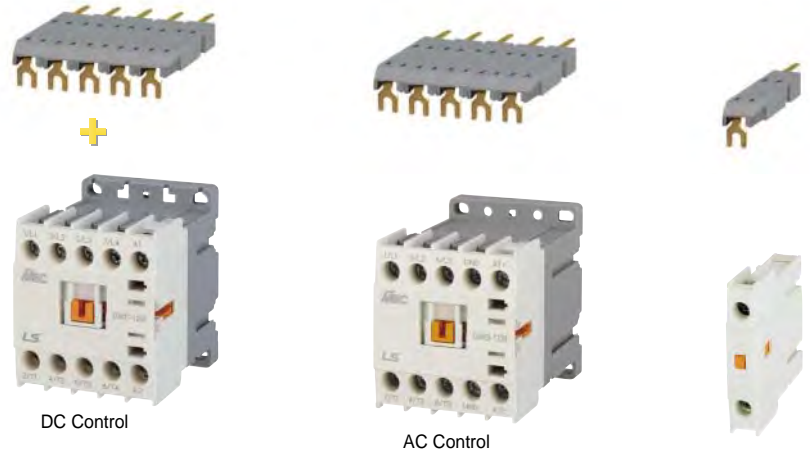
consists of

- Mechanical interlock components
- Cable kits for line and load sides



Solder pin terminals

To modify the connection to Solder pin type from Screw clamp type
 Available for contactors and auxiliary contact blocks



DC Control

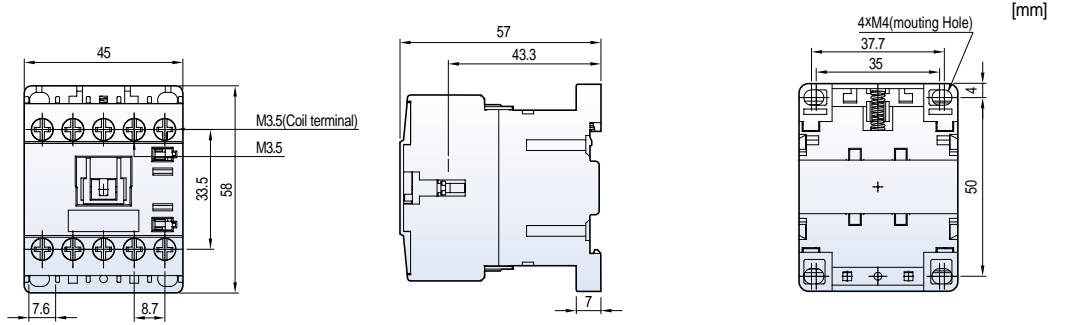
AC Control



Dimensions

Mini contactors with Screw clamp type

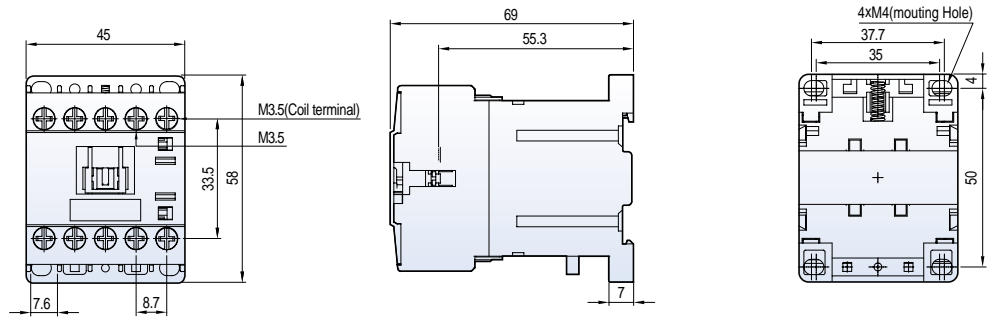
- GMC-6M
- GMC-9M
- GMC-12M
- GMC-16M
- GMC-6M/4
- GMC-9M/4
- GMC-12M/4
- GMC-16M/4



[mm]

0.17kg

- GMD-6M
- GMD-9M
- GMD-12M
- GMD-16M
- GMD-6M/4
- GMD-9M/4
- GMD-12M/4
- GMD-16M/4

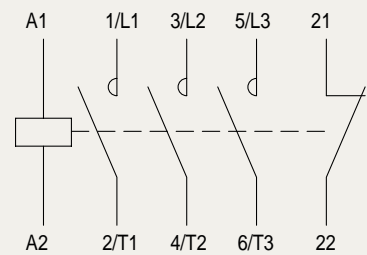
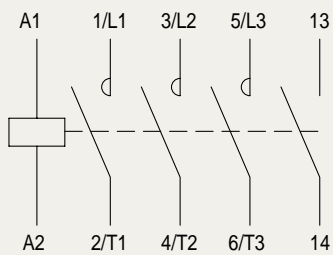


0.23kg

Circuit diagram

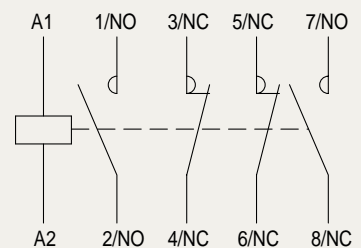
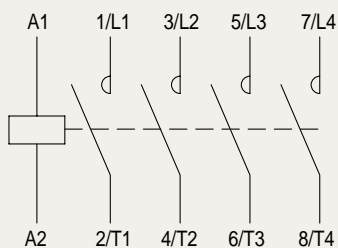
GMC-6M~16M, GMD-6M~16M

3-Pole contactors



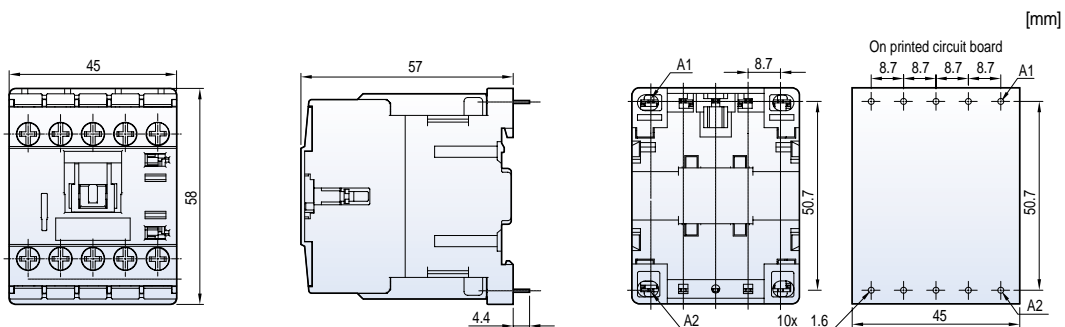
GMC-6M/4~16M/4, GMD-6M/4~16M/4

4-Pole contactors



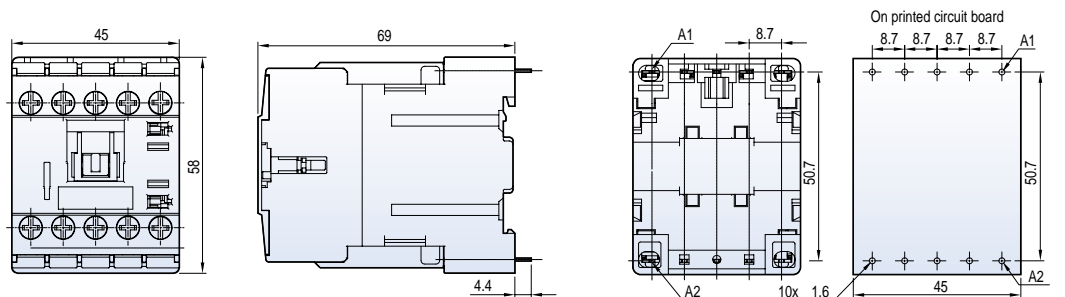
Mini contactors with Solder pin type

- GMC-6MP
- GMC-9MP
- GMC-12MP
- GMC-16MP
- GMC-6MP/4
- GMC-9MP/4
- GMC-12MP/4
- GMC-16MP/4



0.17kg

- GMD-6MP
- GMD-9MP
- GMD-12MP
- GMD-16MP
- GMD-6MP/4
- GMD-9MP/4
- GMD-12MP/4
- GMD-16MP/4

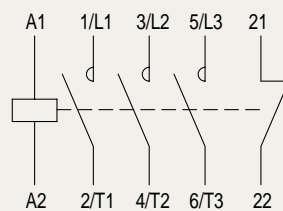
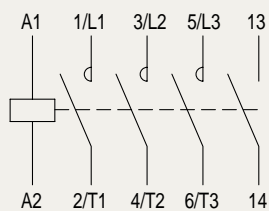


0.23kg

Circuit diagram

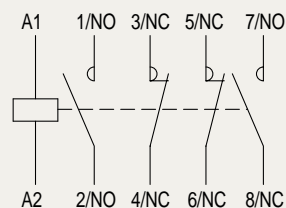
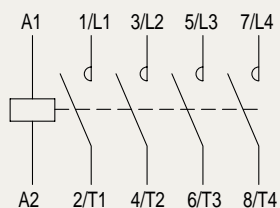
GMC-6MP~16MP, GMD-6MP~16MP

3-Pole contactors



GMC-6MP/4~16MP/4, GMD-6MP/4~16MP/4

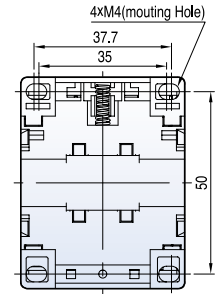
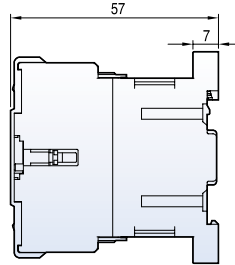
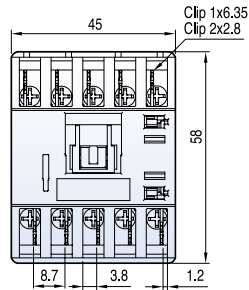
4-Pole contactors



Dimensions

Mini contactors with Fast-on type

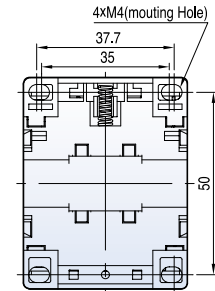
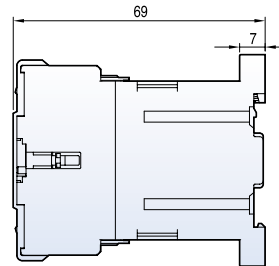
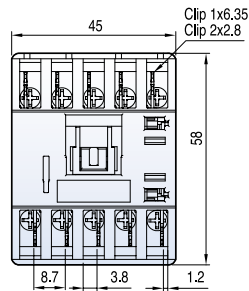
- GMC-6MF
- GMC-9MF
- GMC-12MF
- GMC-16MF
- GMC-6MF/4
- GMC-9MF/4
- GMC-12MF/4
- GMC-16MF/4



[mm]

0.18kg

- GMD-6MF
- GMD-9MF
- GMD-12MF
- GMD-16MF
- GMD-6MF/4
- GMD-9MF/4
- GMD-12MF/4
- GMD-16MF/4

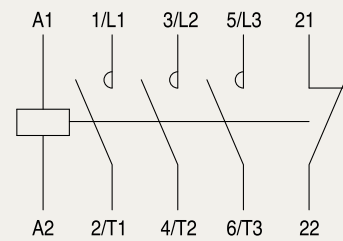
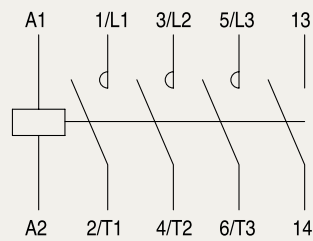


0.27kg

Circuit diagram

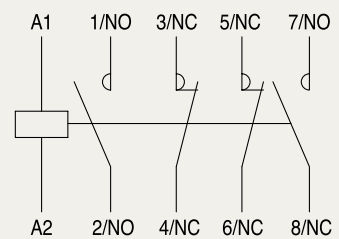
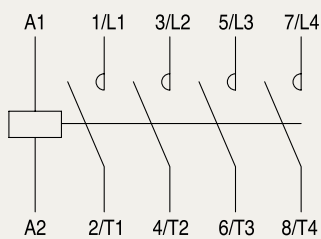
GMC-6MF-16MF, GMD-6MF-16MF

3-Pole contactors



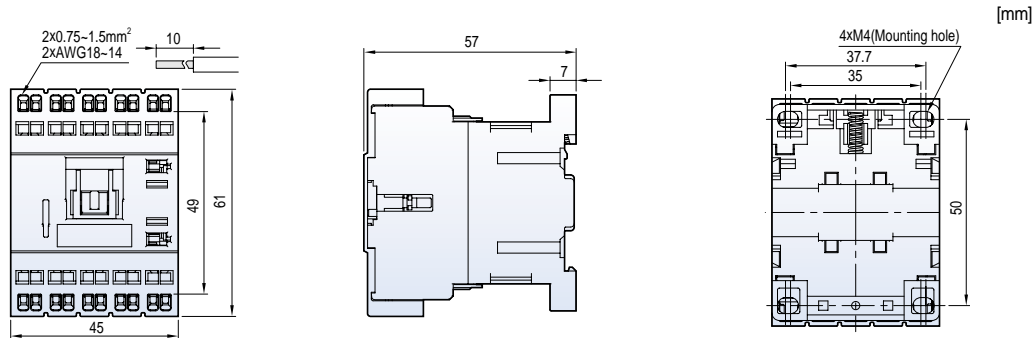
GMC-6MF/4-16MF/4, GMD-6MF/4-16MF/4

4-Pole contactors



Mini contactors with Cage clamp type

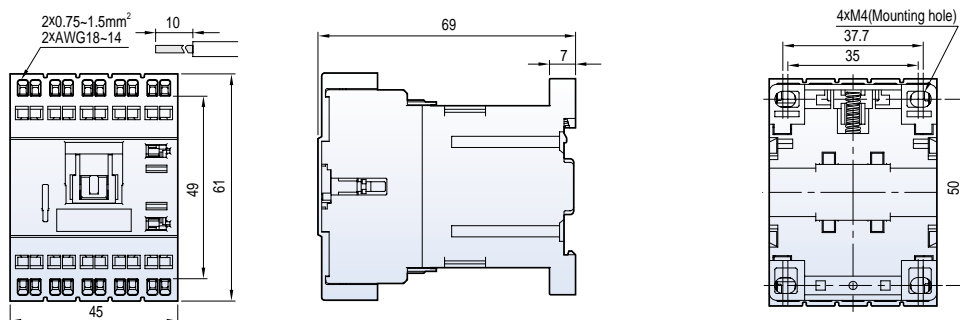
- GMC-6MC
- GMC-9MC
- GMC-12MC
- GMC-16MC
- GMC-6MC/4
- GMC-9MC/4
- GMC-12MC/4
- GMC-16MC/4



[mm]

0.19kg

- GMD-6MC
- GMD-9MC
- GMD-12MC
- GMD-16MC
- GMD-6MC/4
- GMD-9MC/4
- GMD-12MC/4
- GMD-16MC/4

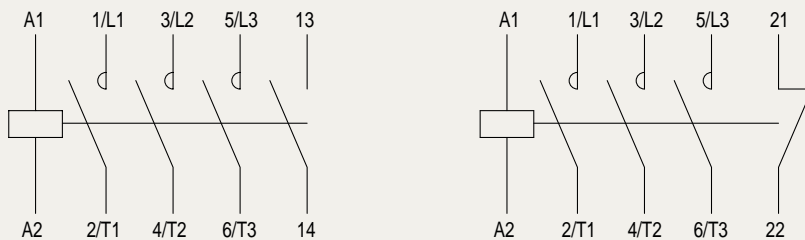


0.28kg

Circuit diagram

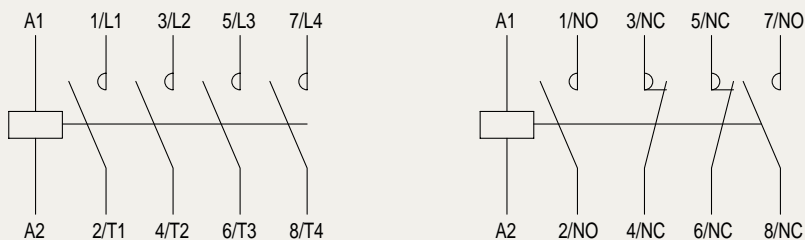
GMC-6MC~16MC, GMD-6MC~16MC

3-Pole contactors



GMC-6MC/4~16MC/4, GMD-6MC/4~16MC/4

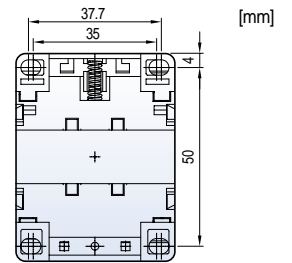
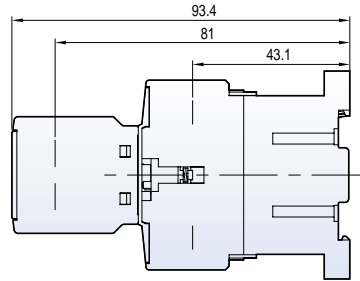
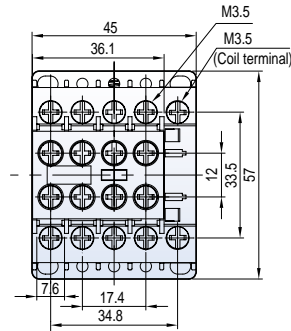
4-Pole contactors



Dimensions

Mini contactors with Auxiliary contacts

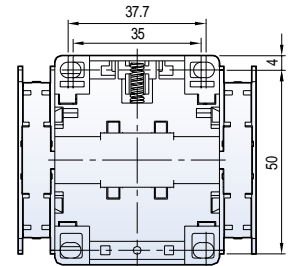
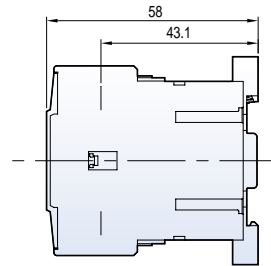
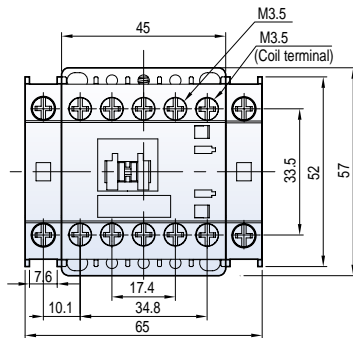
- GMC-6M
- GMC-9M
- GMC-12M
- GMC-16M
- +
- AU-4M



[mm]

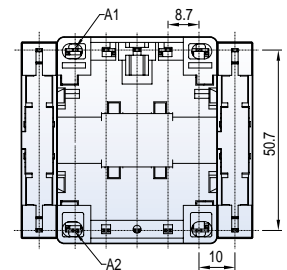
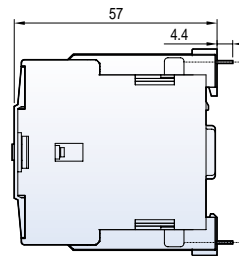
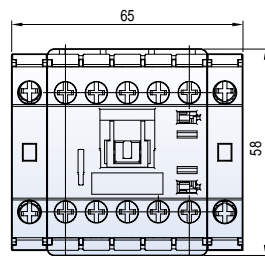
0.21kg

- GMC-6M
- GMC-9M
- GMC-12M
- GMC-16M
- +
- 2 × AU-1M

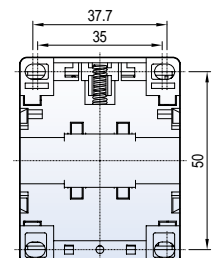
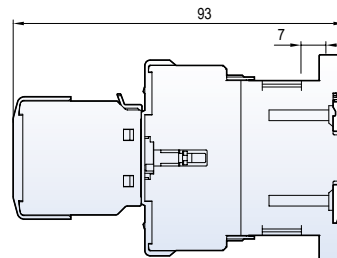
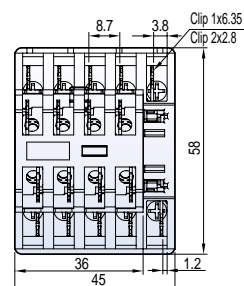


0.21kg

- GMC-6MP
- GMC-9MP
- GMC-12MP
- GMC-16MP
- +
- 2 × AU-1MP



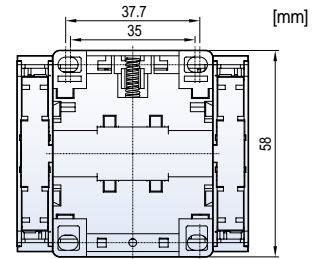
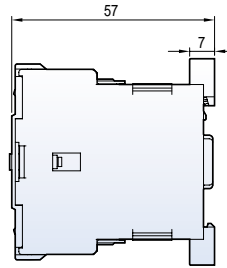
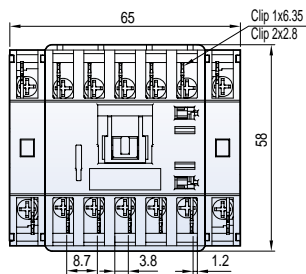
- GMC-6MF
- GMC-9MF
- GMC-12MF
- GMC-16MF
- +
- AU-4MF



0.23kg

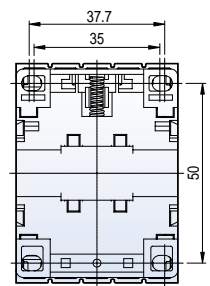
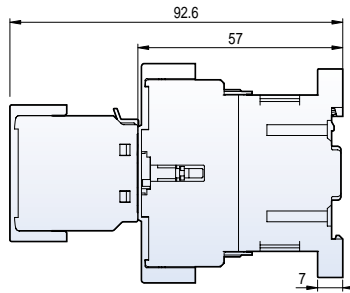
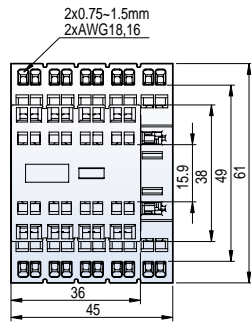
Mini contactors with Auxiliary contacts

- GMC-6MF
- GMC-9MF
- 2 × GMC-12MF
- GMC-16MF
- +
- AU-1MF



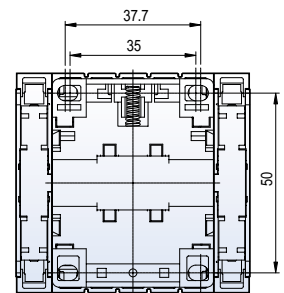
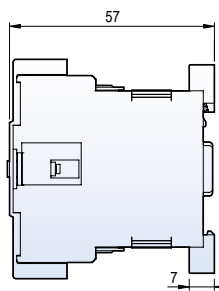
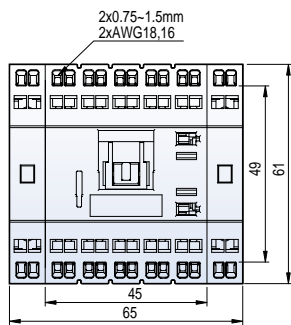
0.32kg

- GMC-6MC
- GMC-9MC
- GMC-12MC
- GMC-16MC
- +
- AU-4MC



0.24kg

- GMC-6MC
- GMC-9MC
- 2 × GMC-12MC
- GMC-16MC
- +
- AU-1MC

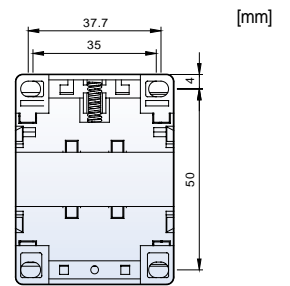
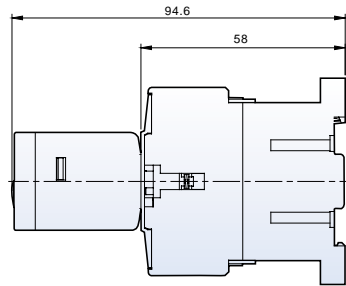
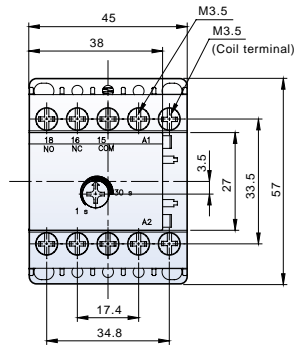


0.23kg

Dimensions

Mini contactors with external accessories

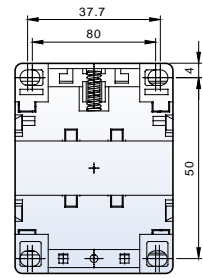
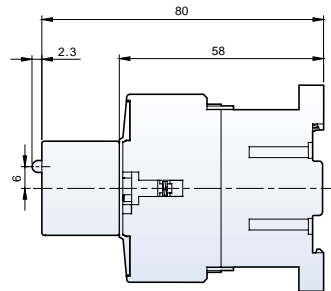
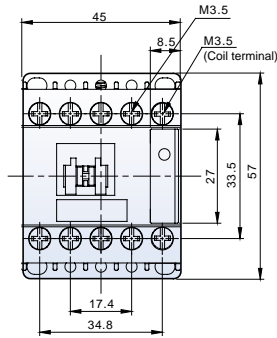
- GMC-6M
- GMC-9M
- GMC-12M
- GMC-16M
- +
- AT-12M



[mm]

0.21kg

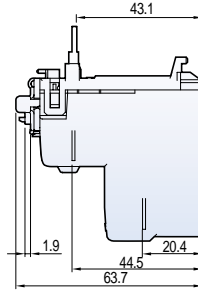
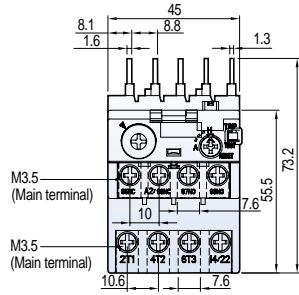
- GMD-6M
- GMD-9M
- GMD-12M
- GMD-16M
- +
- AS-12M



0.175kg

Thermal overload relays for Mini contactors

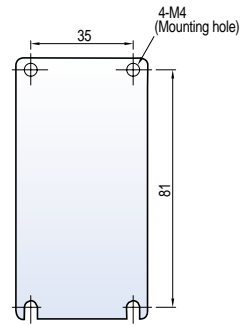
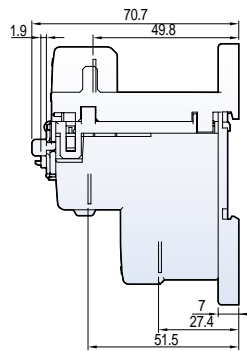
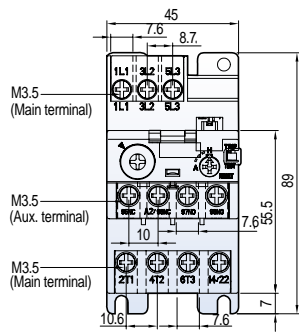
GTH(K)-12M



[mm]

0.1kg

GTH(K)-12MH

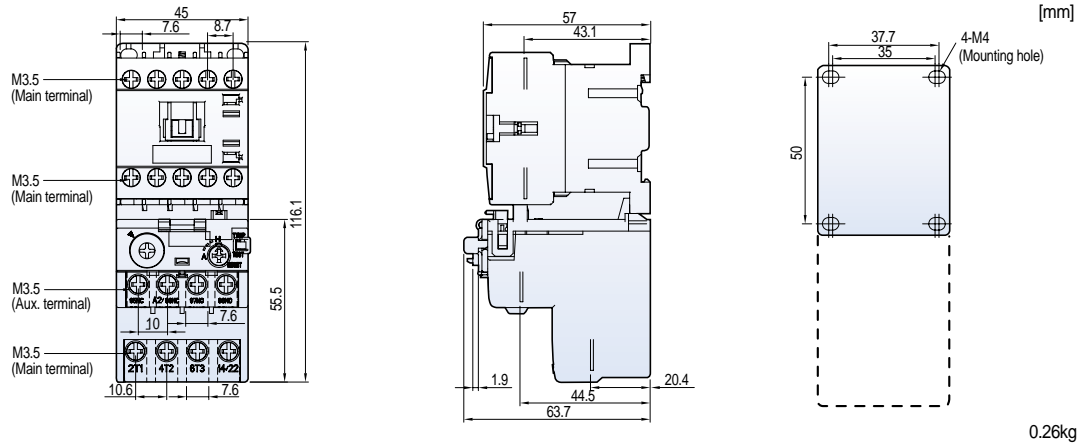


0.4kg

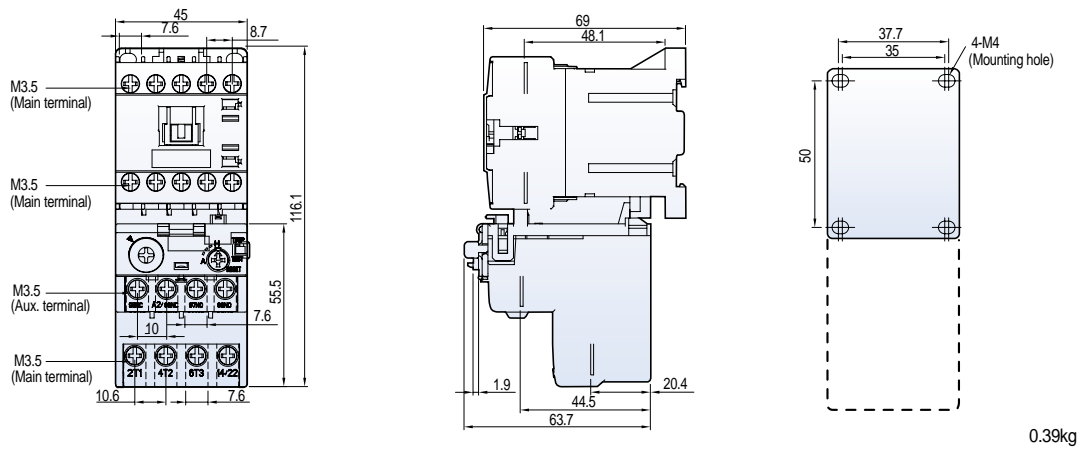
Dimensions

Mini motor starters, open

- GMS-6M
- GMS-9M
- GMS-12M
- GMS-16M



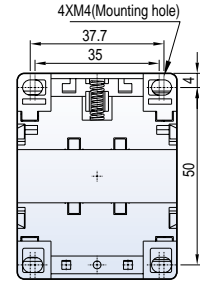
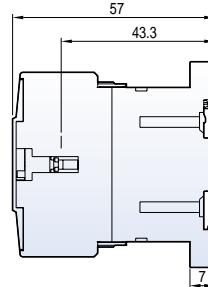
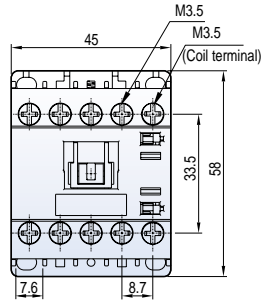
- GMS-6MD
- GMS-9MD
- GMS-12MD
- GMS-16MD



Mini contactor relays

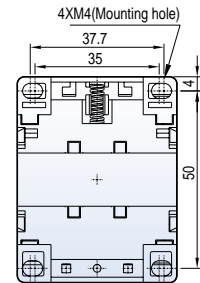
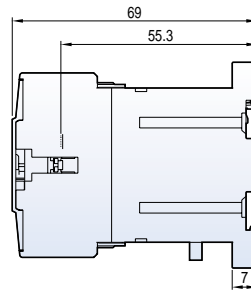
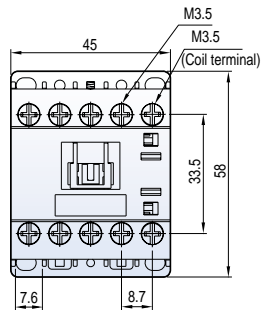
[mm]

GMR-4M



0.17kg

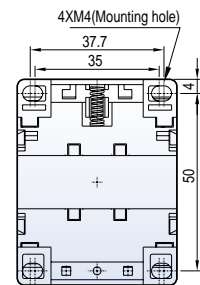
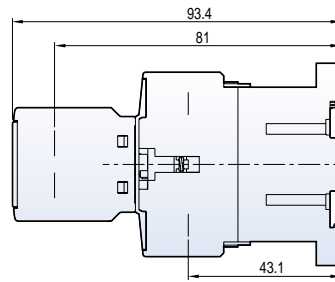
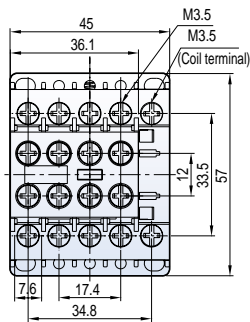
GMR-4MD



0.23kg

GMR-4M

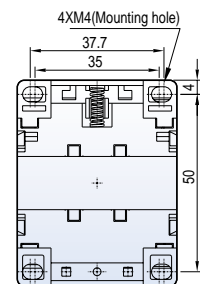
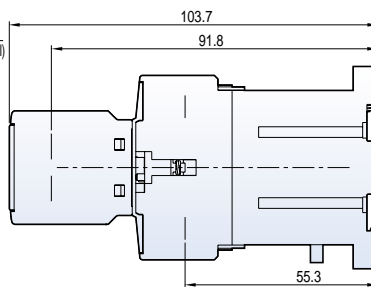
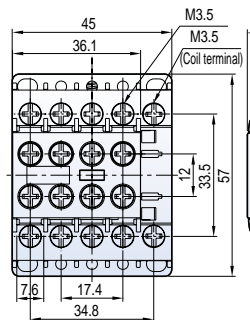
GMR-8M



0.21kg

GMR-4M

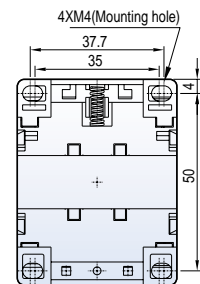
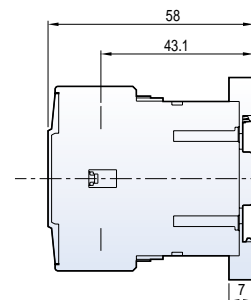
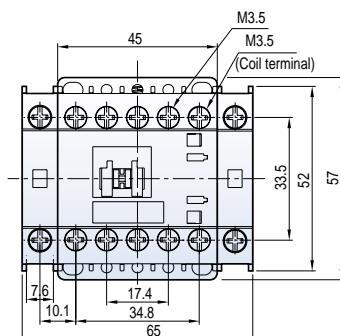
GMR-8M



0.21kg

GMR-4M

2 × AU-1M

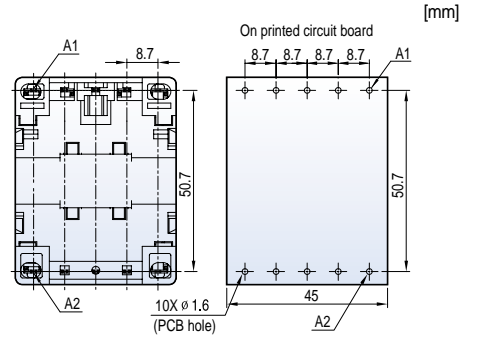
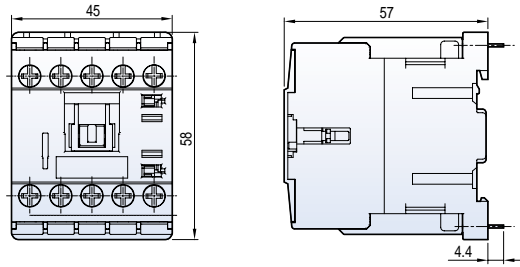


0.21kg

Dimensions

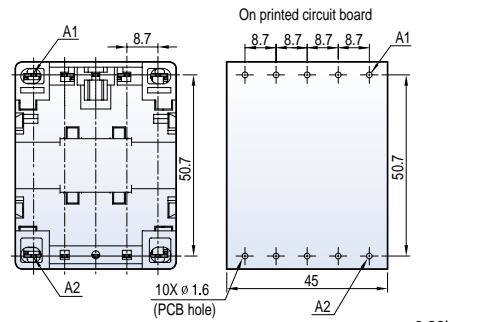
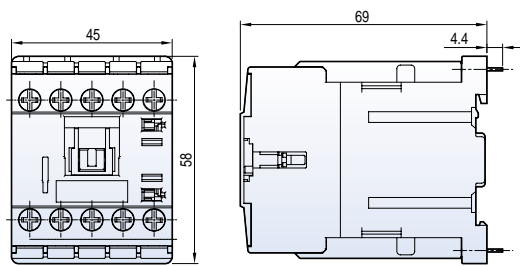
Mini contactor relays

GMR-4MP



0.19kg

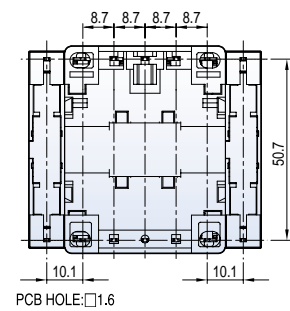
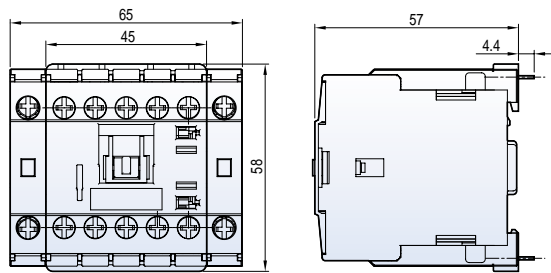
GMR-4MPD



0.28kg

GMR-4MP

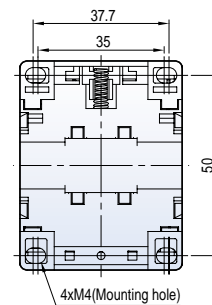
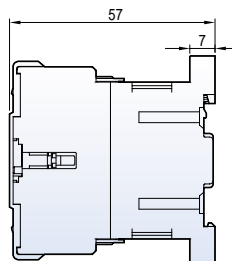
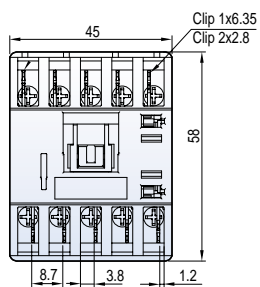
2 × AU-1M



Mini contactor relays

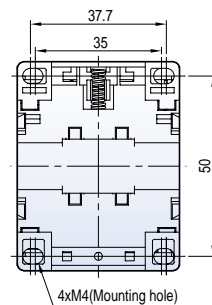
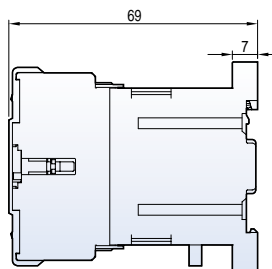
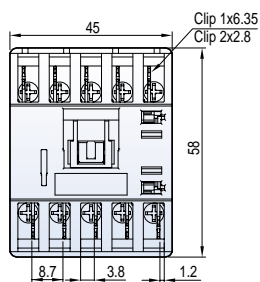
[mm]

GMR-4MF



0.18kg

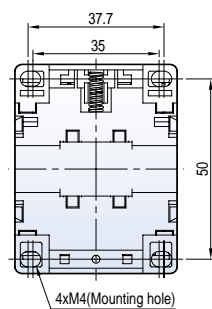
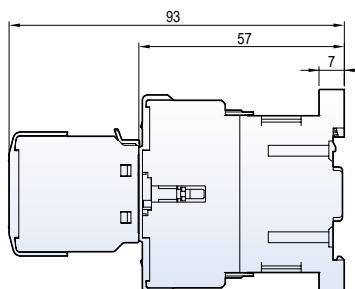
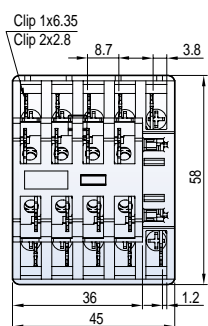
GMR-4MFD



0.27kg

GMR-6MF

GMR-8MF

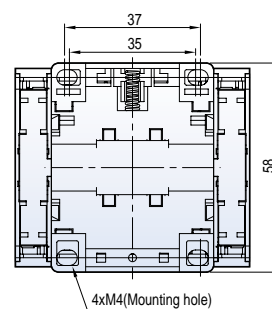
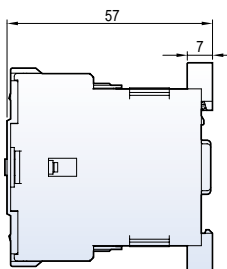
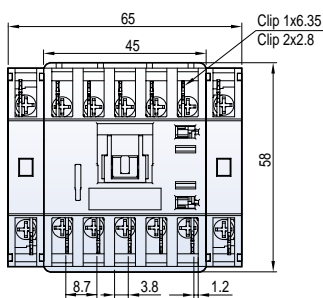


0.23kg

GMR-4MF

+

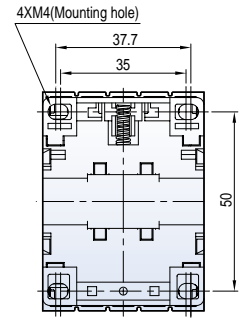
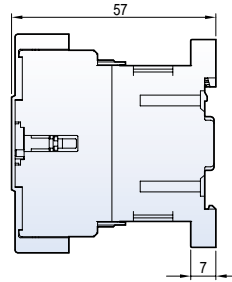
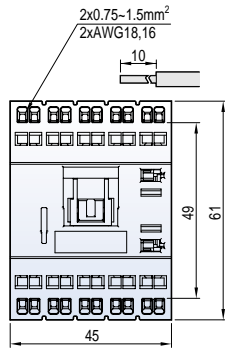
2 × AU-1MF



0.32kg

Dimensions

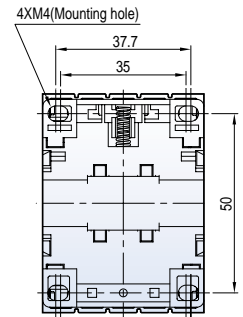
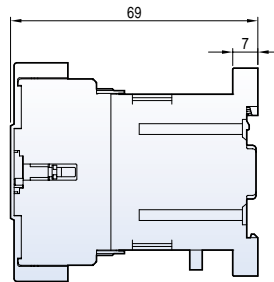
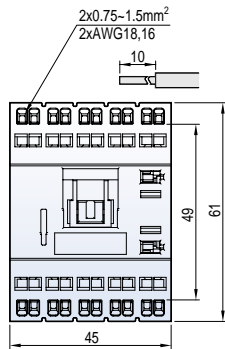
GMR-4MC



[mm]

0.18kg

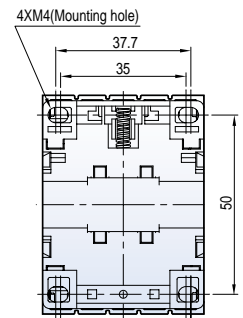
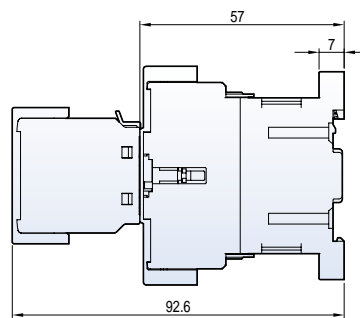
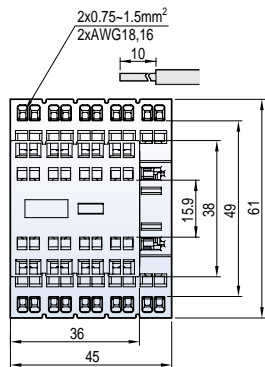
GMR-4MCD



0.27kg

GMR-6MC

GMR-8MC



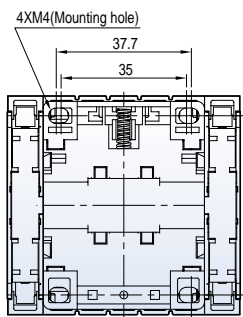
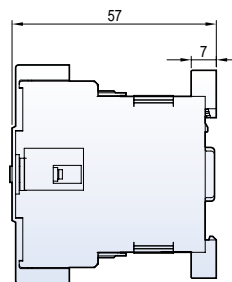
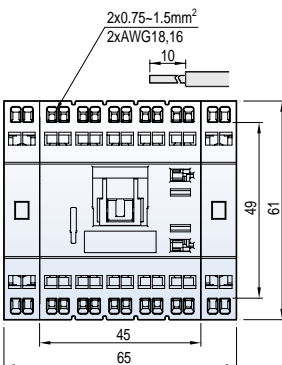
0.23kg

2x

GMR-4MC

+

AU-1MC



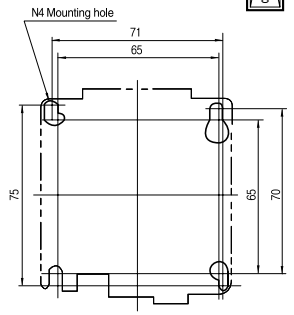
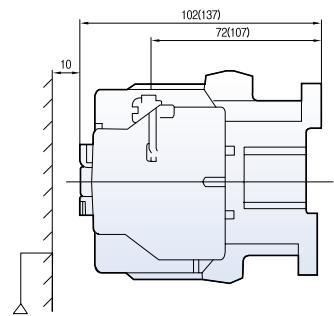
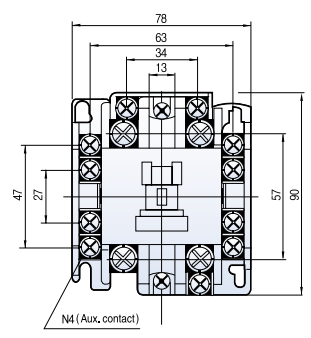
0.32kg

2-pole DC Contactors

[mm]

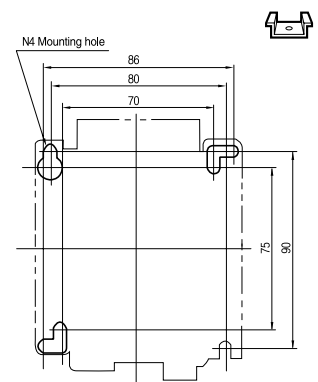
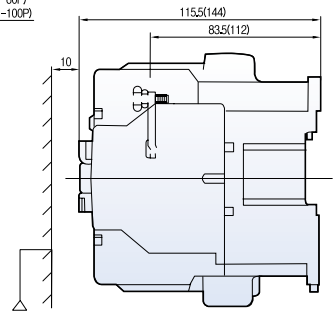
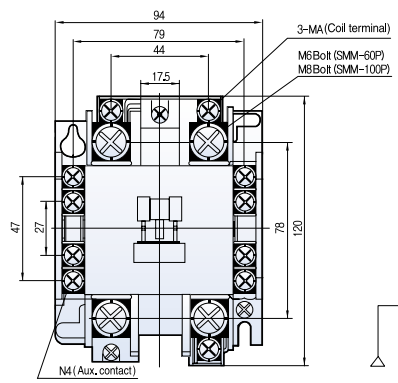


- SMM-30P
- SMM-30DP



0.61(0.93)kg

- SMM-60P
- SMM-100P
- SMM-60DP
- SMM-100DP

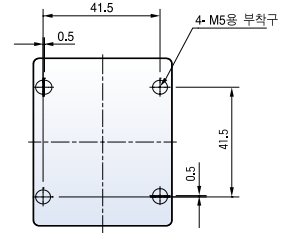
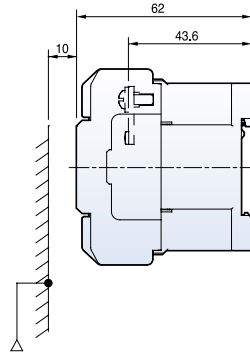
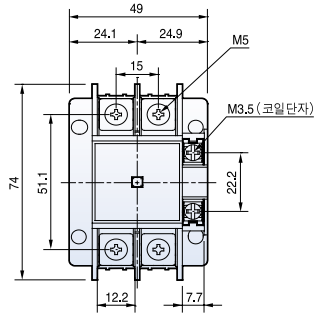


1.15(2.17)kg

Dimensions

2-pole AC Contactors

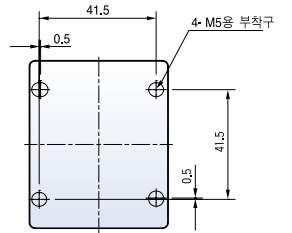
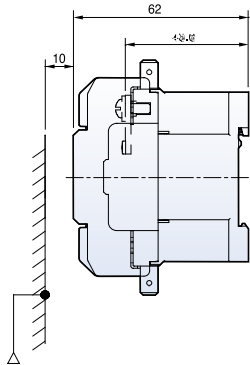
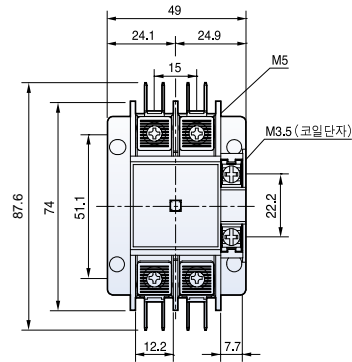
- GMC-10P2
- GMC-20P2
- GMC-25P2
- GMC-30P2
- GMC-35P2
- GMC-40P2
- (TSBS Type)



[mm]

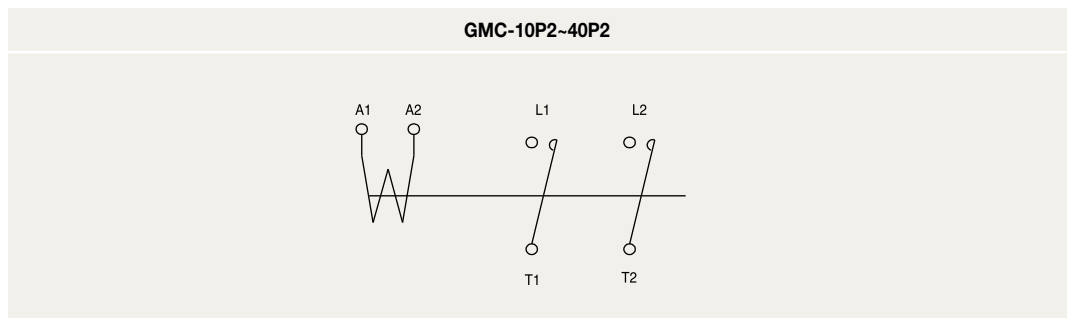
1.29kg

- GMC-10P2
- GMC-20P2
- GMC-25P2
- GMC-30P2
- GMC-35P2
- GMC-40P2
- (TQBS Type)



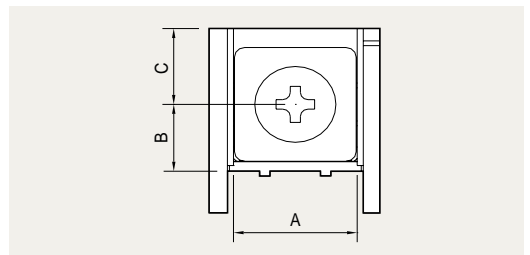
1.29kg

Circuit diagram



Terminal

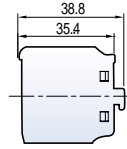
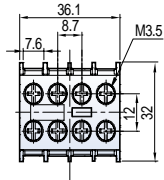
| Type | Terminal | Screw (mm ²) | Wire (kgf · cm) | Torque (mm) | A × B × C |
|---------------|----------|--------------------------|-----------------|-------------|-----------------|
| GMC-10P2-40P2 | Main | M5 | 1-16 | 26 | 12.2 × 7 × 8 |
| | Coil | M3.5 | 1-2.5 | 12 | 7.7 × 7.5 × 4.5 |



Accessories for Mini contactors

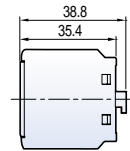
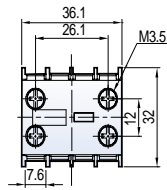
[mm]

AU-4M



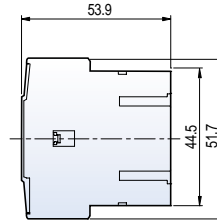
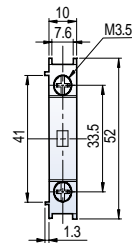
0.04kg

AU-2M



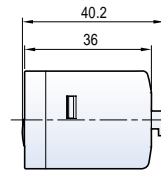
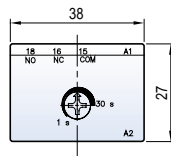
0.03kg

AU-1M



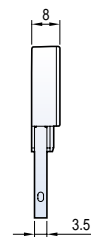
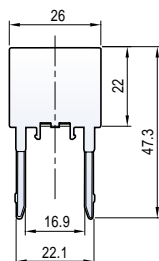
0.02kg

AT-12M



0.04kg

AS-12M



0.005kg



EMPR



Contents :

Electronic overload relays / Digital motor protection relays

| | |
|--------------------------------------------------|-----|
| Catalog numbering system | 142 |
| Specification | |
| Electronic overload relays | 143 |
| Digital motor protection relays | 145 |
| Curves | |
| Trip curves for electronic overload relays | 146 |
| Digital motor protection relays | 147 |
| Dimensions | |
| Electronic overload relays | 148 |
| Digital motor protection relay | 151 |



Catalog numbering system

Electronic motor protection relay

| GMP | 22 | - | 2 | P | R | 220 | | | | | |
|------------|-----------------------|-----------------------------|----------|-------------|---------------|------------|---------------|----------------------------------|-------------------|-----|------------|
| Frame | Current setting value | Type | CT No. | | Wiring method | | Reverse phase | | Operating voltage | | |
| 22 | 0.3~1.5A | Direct/ Screw/ Tunnel | 2 | 2CT | P | Pin type | - | Without reverse phase protection | | - | AC100~260V |
| | 1~5A | | 3 | 3CT | S | Screw type | | With reverse phase protection | | 220 | AC220V |
| | 4.4~22A | | T | Tunnel type | R | | 110 | AC110V | | | |
| 40 | 4~20A | Screw | | | | | | | | | |
| | 8~40A | | | | | | | | | | |
| 80 | 16~80A | Screw | | | | | | | | | |

| Frame | Current setting value | Type | Operating voltage | |
|-------|-----------------------|--------|-------------------|-------------|
| 60 | 0.5~6A | Tunnel | 24 | AC 24V |
| | 3~30A | | 110 | AC85~120V |
| | 5~60A | | 220 | AC180~260V |
| | | | 380 | AC380(440V) |

Digital motor protection relay (DMP 06-SZ 220)

| DMP | - | 06 | S | Z | a | 220 | | | |
|-----------------------|----------|---------------|-------------|----------|--------------|------------|-----------------|-------------------|--------|
| Current setting range | | Wiring method | | Option | | Type | | Operating voltage | |
| 06 | 0.5~6A | S | Screw type | - | Standard | - | Standard | 220 | AC220V |
| 60 | 5~60A | T | Tunnel type | Z | Ground fault | a | Memory function | 110 | AC110V |

* The standard length of a extension cable is 1.5m, 2m, 4m cable is optional

* For ground fault protection, ZCT (30 ϕ , 50 ϕ , 65 ϕ , 80 ϕ)made by LS is optionally required

* Type "a": It has additional functions like as setting operation time by month or by hour, checking & storing operating time

Specification

Electronic overload relays

Ratings



| Model | | GMP22-2P | GMP22-2P(1a1b) GMP22-3P/3PR | | GMP22-2S | GMP22-3S/3SR | GMP22-2T | GMP22-3T/3TR |
|------------------------------------|---------------------|------------------------------------------------------------------------|---------------------------------|--------|------------------------------------------|----------------|----------------|---------------|
| Type | | Pin type | | | Screw type | | Tunnel type | |
| No. of CT | | 2CT | 2CT | 3CT | 2CT | 3CT | 2CT | 3CT |
| Protection | Overcurrent | ● | ● | ● | ● | ● | ● | ● |
| | Phase failure | ● Note1) | ● | ● | ● | ● | ● | ● |
| | Stall | ● | ● | ● | ● | ● | ● | ● |
| | Asymmetry | — | — | ● | — | ● | — | ● |
| | Reverse phase | — | — | ●(3PR) | — | ●(3SR) | — | ●(3TR) |
| Current setting range (A) | | 0.3~1.5 | | | | | | |
| | | 1~5 | | | | | | |
| | | 4.4~22 | | | | | | |
| Operating time characteristics | | Inverse time characteristics(GMP22-2PD: Definite time characteristics) | | | | | | |
| Time setting (sec) | Inverse time | 0~30 sec | | | | | | |
| | Definite D-time | 0.2~60 sec for GMP22-2PD | | | | | | |
| | O-time | 5sec (Fixed) for GMP22-2PD | | | | | | |
| Tolerance | Current | ±5% | | | | | | |
| | Time | ±5%(or ±0.5sec) | | | | | | |
| Control power | Voltage | AC 110V/220V(±10%) | AC 100~260V | | | | | |
| | Frequency | 50/60Hz | | | | | | |
| Aux. contact | Contact | 1SPDT(1c) Note2) | 2SPST(When power applied, 1a1b) | | | | | |
| | Ratings | 5A/250VAC Resistive load | 3A/250VAC Resistive load | | | | | |
| | Operate | (95 ⇄ 96 Close) | (95 ⇄ 96 Close) | | | (97 ⇄ 98 Open) | | |
| Insulation resistance | Min 100MΩ at 500Vdc | | | | | | | |
| Surge endurance(IEC 1000-4-5) | | 1.2 × 50μs 6kV Apply the standard wave | | | | | | |
| Fast transient burst(IEC 1000-4-4) | | 2.5kV/5min. | | | | | | |
| Environment Temperature | Operation | -25~70°C | | | | | | |
| | Storage | -30~80°C | | | | | | |
| | Relative humidity | 30~90%RH(No freezing) | | | | | | |
| Trip indicator | | Red LED | Red/Green LED | | Red LED | Red/Green LED | Red LED | Red/Green LED |
| Dimension(mm) | W × H × D | 44 × 71 × 78 | 53 × 77.5 × 87.5 | | 53 × 68 × 87.5 | | 53 × 38 × 87.5 | |
| Mounting type | | Direct mount onto a MC | | | Separate mount(Screw or Din-rail) Note3) | | | |
| Applied MC | | GMC-9, GMC-12, GMC-18, GMC-22 | | | | | | |
| Certification | | UL, cUL, CE | | | | | | |

Note) 1. When it is 2CT model, only two-phase protection is available

2. 1a1b Aux. switch is optional in GMP 22-2P model

3. The bracket for Din-rail mount is optional

Specification

Electronic overload relays

Ratings



| Model | | GMP40-2P | GMP40-3P/3PR | GMP40-2S | GMP40-3S/3SR | GMP40-2T | GMP40-3T/3TR | GMP80-2S | GMP80-3S/3SR |
|------------------------------------|-------------------|-------------------------------------------------------|---------------|-----------------------------------|---------------|----------------|---------------|--------------------------------------------|--------------|
| Type | | Pin type | | Screw type | | Tunnel type | | Screw type | |
| No. of CT | | 2CT | 3CT | 2CT | 3CT | 2CT | 3CT | 2CT | 3CT |
| Protection | Overcurrent | ● | ● | ● | ● | ● | ● | ● | ● |
| | Phase failure | ● | ● | ● | ● | ● | ● | ● | ● |
| | Stall | ● | ● | ● | ● | ● | ● | ● | ● |
| | Asymmetry | — | ● | — | ● | — | ● | — | ● |
| | Reverse phase | — | ●(3PR) | — | ●(3SR) | — | ●(3TR) | — | ●(3SR) |
| Current setting range(A) | | 4~20 | | | | | | 16~80 | |
| | | 8~40 | | | | | | | |
| Operating time characteristics | | Inverse time characteristics | | | | | | | |
| Time setting (sec) | Inverse time | 0~30 sec | | | | | | | |
| | Reset time | Manual reset (Prompt) Reset after 1 Min.(Optional) | | | | | | | |
| Tolerance | Current | ±5% | | | | | | | |
| | Time | ±5%(or±0.5sec) | | | | | | | |
| Control power | Voltage | AC 100~260V | | | | | | | |
| | Frequency | 50/60Hz | | | | | | | |
| Aux. contact | Contact | 2SPST(When power applied, 1a1b) | | | | | | | |
| | Ratings | 3A/250VAC Resistive load | | | | | | | |
| | Operate | (95┆ 96 Close) | | | | (97┆ 98 Open) | | | |
| Insulation resistance | | Min 100MΩ at 500Vdc | | | | | | | |
| Surge endurance(IEC 1000-4-5) | | 1.2 × 50μs 6kV Apply the standard wave | | | | | | | |
| Fast transient burst(IEC 1000-4-4) | | 2.5kV/5min. | | | | | | | |
| Environment Temperature | Operation | -25~70°C | | | | | | | |
| | Storage | -30~80°C | | | | | | | |
| | Relative humidity | 30~90%RH((No freezing) | | | | | | | |
| Trip indicator | | Red LED | Red/Green LED | Red LED | Red/Green LED | Red LED | Red/Green LED | Red LED | 2Red LEDs |
| Dimension(mm) | W×H×D | 53 × 77.5 × 87.5 | | 53 × 68 × 87.5 | | 53 × 38 × 87.5 | | 89 × 77.5 × 97.4 | |
| Mounting type | | Direct mount onto a MC | | Separate mount(Screw or Din-rail) | | | | Direct/Separate mount (Screw or Din-rail) | |
| Applied MC | | GMC-32, GMC-40 | | | | | | GMC-50, GMC-65, GMC-75, GMC-85 | |
| Certification | | UL, cUL, CE | | | | | | | |

Digital motor protection relays



DMP□-S & DMP□-Saa

DMP□-T & DMP□-Ta

| Model | | | DMP06-S/Sa | DMP60-S/Sa | DMP06-T/Ta | DMP60-T/Ta |
|------------------------------------|---------------|-------------------------|-----------------------------------------------------------------------------|-----------------------|------------------|---------------------|
| Wiring | | | Screw type | | Tunnel type | |
| Panel mount | | | Unit or Extension Note1) | | | |
| Operation time | | | Select either reverse time characteristics or definite time characteristics | | | |
| Protection | | | According to the setting time | | | |
| Over current | | | | | | |
| Phase failure | | | 3 sec. | | | |
| Reverse phase | | | Within 0.1 sec. | | | |
| Asymmetry | | | 5 sec. | | | |
| Stall | | | 5 sec. | | | |
| Lock | | | Within 0.5 sec. | | | |
| Under current | | | 3 sec. | | | |
| Ground fault | | | Within 0.05~1 sec. Selectable (0.05~1.0sec) | | | |
| Short circuit Note2) | | | Within 50ms | | | |
| Alarm | | | Variable (60~110% of the setting current) | | | |
| Current setting range (A) | | | 0.5~6 | 5~60 | 0.5~6 | 5~60 |
| Motor capacity (kW) | | | 220~240V 380~440V | 0.09~0.75 0.12~1.5 | 1.1~11 2.2~22 | 0.09~0.75 2.2~22 |
| Time setting range (sec) | Definite time | Delay in starting | 0~60sec | | | |
| | | Delay in operating | 0~30sec | | | |
| | Inverse time | 0~60sec | | | | |
| | Reset | Manual reset | | | | |
| Tolerance | Current | | ± 5% | | | |
| | Time | | ± 5% (or ± 0.5sec) | | | |
| Operating power Note3) | | | AC 190~250V | | | |
| | | | 60Hz (50Hz) | | | |
| Aux. contact | OL | 2-SPST | 3A/250Vac Resistive load | | | |
| | AL | SPST | 3A/250Vac Resistive load | | | |
| Insulation resistance | | | Over DC500V 100MΩ | | | |
| Surge impulse voltage(IEC1000-4-5) | | | 1.2 × 50μs 6kV (Apply standard wave form) | | | |
| Fast transient burst(IEC1000-4-4) | | | 2.5kV/5min | | | |
| Environment | Temperature | Operation | -25~70°C | | | |
| | | Storage | -30~80°C | | | |
| | Humidity | 30~90% RH (No freezing) | | | | |
| Display | 7-Segment | | 3 phase current, cause of a fault | | | |
| | Bar-Graph | | 60~110% of real load current | | | |
| Mounting type | | | 35mm Din-rail/Panel | | | |

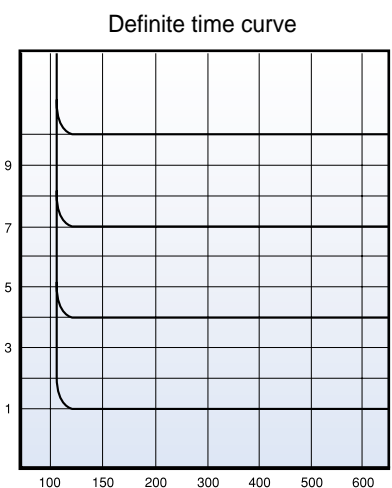
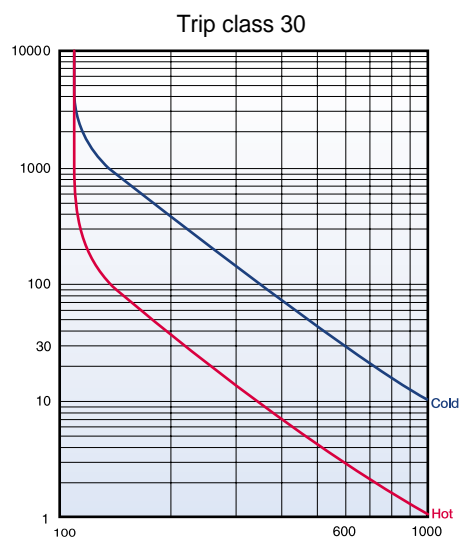
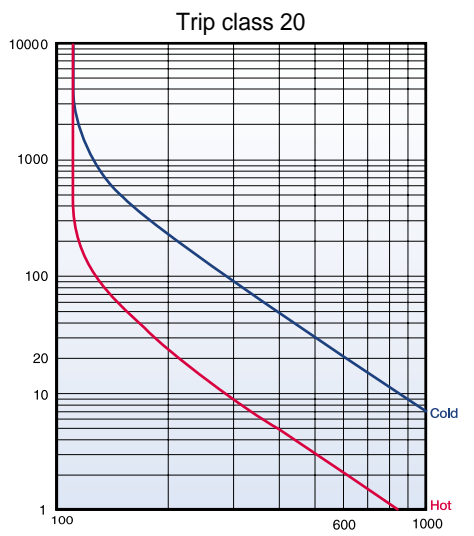
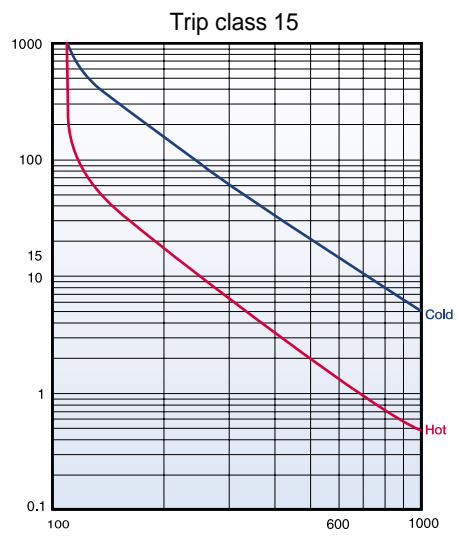
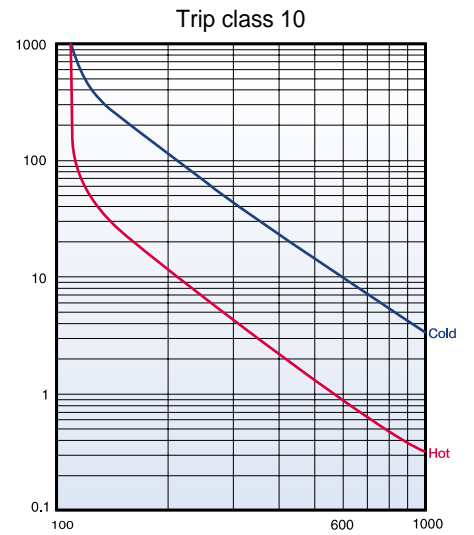
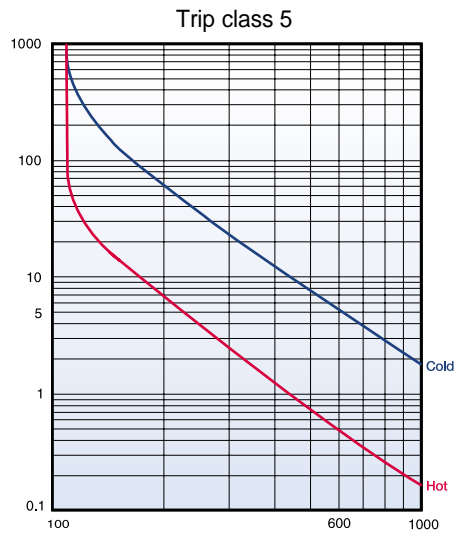
Note) 1. In extension type, the digital EMPR is calibrated with combining the display part and main body so, please cautious not to combine the display part and main body with different part No.

2. Instantaneous short circuit protection is optional

3. Operational voltage of AC 110V and 50Hz is optional

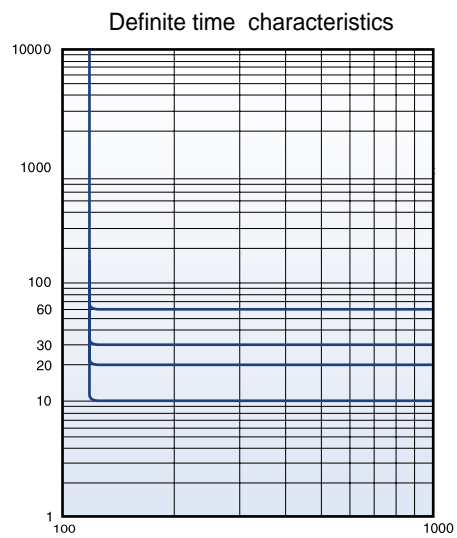
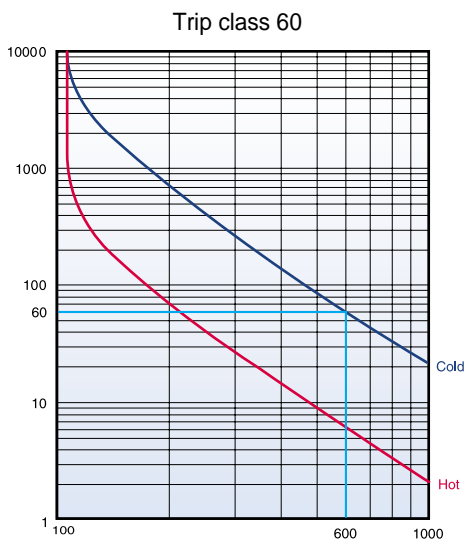
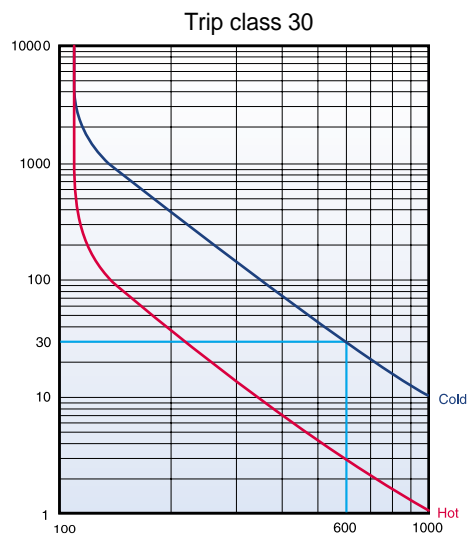
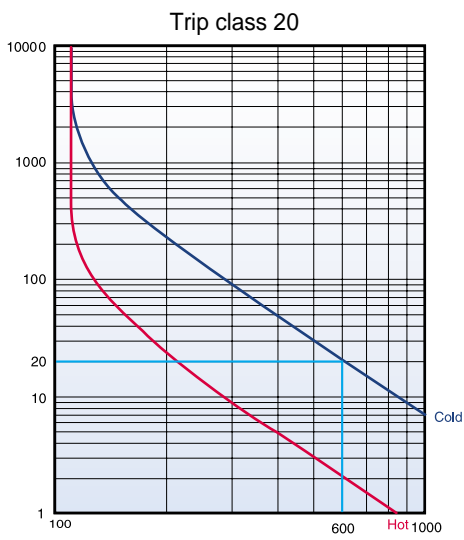
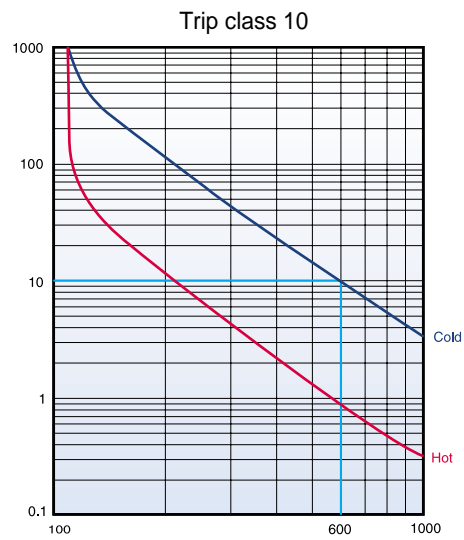
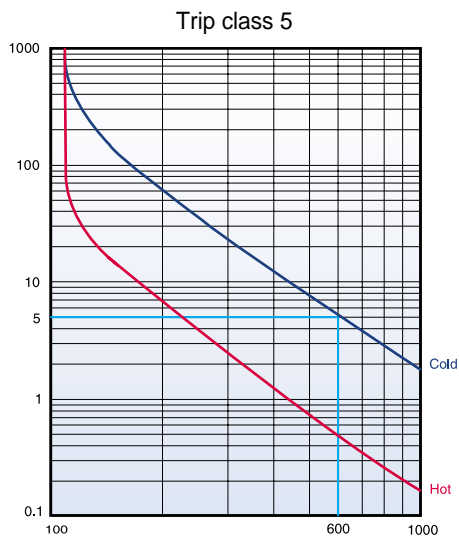
Electronic overload relays

GMP



Digital motor protection relays

DMP



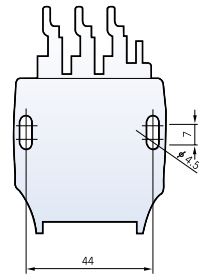
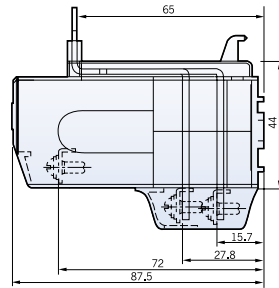
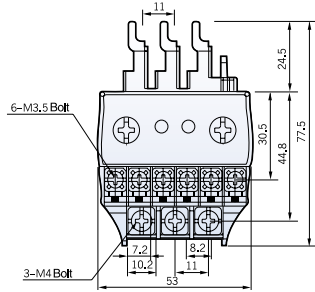
Dimensions

Electronic overload relays

GMP22-2P

GMP22-3P

GMP22-3PR

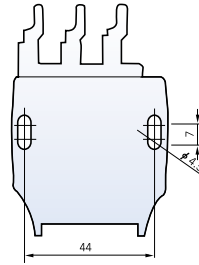
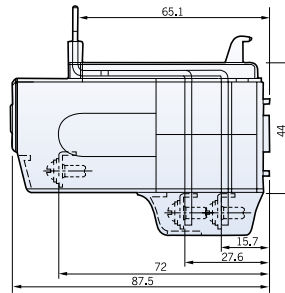
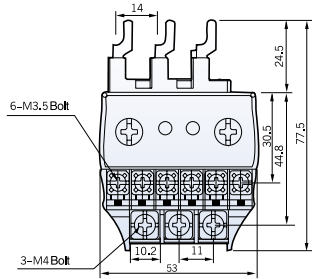


0.18kg

GMP40-2P

GMP40-3P

GMP40-3PR



0.20kg/0.22kg

GMP22-2S

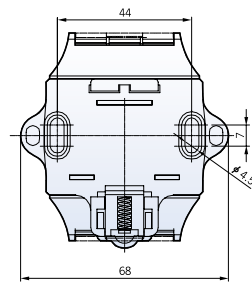
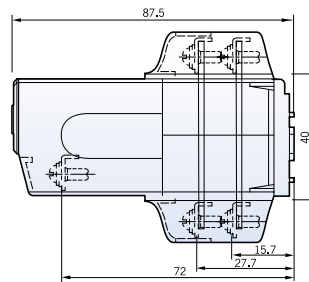
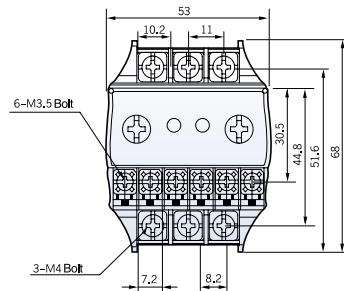
GMP22-3S

GMP22-3SR

GMP40-2S

GMP40-3S

GMP40-3SR



(Mounting adapter)

0.19kg/0.21kg

GMP22-2T

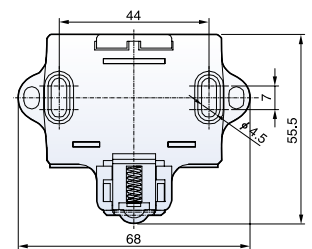
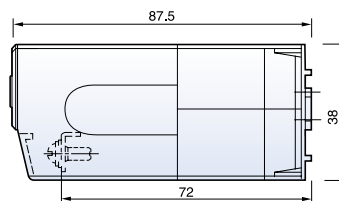
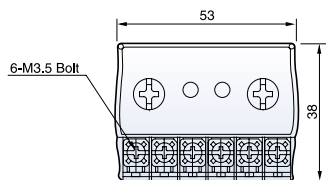
GMP22-3T

GMP22-3TR

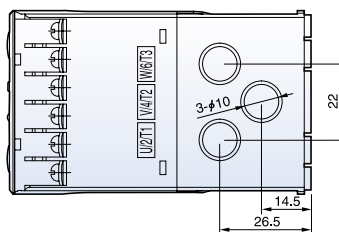
GMP40-2T

GMP40-3T

GMP40-3TR

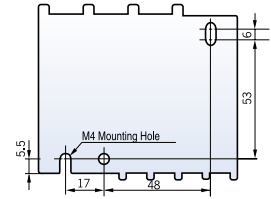
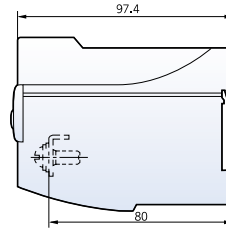
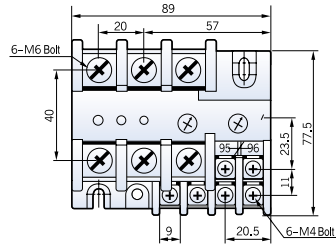


(Mounting adapter)



0.14kg/0.16kg

- GMP80-2S
- GMP80-3S
- GMP80-3SR



0.42kg/0.46kg

Terminal configuration

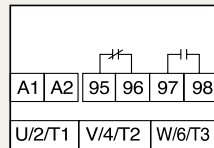


Fig. 1

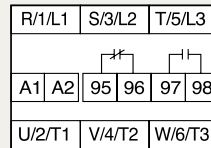


Fig. 2

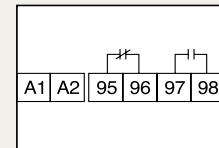
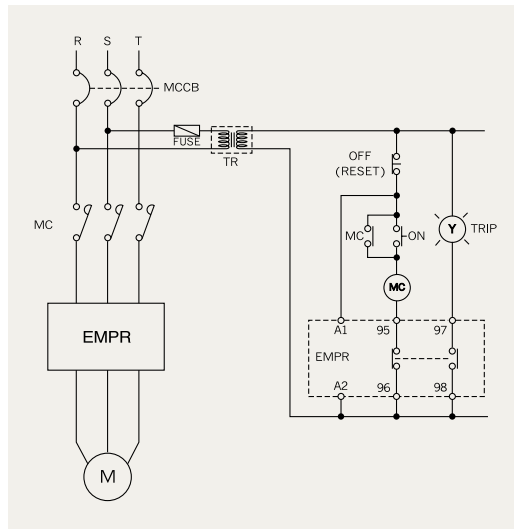
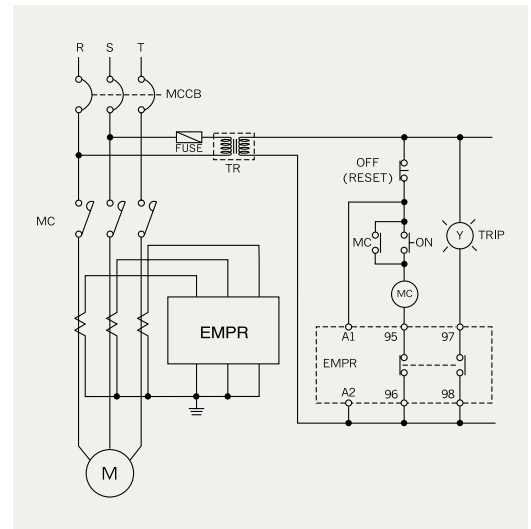


Fig. 3

Circuit diagram



Without additional CTs

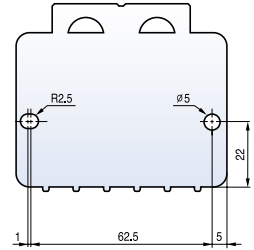
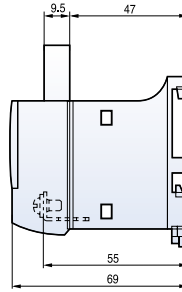
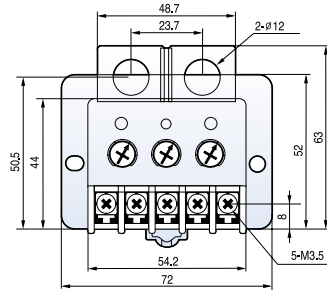


In case of using additional CTs

Dimensions

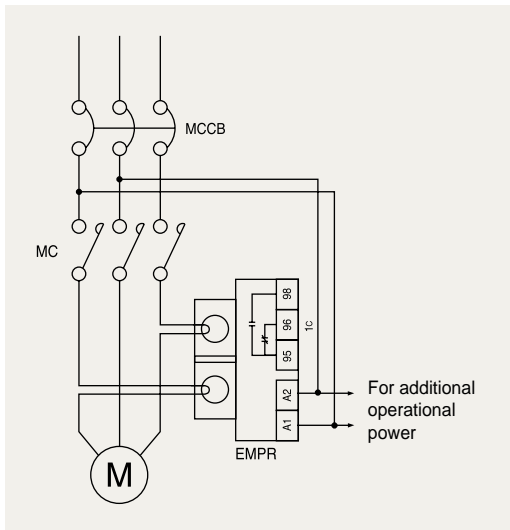
Electronic overload relays

GMP 60T



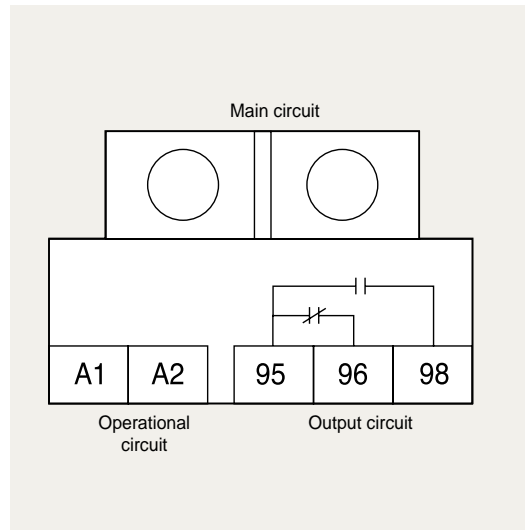
0.42kg/0.46kg

Circuit diagram



Without additional CTs

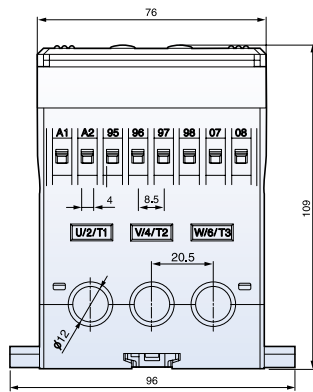
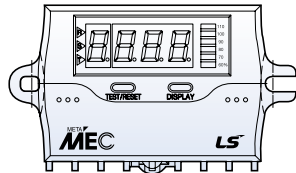
Terminal configuration



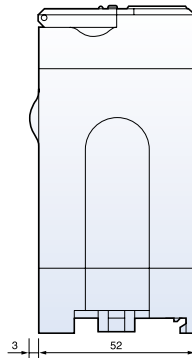
In case of using additional CTs

Digital motor protection relay

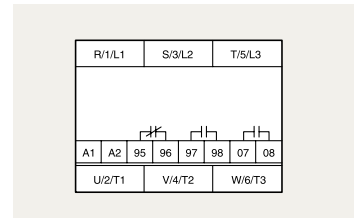
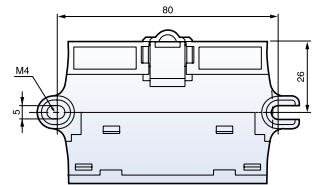
- DMP□-T
- DMP□-TZ
- DMP□-Ta
- DMP□-TZa



※ Wire size to penetrate a CT :below 22 [mm²]

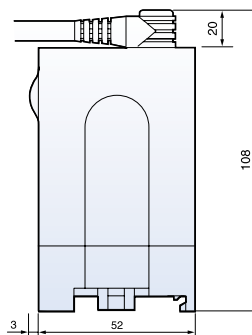
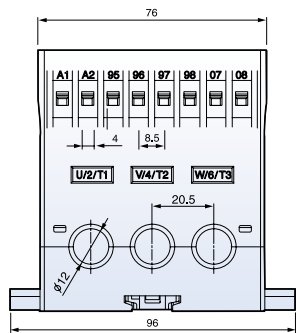
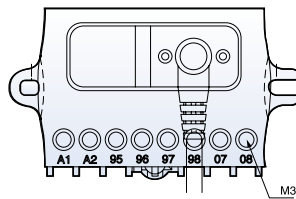


Mounting dimensions

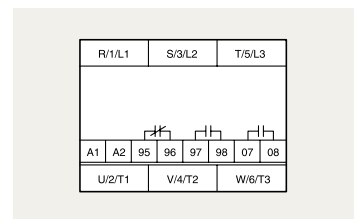
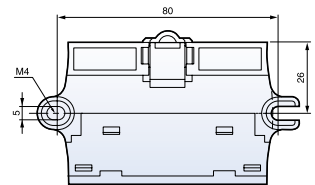


0.56kg

- DMP□-T
- DMP□-TZ
- DMP□-Ta
- DMP□-TZa

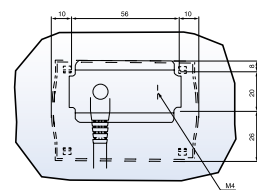
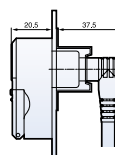
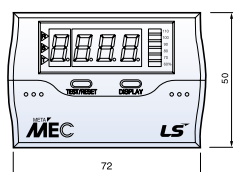


Mounting dimensions



0.5kg

Panel mounting



Panel cutting size

- Note) 1. In extension type, the digital EMPR is calibrated with combining the display unit and mainbody so, please cautious not to combine the display unit and mainbody with different part No.
 2. The 07-08 contacts are the ZCT input terminal (Digital EMPR with ground fault function)



Manual Motor Starters



Contents :

Manual Motor Starters

| | |
|-----------------------|-----|
| Specifications | 154 |
| Selection guide | 158 |
| Accessories | 161 |
| Dimensions | 166 |

LS Meta-MEC Manual Motor Starters provide completed ranges up to 100A



Specifications



| Frame | | |
|-------------------------------------------|---------------------------------------------|--------------------------------------|
| Type | Current adjustable type | |
| | Instantaneous type | |
| Breaking capacity | | |
| Handle Type | | |
| Number of poles | | |
| Rated operational voltage (Ue) | | |
| Rated frequency | | |
| Rated insulation voltage (Ui) | | |
| Rated impulse voltage (Uimp) | | |
| Utilization category | IEC 60 947-2 (Breaker) | |
| | IEC 60 947-4 (Motor starter) | |
| Mechanical endurance (Operating) | | |
| Electrical endurance (Cycles) | | |
| Max operating frequency per hour (Ope./h) | | |
| Temperature compensation (Operation) | | |
| Instantaneous short circuit release | | |
| Overload protection | | |
| Phase failure function | | |
| Trip indicating function | | |
| Test function | | |
| Weight (kg) | | |
| Rated breaking capacity (kA) | Rated operational current (I _e) | Thermal release Adjustment range (A) |
| | | |
| | 0.25 | 0.16~0.25 |
| | 0.4 | 0.25~0.4 |
| | 0.63 | 0.4~0.63 |
| | 1 | 0.63~1 |
| | 1.6 | 1~1.6 |
| | 2.5 | 1.6~2.5 |
| | 4 | 2.5~4 |
| | 6 | 4~6 |
| | 8 | 5~8 |
| | 10 | 6~10 |
| | 13 | 9~13 |
| | 17 | 11~17 |
| | 22 | 14~22 |
| | 26 | 18~26 |
| | 32 | 22~32 |
| | 40 | 28~40 |
| | 50 | 34~50 |
| | 63 | 45~63 |
| | 65 | 47~65 |
| | 75 | 55~75 |
| | 90 | 70~90 |
| | 100 | 80~100 |

| 32AF | | | | | | | | | | | |
|--------------------------|------|------|------|------|--------------------------|------|------|------|------|-----|-----|
| MMS-32S | | | | | MMS-32H | | | | | | |
| - | | | | | MMS-32HI | | | | | | |
| Standard Toggle | | | | | High breaking Rotary | | | | | | |
| 3 | | | | | 3 | | | | | | |
| Up to 690V | | | | | Up to 690V | | | | | | |
| 50/60 Hz | | | | | 50/60 Hz | | | | | | |
| 690V | | | | | 690V | | | | | | |
| 6kV | | | | | 6kV | | | | | | |
| Cat. A | | | | | Cat. A | | | | | | |
| AC 3 | | | | | AC 3 | | | | | | |
| 100,000 | | | | | 100,000 | | | | | | |
| 100,000 | | | | | 100,000 | | | | | | |
| 25 | | | | | 25 | | | | | | |
| -20 ~ +60 °C | | | | | -20 ~ +60 °C | | | | | | |
| 13 × I _e max. | | | | | 13 × I _e max. | | | | | | |
| ○ | | | | | ○ | | | | | | |
| ○ | | | | | ○ | | | | | | |
| × | | | | | × | | | | | | |
| ○ | | | | | ○ | | | | | | |
| 0.32 | | | | | 0.36 | | | | | | |
| 220V | 415V | 460V | 525V | 690V | 220V | 415V | 460V | 525V | 690V | | |
| 240V | 400V | 440V | 500V | 600V | 240V | 400V | 440V | 500V | 600V | | |
| 230V | | | | | 230V | | | | | | |
| Icu | Ics | Icu | Ics | Icu | Ics | Icu | Ics | Icu | Ics | Icu | Ics |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 100 | 50 | 38 | 3 | 3 | 100 | 100 | 100 |
| 100 | 100 | 100 | 100 | 50 | 38 | 15 | 11 | 3 | 3 | 100 | 100 |
| 100 | 100 | 100 | 100 | 15 | 11 | 10 | 8 | 3 | 3 | 100 | 100 |
| 100 | 100 | 100 | 100 | 15 | 11 | 10 | 8 | 3 | 3 | 100 | 100 |
| 100 | 100 | 50 | 38 | 15 | 11 | 6 | 5 | 3 | 3 | 100 | 100 |
| 100 | 100 | 50 | 38 | 10 | 8 | 6 | 5 | 3 | 3 | 100 | 100 |
| 50 | 38 | 20 | 15 | 10 | 8 | 6 | 5 | 3 | 3 | 100 | 100 |
| 40 | 30 | 15 | 11 | 8 | 6 | 6 | 5 | 3 | 3 | 100 | 100 |
| 40 | 30 | 15 | 11 | 8 | 6 | 5 | 4 | 3 | 3 | 100 | 100 |
| 30 | 22 | 15 | 11 | 6 | 4 | 5 | 4 | 3 | 3 | 100 | 100 |
| 20 | 15 | 10 | 8 | 5 | 3 | 4 | 3 | 2 | 2 | 100 | 100 |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - |

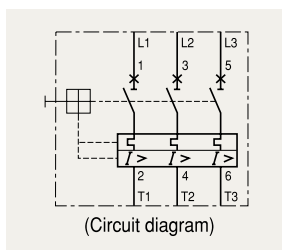


| 63AF | | | | | | | | | | 100AF | | | | | | | | | |
|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|
| MMS-63S | | | | | MMS-63H | | | | | MMS-100S | | | | | MMS-100H | | | | |
| - | | | | | MMS-63HI | | | | | - | | | | | MMS-100HI | | | | |
| Standard | | | | | High breaking | | | | | Standard | | | | | High breaking | | | | |
| Rotary | | | | | Rotary | | | | | Rotary | | | | | Rotary | | | | |
| 3 | | | | | 3 | | | | | 3 | | | | | 3 | | | | |
| Up to 690V | | | | | Up to 690V | | | | | Up to 690V | | | | | Up to 690V | | | | |
| 50/60 Hz | | | | | 50/60 Hz | | | | | 50/60 Hz | | | | | 50/60 Hz | | | | |
| 1,000V | | | | | 1,000V | | | | | 1,000V | | | | | 1,000V | | | | |
| 8kV | | | | | 8kV | | | | | 8kV | | | | | 8kV | | | | |
| Cat. A | | | | | Cat. A | | | | | Cat. A | | | | | Cat. A | | | | |
| AC 3 | | | | | AC 3 | | | | | AC 3 | | | | | AC 3 | | | | |
| 50,000 | | | | | 50,000 | | | | | 50,000 | | | | | 50,000 | | | | |
| 25,000 | | | | | 25,000 | | | | | 25,000 | | | | | 25,000 | | | | |
| 25 | | | | | 25 | | | | | 25 | | | | | 25 | | | | |
| -20 ~ +60 °C | | | | | -20 ~ +60 °C | | | | | -20 ~ +60 °C | | | | | -20 ~ +60 °C | | | | |
| 13 × I _e max. | | | | | 13 × I _e max. | | | | | 13 × I _e max. | | | | | 13 × I _e max. | | | | |
| ○ | | | | | ○ | | | | | ○ | | | | | ○ | | | | |
| ○ | | | | | ○ | | | | | ○ | | | | | ○ | | | | |
| × | | | | | × | | | | | ○ | | | | | ○ | | | | |
| ○ | | | | | ○ | | | | | ○ | | | | | ○ | | | | |
| 10 | | | | | | | | | | 22 | | | | | | | | | |
| 220V 240V 230V | 415V 400V | 460V 440V | 525V 500V | 690V 600V | 220V 240V 230V | 415V 400V | 460V 440V | 525V 500V | 690V 600V | 220V 240V 230V | 415V 400V | 460V 440V | 525V 500V | 690V 600V | 220V 240V 230V | 415V 400V | 460V 440V | 525V 500V | 690V 600V |
| I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} | I _{cu} | I _{cs} |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | 100 | 100 | 15 | 12 | 10 | 8 | 4 | 3 | 100 | 100 | 100 | 50 | 38 | 50 | 38 | 6 | 5 | - | - |
| 100 | 100 | 50 | 38 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 100 | 50 | 38 | 42 | 32 | 6 | 5 | - |
| 100 | 100 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 38 | 12 | 9 | 5 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 38 | 12 | 9 | 5 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 12 | 9 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 10 | 8 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 10 | 8 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 10 | 8 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 10 | 8 | 5 | 100 |
| 50 | 38 | 25 | 19 | 10 | 8 | 6 | 5 | 4 | 3 | 100 | 100 | 50 | 50 | 35 | 27 | 10 | 8 | 5 | 100 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Selection guide

Standard type

- Adjustable thermal release
- Magnetic release 13 I_e max.
- Trip class 10
- Ambient temperature compensation
- Protective function
 - phase-failure
 - short circuit
 - overload



MMS-32S

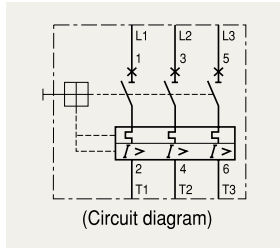
MMS-63S

MMS-100S

| Type | Rated operational current I _e [A] | Thermal release adjustment range [A] | Magnetic release operating current [A] | Switching of 3 phase AC motors, AC-2, AC-3 | | | | | | 400/415V | |
|----------|----------------------------------------------|--------------------------------------|----------------------------------------|--------------------------------------------|------|------|---------------------|------|------|----------------------|----------------------|
| | | | | 3-phase [kW] (50/60Hz) | | | 3-phase [HP] (60Hz) | | | I _{cu} [kA] | I _{cs} [kA] |
| | | | | 230V | 400V | 690V | 230V | 460V | 575V | | |
| MMS-32S | 0.16 | 0.1...0.16 | 2.1 | - | 0.02 | - | - | - | - | 100 | 100 |
| | 0.25 | 0.16...0.25 | 3.3 | 0.03 | 0.06 | - | - | - | - | 100 | 100 |
| | 0.4 | 0.25...0.4 | 5.2 | 0.06 | 0.09 | - | - | - | - | 100 | 100 |
| | 0.63 | 0.4...0.63 | 8.2 | 0.09 | 0.12 | 0.25 | - | - | - | 100 | 100 |
| | 1 | 0.63...1.0 | 13 | 0.12 | 0.25 | 0.55 | - | 1/2 | 1/2 | 100 | 100 |
| | 1.6 | 1.0...1.6 | 20.8 | 0.25 | 0.55 | 1.1 | 1/3 | 3/4 | 1 | 100 | 100 |
| | 2.5 | 1.6...2.5 | 32.5 | 0.37 | 0.75 | 1.5 | 1/2 | 1½ | 1½ | 100 | 100 |
| | 4 | 2.5...4.0 | 52 | 0.75 | 1.5 | 3 | 1 | 2 | 3 | 100 | 100 |
| | 6 | 4...6 | 78 | 1.5 | 2.2 | 4 | 1½ | 5 | 5 | 100 | 100 |
| | 8 | 5...8 | 104 | 1.5 | 3 | 5.5 | 2 | 5 | 5 | 100 | 100 |
| | 10 | 6...10 | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 50 | 38 |
| | 13 | 9...13 | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 50 | 38 |
| | 17 | 11...17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 20 | 15 |
| | 22 | 14...22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 15 | 11 |
| | 26 | 18...26 | 338 | 5.5 | 11 | 18.5 | 7½ | 15 | 20 | 15 | 11 |
| 32 | 22...32 | 416 | 7.5 | 15 | 22 | 10 | 20 | 30 | 15 | 11 | |
| 40 | 28-40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 10 | 8 | |
| MMS-63S | 10 | 6-10 | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 100 | 100 |
| | 13 | 9-13 | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 50 | 38 |
| | 17 | 11-17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 25 | 19 |
| | 22 | 14-22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 25 | 19 |
| | 26 | 18-26 | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 25 | 19 |
| | 32 | 22-32 | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 25 | 19 |
| | 40 | 28-40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 25 | 19 |
| | 50 | 34-50 | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 25 | 19 |
| | 63 | 45-63 | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 25 | 19 |
| 65 | 47-65 | 845 | 15 | 30 | 55 | 20 | 50 | 60 | 25 | 19 | |
| MMS-100S | 17 | 11-17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 50 | 38 |
| | 22 | 14-22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 50 | 38 |
| | 26 | 18-26 | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 50 | 38 |
| | 32 | 22-32 | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 50 | 38 |
| | 40 | 28-40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 50 | 38 |
| | 50 | 34-50 | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 50 | 38 |
| | 63 | 45-63 | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 50 | 38 |
| | 75 | 55-75 | 975 | 22 | 37 | 63 | 25 | 60 | 75 | 50 | 38 |
| | 90 | 70-90 | 1170 | 30 | 45 | 75 | 30 | 75 | 100 | 50 | 38 |
| 100 | 80-100 | 1300 | 30 | 45 | 90 | 40 | 75 | 100 | 50 | 38 | |

High breaking type

- Adjustable thermal release
- Magnetic release 13 I_e max.
- Trip class 10
- Ambient temperature compensation
- Protective function
 - phase-failure
 - short circuit
 - overload

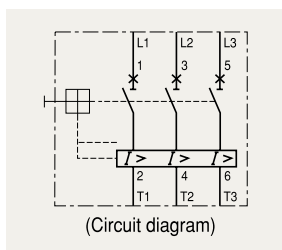


| Type | Rated operational current I _e [A] | Thermal release adjustment range [A] | Magnetic release operating current [A] | Switching of 3 phase AC motors, AC-2, AC-3 | | | | | | 400/415V | |
|----------|----------------------------------------------|--------------------------------------|----------------------------------------|--------------------------------------------|------|------|---------------------|------|------|----------------------|----------------------|
| | | | | 3-phase [kW] (50/60Hz) | | | 3-phase [HP] (60Hz) | | | I _{cu} [kA] | I _{cs} [kA] |
| | | | | 230V | 400V | 690V | 230V | 460V | 575V | | |
| MMS-32H | 0.16 | 0.1...0.16 | 2.1 | - | 0.02 | - | - | - | - | 100 | 100 |
| | 0.25 | 0.16...0.25 | 3.3 | 0.03 | 0.06 | - | - | - | - | 100 | 100 |
| | 0.4 | 0.25...0.4 | 5.2 | 0.06 | 0.09 | - | - | - | - | 100 | 100 |
| | 0.63 | 0.4...0.63 | 8.2 | 0.09 | 0.12 | 0.25 | - | - | - | 100 | 100 |
| | 1 | 0.63...1.0 | 13 | 0.12 | 0.25 | 0.55 | - | 1/2 | 1/2 | 100 | 100 |
| | 1.6 | 1.0...1.6 | 20.8 | 0.25 | 0.55 | 1.1 | 1/3 | 3/4 | 1 | 100 | 100 |
| | 2.5 | 1.6...2.5 | 32.5 | 0.37 | 0.75 | 1.5 | 1/2 | 1½ | 1½ | 100 | 100 |
| | 4 | 2.5...4.0 | 52 | 0.75 | 1.5 | 3 | 1 | 2 | 3 | 100 | 100 |
| | 6 | 4...6 | 78 | 1.5 | 2.2 | 4 | 1½ | 5 | 5 | 100 | 100 |
| | 8 | 5...8 | 104 | 1.5 | 3 | 5.5 | 2 | 5 | 5 | 100 | 100 |
| | 10 | 6...10 | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 100 | 100 |
| | 13 | 9...13 | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 100 | 100 |
| | 17 | 11...17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 50 | 38 |
| | 22 | 14...22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 50 | 38 |
| 26 | 18...26 | 338 | 5.5 | 11 | 18.5 | 7½ | 15 | 20 | 50 | 38 | |
| 32 | 22...32 | 416 | 7.5 | 15 | 22 | 10 | 20 | 30 | 50 | 38 | |
| 40 | 28~40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 40 | 30 | |
| MMS-63H | 10 | 6~10 | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 100 | 100 |
| | 13 | 9~13 | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 100 | 100 |
| | 17 | 11~17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 50 | 50 |
| | 22 | 14~22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 50 | 50 |
| | 26 | 18~26 | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 50 | 50 |
| | 32 | 22~32 | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 50 | 50 |
| | 40 | 28~40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 50 | 50 |
| | 50 | 34~50 | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 50 | 50 |
| | 63 | 45~63 | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 50 | 50 |
| | 65 | 47~65 | 845 | 15 | 30 | 55 | 20 | 50 | 60 | 35 | 27 |
| MMS-100H | 17 | 11~17 | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 100 | 100 |
| | 22 | 14~22 | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 100 | 50 |
| | 26 | 18~26 | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 100 | 50 |
| | 32 | 22~32 | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 100 | 50 |
| | 40 | 28~40 | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 100 | 50 |
| | 50 | 34~50 | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 100 | 50 |
| | 63 | 45~63 | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 100 | 50 |
| | 75 | 55~75 | 975 | 22 | 37 | 63 | 25 | 60 | 75 | 75 | 50 |
| | 90 | 70~90 | 1170 | 30 | 45 | 75 | 30 | 75 | 100 | 75 | 50 |
| | 100 | 80~100 | 1300 | 30 | 45 | 90 | 40 | 75 | 100 | 75 | 50 |

Selection guide


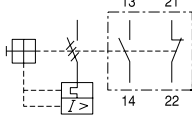
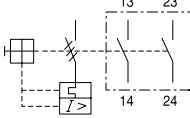
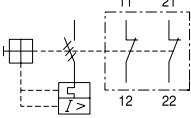

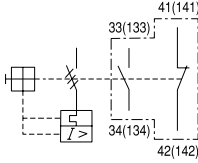
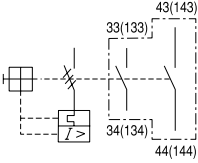
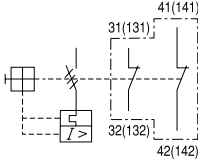

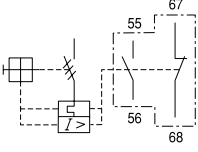
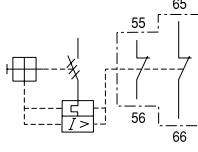

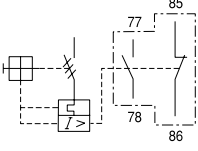
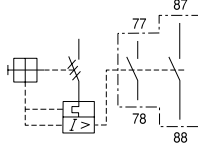
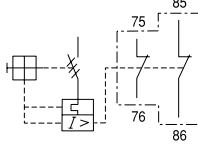
Instantaneous type

- Without thermal releases
- Magnetic release 13 I_e max.
- Protective function
 - short circuit


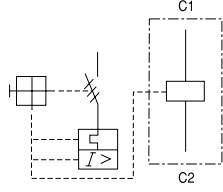

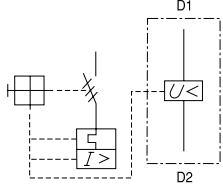

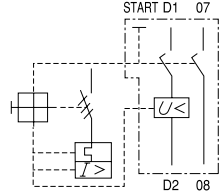


| Type | Rated operational current I _e [A] | Thermal release adjustment range [A] | Magnetic release operating current [A] | Switching of 3 phase AC motors, AC-2, AC-3 | | | | | | 400/415V | |
|-----------|----------------------------------------------|--------------------------------------|----------------------------------------|--------------------------------------------|------|------|---------------------|------|------|----------------------|----------------------|
| | | | | 3-phase [kW] (50/60Hz) | | | 3-phase [HP] (60Hz) | | | I _{cu} [kA] | I _{cs} [kA] |
| | | | | 230V | 400V | 690V | 230V | 460V | 575V | | |
| MMS-32HI | 0.16 | - | 2.1 | - | 0.02 | - | - | - | - | 100 | 100 |
| | 0.25 | - | 3.3 | 0.03 | 0.06 | - | - | - | - | 100 | 100 |
| | 0.4 | - | 5.2 | 0.06 | 0.09 | - | - | - | - | 100 | 100 |
| | 0.63 | - | 8.2 | 0.09 | 0.12 | 0.25 | - | - | - | 100 | 100 |
| | 1 | - | 13 | 0.12 | 0.25 | 0.55 | - | 1/2 | 1/2 | 100 | 100 |
| | 1.6 | - | 20.8 | 0.25 | 0.55 | 1.1 | 1/3 | 3/4 | 1 | 100 | 100 |
| | 2.5 | - | 32.5 | 0.37 | 0.75 | 1.5 | 1/2 | 1½ | 1½ | 100 | 100 |
| | 4 | - | 52 | 0.75 | 1.5 | 3 | 1 | 2 | 3 | 100 | 100 |
| | 6 | - | 78 | 1.5 | 2.2 | 4 | 1½ | 5 | 5 | 100 | 100 |
| | 8 | - | 104 | 1.5 | 3 | 5.5 | 2 | 5 | 5 | 100 | 100 |
| | 10 | - | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 100 | 100 |
| | 13 | - | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 100 | 100 |
| | 17 | - | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 50 | 38 |
| | 22 | - | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 50 | 38 |
| 26 | - | 338 | 5.5 | 11 | 18.5 | 7½ | 15 | 20 | 50 | 38 | |
| 32 | - | 416 | 7.5 | 15 | 22 | 10 | 20 | 30 | 50 | 38 | |
| 40 | - | 28-40 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 40 | 30 | |
| MMS-63HI | 10 | - | 130 | 3 | 4 | 7.5 | 3 | 7½ | 10 | 100 | 100 |
| | 13 | - | 169 | 3 | 5.5 | 11 | 3 | 7½ | 10 | 100 | 100 |
| | 17 | - | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 50 | 50 |
| | 22 | - | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 50 | 50 |
| | 26 | - | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 50 | 50 |
| | 32 | - | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 50 | 50 |
| | 40 | - | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 50 | 50 |
| | 50 | - | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 50 | 50 |
| | 63 | - | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 50 | 50 |
| 65 | - | 47-65 | 15 | 30 | 55 | 20 | 50 | 60 | 35 | 27 | |
| MMS-100HI | 17 | - | 221 | 4 | 7.5 | 11 | 5 | 10 | 15 | 100 | 100 |
| | 22 | - | 286 | 4 | 7.5 | 15 | 7½ | 15 | 20 | 100 | 50 |
| | 26 | - | 338 | 5.5 | 11 | 18.5 | 10 | 20 | 25 | 100 | 50 |
| | 32 | - | 416 | 7.5 | 15 | 22 | 10 | 25 | 30 | 100 | 50 |
| | 40 | - | 520 | 7.5 | 18.5 | 30 | 15 | 30 | 40 | 100 | 50 |
| | 50 | - | 650 | 11 | 22 | 45 | 15 | 40 | 50 | 100 | 50 |
| | 63 | - | 819 | 15 | 30 | 55 | 20 | 50 | 60 | 100 | 50 |
| | 75 | - | 975 | 22 | 37 | 63 | 25 | 60 | 75 | 75 | 50 |
| | 90 | - | 1170 | 30 | 45 | 75 | 30 | 75 | 100 | 75 | 50 |
| 100 | - | 1300 | 30 | 45 | 90 | 40 | 75 | 100 | 75 | 50 | |

Auxiliaries

| Type | Description | Connection diagram |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FX...  | Auxiliary Switch <ul style="list-style-type: none"> • Front mounting • 2-pole • One front mounting module per circuit breaker | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 1NO1NC  </div> <div style="text-align: center;"> 2NO  </div> <div style="text-align: center;"> 2NC  </div> </div> |
| LX...  | Auxiliary Switch <ul style="list-style-type: none"> • Side mounting on the left • 2-pole • One side mounting module per circuit breaker | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 1NO1NC  </div> <div style="text-align: center;"> 2NO  </div> <div style="text-align: center;"> 2NC  </div> </div> |
| LA...  | Any Trip Alarm Switch <ul style="list-style-type: none"> • Operates in case of trip • Side mounting on the left • 2-pole • Set LA first in case of using LX together (MMS-63 can not accept LX and LA together) | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 1NO1NC  </div> <div style="text-align: center;"> 2NC  </div> </div> |
| LAM...  | Magnetic Trip Alarm Switch <ul style="list-style-type: none"> • Operates in case of instantaneous trip • Side mounting on the left • 2-pole • Set LAM first in case of using LX together | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 1NO1NC  </div> <div style="text-align: center;"> 2NO  </div> <div style="text-align: center;"> 2NC  </div> </div> |

Auxiliaries

| Type | Description | Connection diagram |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RS...  | Shunt release <ul style="list-style-type: none"> • Side mounting on the right • One side mounting module per circuit breaker. • Can not use with RU or RUX |  <p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p> |
| RU...  | Undervoltage release <ul style="list-style-type: none"> • Side mounting on the right • One side mounting module per circuit breaker. • Can not use with RU or RUX |  <p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p> |
| RUX...  | Undervoltage release with Switch <ul style="list-style-type: none"> • Side mounting on the right • Include 2NO Auxiliary contact • One side mounting module per circuit breaker. • Can not use with RU or RUX • Can not attach to MMS-32S |  <p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p> |

Auxiliaries

E-Handle (Rotary-type)



MMS E-Handle is a Rotary-type Handle accessory which can be attached to the front to control and verify the ON, TRIP, OFF condition of Manual Motor Starters under the situation of closing panel.

- Application Model : MMS-32H/Hi, MMS-63S/H/Hi, MMS-100S/H/Hi
- Operation temp. : -20~ +60°C
- CE and UL certified
- Degree of protection : IP65
- Locking device : Lockable in on/off position
- Material of insulation : Plastic(PA66)

| Type | Application MMS | Remarks |
|---------|-----------------------|-----------------------------------|
| MEH-32 | MMS-32H, 32HI | Length of shaft : 115 or 315mm |
| MEH-63 | MMS-63S, 63H, 63HI | |
| MEH-100 | MMS-100S, 100H, 100HI | |

Phase Bus

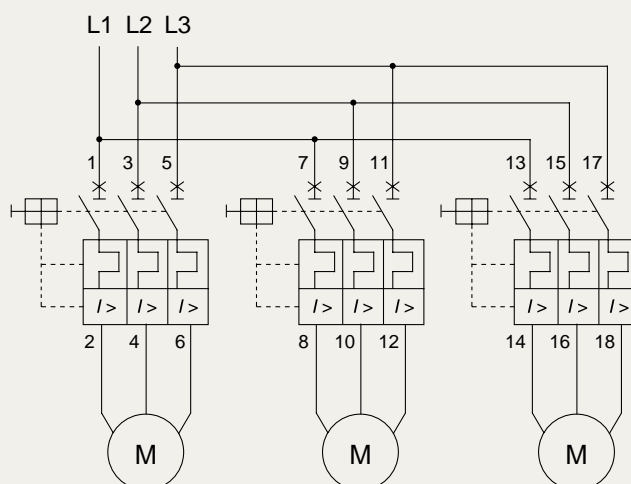
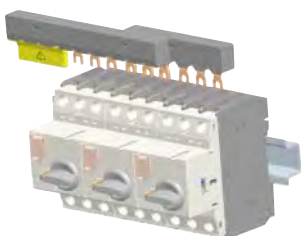


It is a device for a parallel connection with power terminals in the circuit lined up by MMS, and it can provides the solution "Simple wiring" and "Compact wiring space".

- Application Model : MMS-32, 63
- CE and UL certified
- Safety Cover built-in
- RoHS compliance

| Type | Application MMS | Number of Terminals | Rated current | Safety cover attached |
|--------|--------------------|---------------------|---------------|--------------------------|
| PB-322 | MMS-32S, 32H, 32HI | 2 | 63A | PBPC-32 (32 for S, H) |
| PB-323 | | 3 | | |
| PB-632 | MMS-63S, 63H, 63HI | 2 | 108A | PBPC-63 |
| PB-633 | | 3 | | |

Diagram





Auxiliaries

Enclosure

Case cover of MMS enclosure is specifically designed with dust-proof and corrosive-proof structure.

Therefore, it is the optimum product to use in dusty areas such as cement plants, cotton mills as well as in the presence of corrosive gas or liquid (excl. explosive, flammable gas) such as fertilizer, refinery, and plating plant.

- Application Model: MMS-32H/HI
- Operation temp. : -20~ +60 °C
- CE and UL certified
- Degree of protection : IP65
- Material of insulation :Plastic(ABS)

| Type | Application MMS | Remarks |
|--------|-----------------|---------------|
| EPH-32 | MMS-32H, 32HI | Surface mount |



Dial Cover

Dial cover is used to protect the set value from the operation that is not intended. It is supplied as standard for all MMS.

- Application Model : MMS-32, 63,100 (All types)

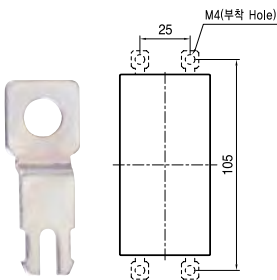


Insulation Barrier

Insulation barrier is used to enlarge the creepage distance and clearance to meet the requirement of UL.

- Application Model : MMS-100

| Type | Application MMS |
|-------|-----------------------|
| IB100 | MMS-100S, 100H, 100HI |



Screw mounting holder

32AF MMS is only for DIN rail mountable by itself. Screw mounting holder is used to mount MMS on a panel by screws.

- Application Model : MMS-32

| Type | Application MMS | Remarks |
|-------|--------------------|--------------|
| MP-32 | MMS-32S, 32H, 32HI | For M4 screw |

Auxiliaries

Direct adaptor and Mounting unit

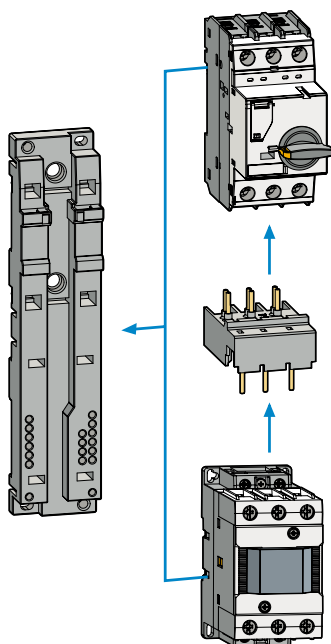
Direct adaptor, DA

Direct adaptor is used to connect MMS directly with a contactor

Mounting unit, MU

This device is attached module to connect joined MMS with a contactor

- Application Model : MMS + Metasol(MC-6a~100a), Susol(MC-9~95), Mini contactor



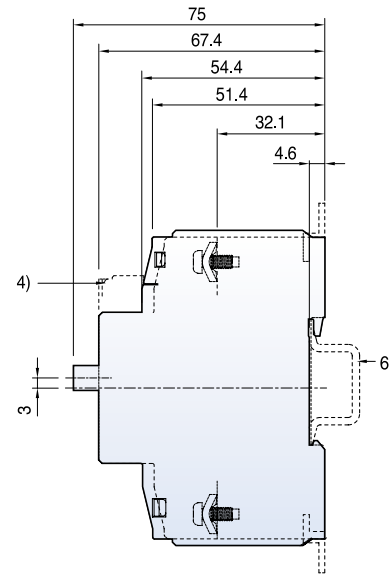
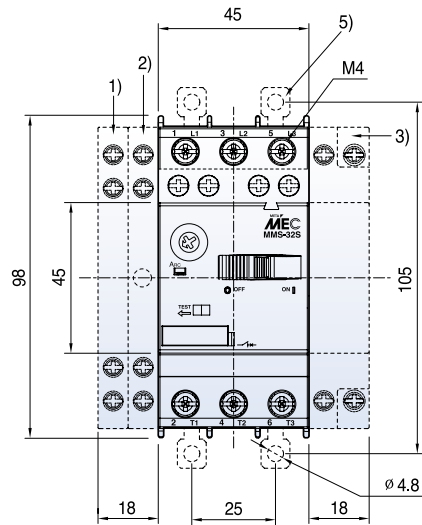
| Type | | Combined devices | |
|----------------|---------------|-----------------------|-------------------------------------|
| Direct adaptor | Mounting unit | MMS | MC |
| DA-16SA | MU-45 | MMS-32S | Mini-MC GMC-6M~16M |
| DA-16SD | | | Mini-MC GMD-6M~16M |
| DA-16HA | | MMS-32H, 32HI | Mini-MC GMC-6M~16M |
| DA-16HD | | | Mini-MC GMD-6M~16M |
| DA-18SA | | MMS-32S | MC-6a~18a AC |
| DA-18SD | | | MC-6a~18a DC |
| DA-18HA | | MMS-32H, 32HI | MC-6a~18a AC |
| DA-18HD | | | MC-6a~18a DC |
| DA-22SA | | MMS-32S | MC-9b~22b AC |
| DA-22SD | | | MC-9b~22b DC |
| DA-22HA | | MMS-32H, 32HI | MC-9b~22b AC |
| DA-22HD | | | MC-9b~22b DC |
| DA-32SA | | MMS-32S | MC-32a~40a AC, MC-9~32 AC |
| DA-32SD | | | MC-32a~40a DC, MC-9~32 DC |
| DA-32HA | | MMS-32H, 32HI | MC-32a~40a AC, MC-9~32 AC |
| DA-32HD | | | MC-32a~40a DC, MC-9~32 DC |
| DA-63A | MU-55 | MMS-63S, 63H, 63HI | MC-50a~65a AC Lug, MC-35~63 AC Lug |
| DA-63D | | | MC-50a~65a DC Lug, MC-35~63 DC Lug |
| DA-95A | MU-70 | MMS-100S, 100H, 100HI | MC-75a~100a AC Lug, MC-65~95 AC Lug |
| DA-95D | | | MC-75a~100a DC Lug, MC-65~95 DC Lug |



Note) MMS and Contactor connected with Direct adaptor.

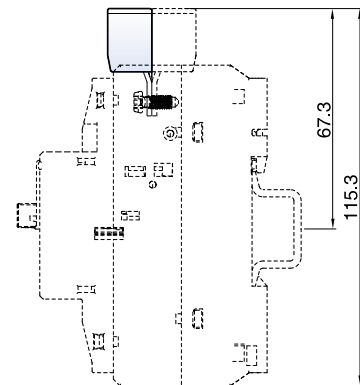
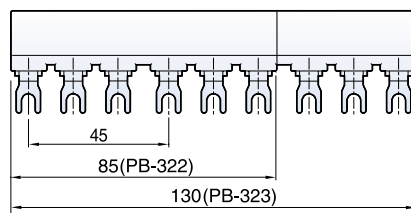
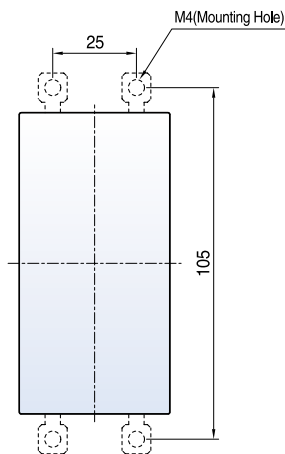
Manual motor starters

MMS-32S



[mm]

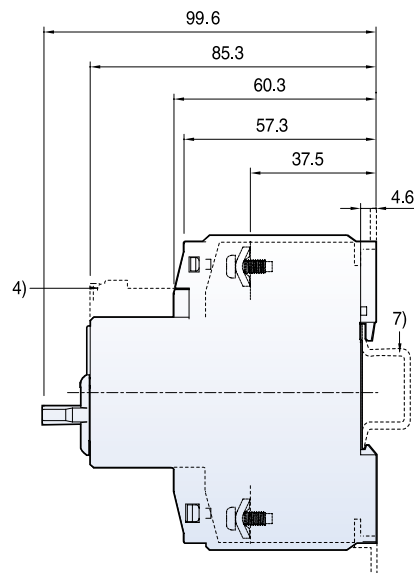
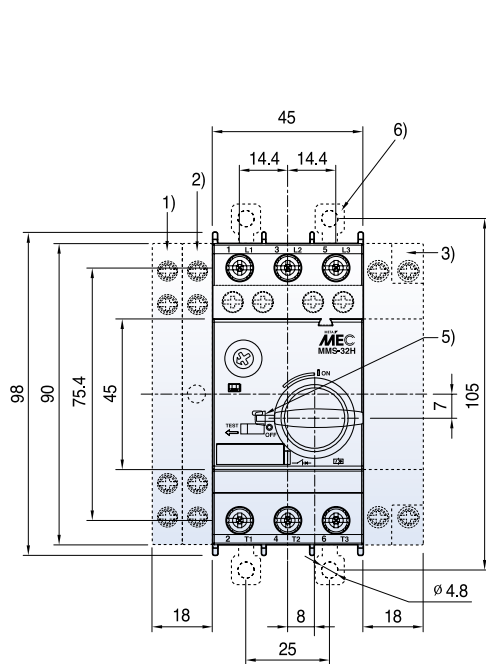
0.31kg



- 1) Side auxiliary switch
- 2) Side magnetic trip alarm switch
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary switch
- 5) Push-in Lugs for screw mounting
- 6) 35mm standard mounting rail acc. to EN 50 022

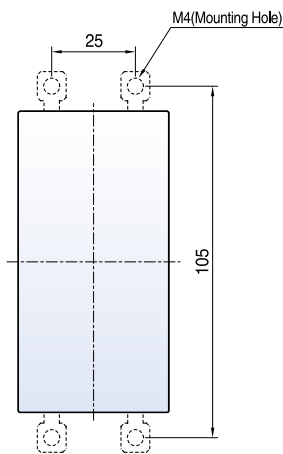
Manual motor starters

- MMS-32H
- MMS-32HI

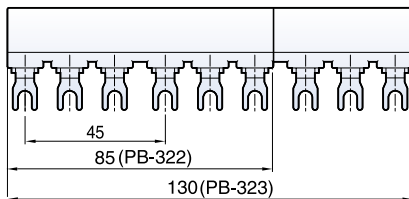


[mm]

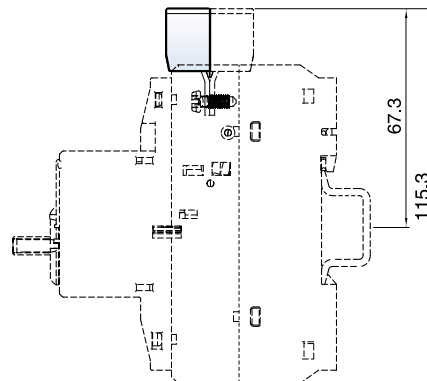
0.4kg



- 1) Side auxiliary switch
- 2) Side magnetic trip alarm switch
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary switch
- 5) Handle lock in OFF position (Ø5mm)
- 6) Push-in Lugs for screw mounting
- 7) 35mm standard mounting rail acc. to EN 50 022



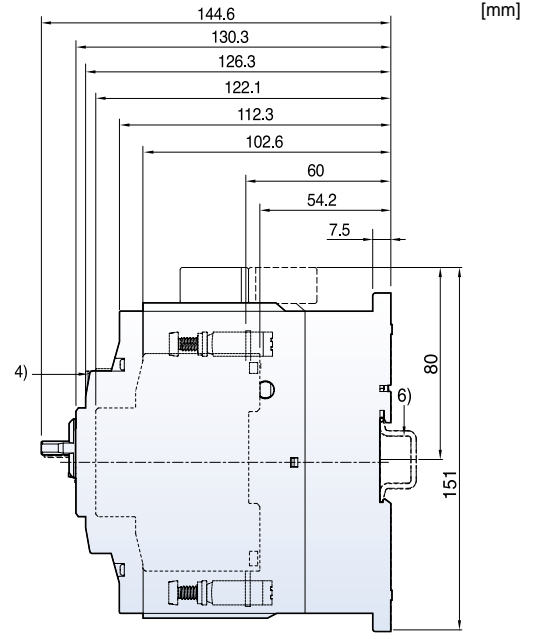
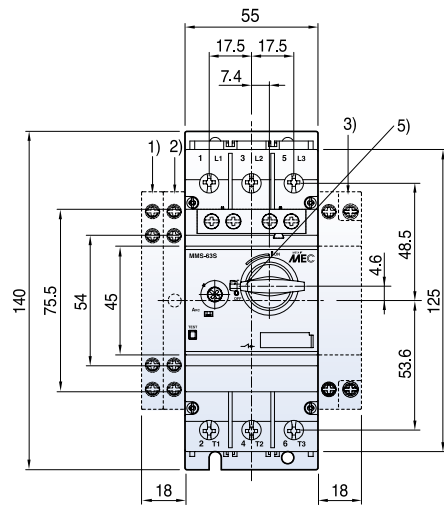
MMS-32H/HI+PB-32 (2,3P)
PB-322 (2P), PB-323 (3P)



Dimensions

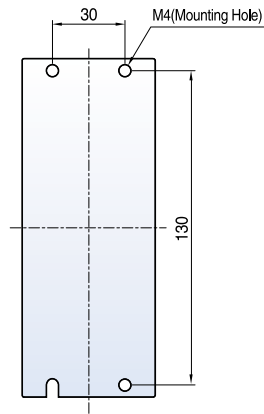
Manual motor starters

- MMS-63S
- MMS-63H
- MMS-63HI

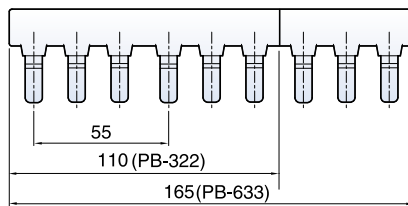


[mm]

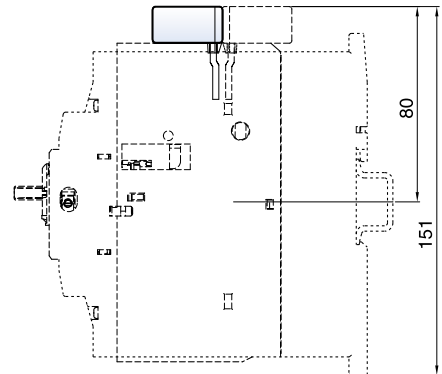
0.98kg



- 1) Side auxiliary switch
- 2) Side magnetic trip alarm switch
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary switch
- 5) Handle lock in OFF position (Ø5mm)
- 6) 35mm standard mounting rail acc. to EN 50 022



MMS-63S/H/HI+PB-63 (2,3P)
PB-632 (2P), PB-633 (3P)

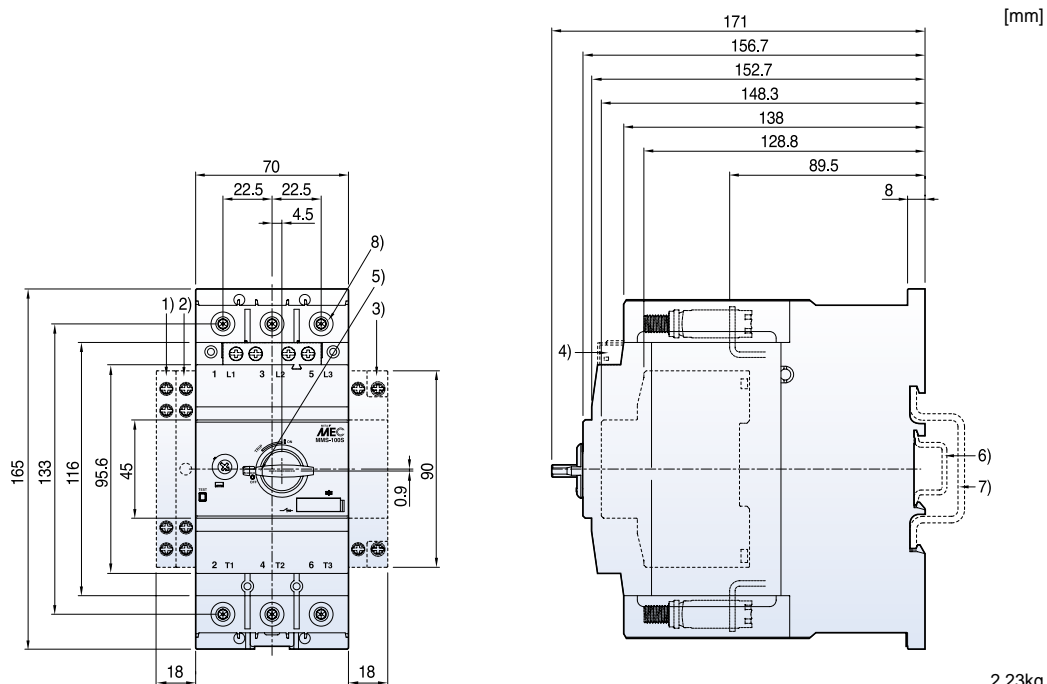


Manual motor starters

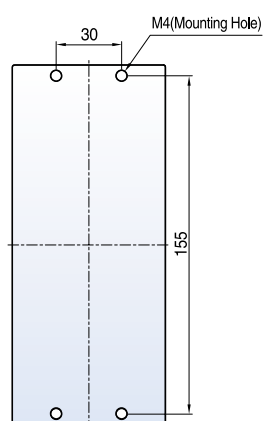
MMS-100S

MMS-100H

MMS-100HI



2.23kg



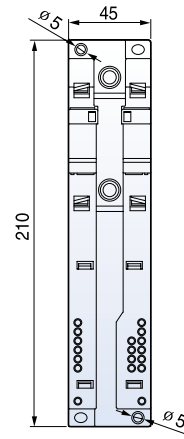
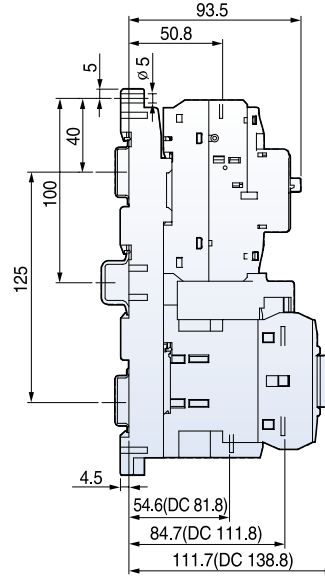
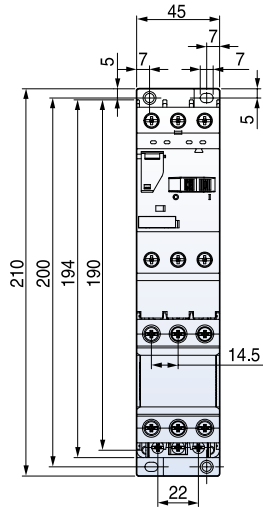
- 1) Side auxiliary switch
- 2) Side magnetic trip alarm switch
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary switch
- 5) Handle lock in OFF position (Ø5mm)
- 6) 35mm standard mounting rail acc. to EN 50 022
- 7) 75mm standard mounting rail acc. to EN 50 023
- 8) 4mm hexagon socket screw

Combination Manual motor starters and contactors

MMS-32S

+

MC-40AF



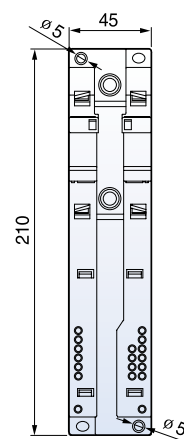
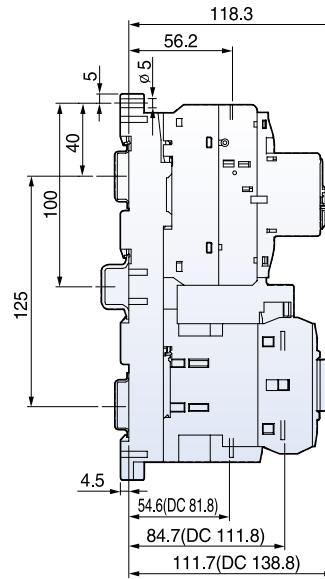
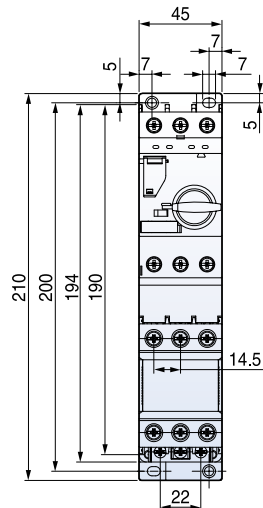
[mm]

1.1kg

MMS-32H

+

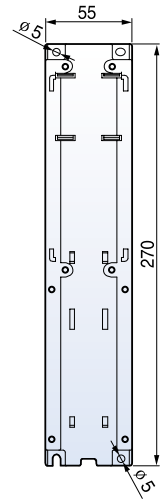
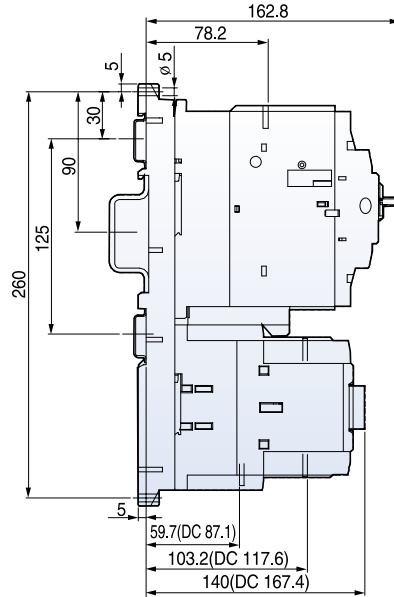
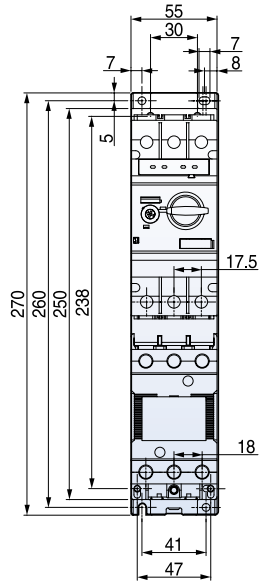
MC-40AF



1.2kg

Combination Manual motor starters and contactors

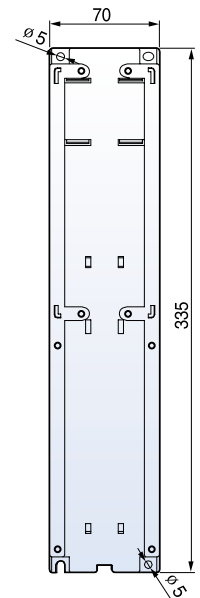
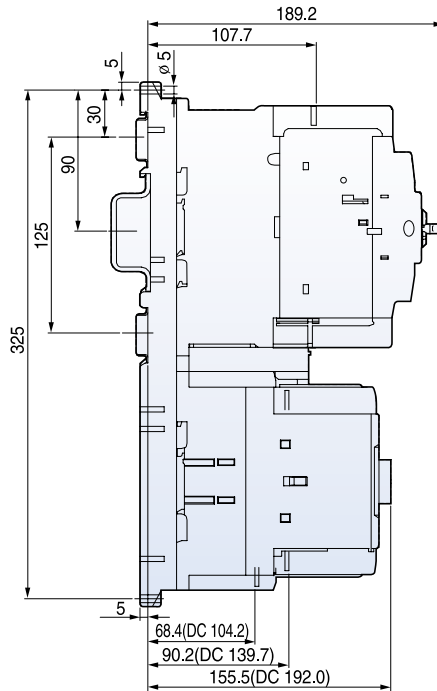
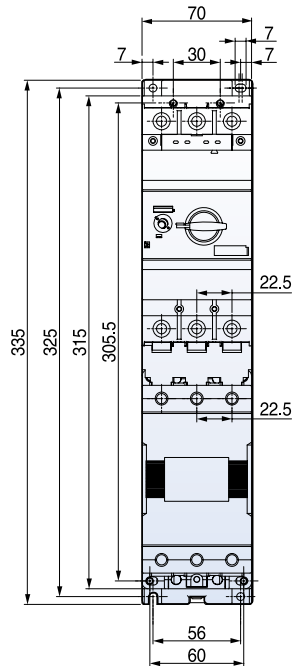
MMS-63H
+
MC-65AF



[mm]

2.3kg

MMS-100H
+
MC-100AF



4.6kg

Contactors

MC-6a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|-------|---------------|--------------|------------|--------------|------------|
| MC-6a | Screw | AC24V | 50/60Hz | 1a | 1327000100 |
| | Screw | AC48V | 50/60Hz | 1a | 1327000200 |
| | Screw | AC100V | 50/60Hz | 1a | 1327000300 |
| | Screw | AC110V | 50/60Hz | 1a | 1327000400 |
| | Screw | AC120V | 50/60Hz | 1a | 1327000500 |
| | Screw | AC200V | 50/60Hz | 1a | 1327000600 |
| | Screw | AC220V | 50/60Hz | 1a | 1327000700 |
| | Screw | AC230V | 50/60Hz | 1a | 1327000800 |
| | Screw | AC240V | 50/60Hz | 1a | 1327000900 |
| | Screw | AC380V | 50/60Hz | 1a | 1327001000 |
| | Screw | AC400V | 50/60Hz | 1a | 1327001100 |
| | Screw | AC415V | 50/60Hz | 1a | 1327001200 |
| | Screw | AC440V | 50/60Hz | 1a | 1327001300 |
| | Screw | AC500V | 50/60Hz | 1a | 1327001400 |
| | Screw | AC550V | 50/60Hz | 1a | 1327001500 |
| | Screw | AC24V | 50Hz | 1a | 1327001600 |
| | Screw | AC36V | 50Hz | 1a | 1327001700 |
| | Screw | AC42V | 50Hz | 1a | 1327001800 |
| | Screw | AC48V | 50Hz | 1a | 1327001900 |
| | Screw | AC80V | 50Hz | 1a | 1327002000 |
| | Screw | AC100V | 50Hz | 1a | 1327002100 |
| | Screw | AC110V | 50Hz | 1a | 1327002200 |
| | Screw | AC220V | 50Hz | 1a | 1327002300 |
| | Screw | AC230V | 50Hz | 1a | 1327002400 |
| | Screw | AC240V | 50Hz | 1a | 1327002500 |
| | Screw | AC380V | 50Hz | 1a | 1327002600 |
| | Screw | AC400V | 50Hz | 1a | 1327002700 |
| | Screw | AC415V | 50Hz | 1a | 1327002800 |
| | Screw | AC440V | 50Hz | 1a | 1327002900 |
| | Screw | AC500V | 50Hz | 1a | 1327003000 |
| | Screw | AC550V | 50Hz | 1a | 1327003100 |
| | Screw | AC24V | 60Hz | 1a | 1327003200 |
| | Screw | AC48V | 60Hz | 1a | 1327003300 |
| | Screw | AC100V | 60Hz | 1a | 1327003400 |
| | Screw | AC110V | 60Hz | 1a | 1327003500 |
| | Screw | AC120V | 60Hz | 1a | 1327003600 |
| | Screw | AC200V | 60Hz | 1a | 1327003700 |
| | Screw | AC208V | 60Hz | 1a | 1327003800 |
| | Screw | AC220V | 60Hz | 1a | 1327003900 |
| | Screw | AC230V | 60Hz | 1a | 1327004000 |
| | Screw | AC240V | 60Hz | 1a | 1327004100 |
| | Screw | AC277V | 60Hz | 1a | 1327004200 |
| | Screw | AC380V | 60Hz | 1a | 1327004300 |
| | Screw | AC440V | 60Hz | 1a | 1327004400 |
| | Screw | AC480V | 60Hz | 1a | 1327004500 |
| | Screw | AC600V | 60Hz | 1a | 1327004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a | 1327004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 1a | 1327004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 1a | 1327004900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 1a | 1327005000 |
| Screw | DC12V | - | 1a | 1327005100 | |
| Screw | DC20V | - | 1a | 1327005200 | |
| Screw | DC24V | - | 1a | 1327005300 | |
| Screw | DC48V | - | 1a | 1327005400 | |
| Screw | DC60V | - | 1a | 1327005500 | |
| Screw | DC80V | - | 1a | 1327005600 | |
| Screw | DC100V | - | 1a | 1327005700 | |
| Screw | DC110V | - | 1a | 1327005800 | |
| Screw | DC125V | - | 1a | 1327005900 | |
| Screw | DC200V | - | 1a | 1327006000 | |
| Screw | DC250V | - | 1a | 1327006100 | |
| Screw | DC220V | - | 1a | 1327006200 | |

Contactors

MC-6a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|-------|---------------|--------------|-----------|--------------|------------|
| MC-6a | Screw | AC24V | 50/60Hz | 1b | 1327006300 |
| | Screw | AC48V | 50/60Hz | 1b | 1327006400 |
| | Screw | AC100V | 50/60Hz | 1b | 1327006500 |
| | Screw | AC110V | 50/60Hz | 1b | 1327006600 |
| | Screw | AC120V | 50/60Hz | 1b | 1327006700 |
| | Screw | AC200V | 50/60Hz | 1b | 1327006800 |
| | Screw | AC220V | 50/60Hz | 1b | 1327006900 |
| | Screw | AC230V | 50/60Hz | 1b | 1327007000 |
| | Screw | AC240V | 50/60Hz | 1b | 1327007100 |
| | Screw | AC380V | 50/60Hz | 1b | 1327007200 |
| | Screw | AC400V | 50/60Hz | 1b | 1327007300 |
| | Screw | AC415V | 50/60Hz | 1b | 1327007400 |
| | Screw | AC440V | 50/60Hz | 1b | 1327007500 |
| | Screw | AC500V | 50/60Hz | 1b | 1327007600 |
| | Screw | AC550V | 50/60Hz | 1b | 1327007700 |
| | Screw | AC24V | 50Hz | 1b | 1327007800 |
| | Screw | AC36V | 50Hz | 1b | 1327007900 |
| | Screw | AC42V | 50Hz | 1b | 1327008000 |
| | Screw | AC48V | 50Hz | 1b | 1327008100 |
| | Screw | AC80V | 50Hz | 1b | 1327008200 |
| | Screw | AC100V | 50Hz | 1b | 1327008300 |
| | Screw | AC110V | 50Hz | 1b | 1327008400 |
| | Screw | AC220V | 50Hz | 1b | 1327008500 |
| | Screw | AC230V | 50Hz | 1b | 1327008600 |
| | Screw | AC240V | 50Hz | 1b | 1327008700 |
| | Screw | AC380V | 50Hz | 1b | 1327008800 |
| | Screw | AC400V | 50Hz | 1b | 1327008900 |
| | Screw | AC415V | 50Hz | 1b | 1327009000 |
| | Screw | AC440V | 50Hz | 1b | 1327009100 |
| | Screw | AC500V | 50Hz | 1b | 1327009200 |
| | Screw | AC550V | 50Hz | 1b | 1327009300 |
| | Screw | AC24V | 60Hz | 1b | 1327009400 |
| | Screw | AC48V | 60Hz | 1b | 1327009500 |
| | Screw | AC100V | 60Hz | 1b | 1327009600 |
| | Screw | AC110V | 60Hz | 1b | 1327009700 |
| | Screw | AC120V | 60Hz | 1b | 1327009800 |
| | Screw | AC200V | 60Hz | 1b | 1327009900 |
| | Screw | AC208V | 60Hz | 1b | 1327010000 |
| | Screw | AC220V | 60Hz | 1b | 1327010100 |
| | Screw | AC230V | 60Hz | 1b | 1327010200 |
| | Screw | AC240V | 60Hz | 1b | 1327010300 |
| | Screw | AC277V | 60Hz | 1b | 1327010400 |
| Screw | AC380V | 60Hz | 1b | 1327010500 | |
| Screw | AC440V | 60Hz | 1b | 1327010600 | |
| Screw | AC480V | 60Hz | 1b | 1327010700 | |
| Screw | AC600V | 60Hz | 1b | 1327010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1b | 1327010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1b | 1327011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1b | 1327011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1b | 1327011200 | |
| Screw | DC12V | - | 1b | 1327011300 | |
| Screw | DC20V | - | 1b | 1327011400 | |
| Screw | DC24V | - | 1b | 1327011500 | |
| Screw | DC48V | - | 1b | 1327011600 | |
| Screw | DC60V | - | 1b | 1327011700 | |
| Screw | DC80V | - | 1b | 1327011800 | |
| Screw | DC100V | - | 1b | 1327011900 | |
| Screw | DC110V | - | 1b | 1327012000 | |
| Screw | DC125V | - | 1b | 1327012100 | |
| Screw | DC200V | - | 1b | 1327012200 | |
| Screw | DC250V | - | 1b | 1327012300 | |
| Screw | DC220V | - | 1b | 1327012400 | |

Contactors

MC-9a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|-------|---------------|--------------|------------|--------------|------------|
| MC-9a | Screw | AC24V | 50/60Hz | 1a | 1316000100 |
| | Screw | AC48V | 50/60Hz | 1a | 1316000200 |
| | Screw | AC100V | 50/60Hz | 1a | 1316000300 |
| | Screw | AC110V | 50/60Hz | 1a | 1316000400 |
| | Screw | AC120V | 50/60Hz | 1a | 1316000500 |
| | Screw | AC200V | 50/60Hz | 1a | 1316000600 |
| | Screw | AC220V | 50/60Hz | 1a | 1316000700 |
| | Screw | AC230V | 50/60Hz | 1a | 1316000800 |
| | Screw | AC240V | 50/60Hz | 1a | 1316000900 |
| | Screw | AC380V | 50/60Hz | 1a | 1316001000 |
| | Screw | AC400V | 50/60Hz | 1a | 1316001100 |
| | Screw | AC415V | 50/60Hz | 1a | 1316001200 |
| | Screw | AC440V | 50/60Hz | 1a | 1316001300 |
| | Screw | AC500V | 50/60Hz | 1a | 1316001400 |
| | Screw | AC550V | 50/60Hz | 1a | 1316001500 |
| | Screw | AC24V | 50Hz | 1a | 1316001600 |
| | Screw | AC36V | 50Hz | 1a | 1316001700 |
| | Screw | AC42V | 50Hz | 1a | 1316001800 |
| | Screw | AC48V | 50Hz | 1a | 1316001900 |
| | Screw | AC80V | 50Hz | 1a | 1316002000 |
| | Screw | AC100V | 50Hz | 1a | 1316002100 |
| | Screw | AC110V | 50Hz | 1a | 1316002200 |
| | Screw | AC220V | 50Hz | 1a | 1316002300 |
| | Screw | AC230V | 50Hz | 1a | 1316002400 |
| | Screw | AC240V | 50Hz | 1a | 1316002500 |
| | Screw | AC380V | 50Hz | 1a | 1316002600 |
| | Screw | AC400V | 50Hz | 1a | 1316002700 |
| | Screw | AC415V | 50Hz | 1a | 1316002800 |
| | Screw | AC440V | 50Hz | 1a | 1316002900 |
| | Screw | AC500V | 50Hz | 1a | 1316003000 |
| | Screw | AC550V | 50Hz | 1a | 1316003100 |
| | Screw | AC24V | 60Hz | 1a | 1316003200 |
| | Screw | AC48V | 60Hz | 1a | 1316003300 |
| | Screw | AC100V | 60Hz | 1a | 1316003400 |
| | Screw | AC110V | 60Hz | 1a | 1316003500 |
| | Screw | AC120V | 60Hz | 1a | 1316003600 |
| | Screw | AC200V | 60Hz | 1a | 1316003700 |
| | Screw | AC208V | 60Hz | 1a | 1316003800 |
| | Screw | AC220V | 60Hz | 1a | 1316003900 |
| | Screw | AC230V | 60Hz | 1a | 1316004000 |
| | Screw | AC240V | 60Hz | 1a | 1316004100 |
| | Screw | AC277V | 60Hz | 1a | 1316004200 |
| | Screw | AC380V | 60Hz | 1a | 1316004300 |
| | Screw | AC440V | 60Hz | 1a | 1316004400 |
| | Screw | AC480V | 60Hz | 1a | 1316004500 |
| | Screw | AC600V | 60Hz | 1a | 1316004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a | 1316004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 1a | 1316004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 1a | 1316004900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 1a | 1316005000 |
| Screw | DC12V | - | 1a | 1316005100 | |
| Screw | DC20V | - | 1a | 1316005200 | |
| Screw | DC24V | - | 1a | 1316005300 | |
| Screw | DC48V | - | 1a | 1316005400 | |
| Screw | DC60V | - | 1a | 1316005500 | |
| Screw | DC80V | - | 1a | 1316005600 | |
| Screw | DC100V | - | 1a | 1316005700 | |
| Screw | DC110V | - | 1a | 1316005800 | |
| Screw | DC125V | - | 1a | 1316005900 | |
| Screw | DC200V | - | 1a | 1316006000 | |
| Screw | DC250V | - | 1a | 1316006100 | |
| Screw | DC220V | - | 1a | 1316006200 | |

Contactors

MC-9a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|-------|---------------|--------------|-----------|--------------|------------|
| MC-9a | Screw | AC24V | 50/60Hz | 1b | 1316100100 |
| | Screw | AC48V | 50/60Hz | 1b | 1316100200 |
| | Screw | AC100V | 50/60Hz | 1b | 1316100300 |
| | Screw | AC110V | 50/60Hz | 1b | 1316100400 |
| | Screw | AC120V | 50/60Hz | 1b | 1316100500 |
| | Screw | AC200V | 50/60Hz | 1b | 1316100600 |
| | Screw | AC220V | 50/60Hz | 1b | 1316100700 |
| | Screw | AC230V | 50/60Hz | 1b | 1316100800 |
| | Screw | AC240V | 50/60Hz | 1b | 1316100900 |
| | Screw | AC380V | 50/60Hz | 1b | 1316101000 |
| | Screw | AC400V | 50/60Hz | 1b | 1316101100 |
| | Screw | AC415V | 50/60Hz | 1b | 1316101200 |
| | Screw | AC440V | 50/60Hz | 1b | 1316101300 |
| | Screw | AC500V | 50/60Hz | 1b | 1316101400 |
| | Screw | AC550V | 50/60Hz | 1b | 1316101500 |
| | Screw | AC24V | 50Hz | 1b | 1316101600 |
| | Screw | AC36V | 50Hz | 1b | 1316101700 |
| | Screw | AC42V | 50Hz | 1b | 1316101800 |
| | Screw | AC48V | 50Hz | 1b | 1316101900 |
| | Screw | AC80V | 50Hz | 1b | 1316102000 |
| | Screw | AC100V | 50Hz | 1b | 1316102100 |
| | Screw | AC110V | 50Hz | 1b | 1316102200 |
| | Screw | AC220V | 50Hz | 1b | 1316102300 |
| | Screw | AC230V | 50Hz | 1b | 1316102400 |
| | Screw | AC240V | 50Hz | 1b | 1316102500 |
| | Screw | AC380V | 50Hz | 1b | 1316102600 |
| | Screw | AC400V | 50Hz | 1b | 1316102700 |
| | Screw | AC415V | 50Hz | 1b | 1316102800 |
| | Screw | AC440V | 50Hz | 1b | 1316102900 |
| | Screw | AC500V | 50Hz | 1b | 1316103000 |
| | Screw | AC550V | 50Hz | 1b | 1316103100 |
| | Screw | AC24V | 60Hz | 1b | 1316103200 |
| | Screw | AC48V | 60Hz | 1b | 1316103300 |
| | Screw | AC100V | 60Hz | 1b | 1316103400 |
| | Screw | AC110V | 60Hz | 1b | 1316103500 |
| | Screw | AC120V | 60Hz | 1b | 1316103600 |
| | Screw | AC200V | 60Hz | 1b | 1316103700 |
| | Screw | AC208V | 60Hz | 1b | 1316103800 |
| | Screw | AC220V | 60Hz | 1b | 1316103900 |
| | Screw | AC230V | 60Hz | 1b | 1316104000 |
| | Screw | AC240V | 60Hz | 1b | 1316104100 |
| | Screw | AC277V | 60Hz | 1b | 1316104200 |
| | Screw | AC380V | 60Hz | 1b | 1316104300 |
| | Screw | AC440V | 60Hz | 1b | 1316104400 |
| | Screw | AC480V | 60Hz | 1b | 1316104500 |
| Screw | AC600V | 60Hz | 1b | 1316104600 | |
| Screw | AC100V, 110V | 50Hz | 1b | 1316104700 | |
| Screw | AC110V, 120V | 50Hz | 1b | 1316104800 | |
| Screw | AC200V, 220V | 50Hz | 1b | 1316104900 | |
| Screw | AC240V, 277V | 50Hz | 1b | 1316105000 | |
| Screw | DC12V | - | 1b | 1316105100 | |
| Screw | DC20V | - | 1b | 1316105200 | |
| Screw | DC24V | - | 1b | 1316105300 | |
| Screw | DC48V | - | 1b | 1316105400 | |
| Screw | DC60V | - | 1b | 1316105500 | |
| Screw | DC80V | - | 1b | 1316105600 | |
| Screw | DC100V | - | 1b | 1316105700 | |
| Screw | DC110V | - | 1b | 1316105800 | |
| Screw | DC125V | - | 1b | 1316105900 | |
| Screw | DC200V | - | 1b | 1316106000 | |
| Screw | DC250V | - | 1b | 1316106100 | |
| Screw | DC220V | - | 1b | 1316106200 | |

Contactors

MC-12a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-12a | Screw | AC24V | 50/60Hz | 1a | 1317000100 |
| | Screw | AC48V | 50/60Hz | 1a | 1317000200 |
| | Screw | AC100V | 50/60Hz | 1a | 1317000300 |
| | Screw | AC110V | 50/60Hz | 1a | 1317000400 |
| | Screw | AC120V | 50/60Hz | 1a | 1317000500 |
| | Screw | AC200V | 50/60Hz | 1a | 1317000600 |
| | Screw | AC220V | 50/60Hz | 1a | 1317000700 |
| | Screw | AC230V | 50/60Hz | 1a | 1317000800 |
| | Screw | AC240V | 50/60Hz | 1a | 1317000900 |
| | Screw | AC380V | 50/60Hz | 1a | 1317001000 |
| | Screw | AC400V | 50/60Hz | 1a | 1317001100 |
| | Screw | AC415V | 50/60Hz | 1a | 1317001200 |
| | Screw | AC440V | 50/60Hz | 1a | 1317001300 |
| | Screw | AC500V | 50/60Hz | 1a | 1317001400 |
| | Screw | AC550V | 50/60Hz | 1a | 1317001500 |
| | Screw | AC24V | 50Hz | 1a | 1317001600 |
| | Screw | AC36V | 50Hz | 1a | 1317001700 |
| | Screw | AC42V | 50Hz | 1a | 1317001800 |
| | Screw | AC48V | 50Hz | 1a | 1317001900 |
| | Screw | AC80V | 50Hz | 1a | 1317002000 |
| | Screw | AC100V | 50Hz | 1a | 1317002100 |
| | Screw | AC110V | 50Hz | 1a | 1317002200 |
| | Screw | AC220V | 50Hz | 1a | 1317002300 |
| | Screw | AC230V | 50Hz | 1a | 1317002400 |
| | Screw | AC240V | 50Hz | 1a | 1317002500 |
| | Screw | AC380V | 50Hz | 1a | 1317002600 |
| | Screw | AC400V | 50Hz | 1a | 1317002700 |
| | Screw | AC415V | 50Hz | 1a | 1317002800 |
| | Screw | AC440V | 50Hz | 1a | 1317002900 |
| | Screw | AC500V | 50Hz | 1a | 1317003000 |
| | Screw | AC550V | 50Hz | 1a | 1317003100 |
| | Screw | AC24V | 60Hz | 1a | 1317003200 |
| | Screw | AC48V | 60Hz | 1a | 1317003300 |
| | Screw | AC100V | 60Hz | 1a | 1317003400 |
| | Screw | AC110V | 60Hz | 1a | 1317003500 |
| | Screw | AC120V | 60Hz | 1a | 1317003600 |
| | Screw | AC200V | 60Hz | 1a | 1317003700 |
| | Screw | AC208V | 60Hz | 1a | 1317003800 |
| | Screw | AC220V | 60Hz | 1a | 1317003900 |
| | Screw | AC230V | 60Hz | 1a | 1317004000 |
| | Screw | AC240V | 60Hz | 1a | 1317004100 |
| | Screw | AC277V | 60Hz | 1a | 1317004200 |
| | Screw | AC380V | 60Hz | 1a | 1317004300 |
| | Screw | AC440V | 60Hz | 1a | 1317004400 |
| | Screw | AC480V | 60Hz | 1a | 1317004500 |
| | Screw | AC600V | 60Hz | 1a | 1317004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a | 1317004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 1a | 1317004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 1a | 1317004900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 1a | 1317005000 |
| Screw | DC12V | - | 1a | 1317005100 | |
| Screw | DC20V | - | 1a | 1317005200 | |
| Screw | DC24V | - | 1a | 1317005300 | |
| Screw | DC48V | - | 1a | 1317005400 | |
| Screw | DC60V | - | 1a | 1317005500 | |
| Screw | DC80V | - | 1a | 1317005600 | |
| Screw | DC100V | - | 1a | 1317005700 | |
| Screw | DC110V | - | 1a | 1317005800 | |
| Screw | DC125V | - | 1a | 1317005900 | |
| Screw | DC200V | - | 1a | 1317006000 | |
| Screw | DC250V | - | 1a | 1317006100 | |
| Screw | DC220V | - | 1a | 1317006200 | |

Contactors

MC-12a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-12a | Screw | AC24V | 50/60Hz | 1b | 1317100100 |
| | Screw | AC48V | 50/60Hz | 1b | 1317100200 |
| | Screw | AC100V | 50/60Hz | 1b | 1317100300 |
| | Screw | AC110V | 50/60Hz | 1b | 1317100400 |
| | Screw | AC120V | 50/60Hz | 1b | 1317100500 |
| | Screw | AC200V | 50/60Hz | 1b | 1317100600 |
| | Screw | AC220V | 50/60Hz | 1b | 1317100700 |
| | Screw | AC230V | 50/60Hz | 1b | 1317100800 |
| | Screw | AC240V | 50/60Hz | 1b | 1317100900 |
| | Screw | AC380V | 50/60Hz | 1b | 1317101000 |
| | Screw | AC400V | 50/60Hz | 1b | 1317101100 |
| | Screw | AC415V | 50/60Hz | 1b | 1317101200 |
| | Screw | AC440V | 50/60Hz | 1b | 1317101300 |
| | Screw | AC500V | 50/60Hz | 1b | 1317101400 |
| | Screw | AC550V | 50/60Hz | 1b | 1317101500 |
| | Screw | AC24V | 50Hz | 1b | 1317101600 |
| | Screw | AC36V | 50Hz | 1b | 1317101700 |
| | Screw | AC42V | 50Hz | 1b | 1317101800 |
| | Screw | AC48V | 50Hz | 1b | 1317101900 |
| | Screw | AC80V | 50Hz | 1b | 1317102000 |
| | Screw | AC100V | 50Hz | 1b | 1317102100 |
| | Screw | AC110V | 50Hz | 1b | 1317102200 |
| | Screw | AC220V | 50Hz | 1b | 1317102300 |
| | Screw | AC230V | 50Hz | 1b | 1317102400 |
| | Screw | AC240V | 50Hz | 1b | 1317102500 |
| | Screw | AC380V | 50Hz | 1b | 1317102600 |
| | Screw | AC400V | 50Hz | 1b | 1317102700 |
| | Screw | AC415V | 50Hz | 1b | 1317102800 |
| | Screw | AC440V | 50Hz | 1b | 1317102900 |
| | Screw | AC500V | 50Hz | 1b | 1317103000 |
| | Screw | AC550V | 50Hz | 1b | 1317103100 |
| | Screw | AC24V | 60Hz | 1b | 1317103200 |
| | Screw | AC48V | 60Hz | 1b | 1317103300 |
| | Screw | AC100V | 60Hz | 1b | 1317103400 |
| | Screw | AC110V | 60Hz | 1b | 1317103500 |
| | Screw | AC120V | 60Hz | 1b | 1317103600 |
| | Screw | AC200V | 60Hz | 1b | 1317103700 |
| | Screw | AC208V | 60Hz | 1b | 1317103800 |
| | Screw | AC220V | 60Hz | 1b | 1317103900 |
| | Screw | AC230V | 60Hz | 1b | 1317104000 |
| | Screw | AC240V | 60Hz | 1b | 1317104100 |
| | Screw | AC277V | 60Hz | 1b | 1317104200 |
| | Screw | AC380V | 60Hz | 1b | 1317104300 |
| | Screw | AC440V | 60Hz | 1b | 1317104400 |
| | Screw | AC480V | 60Hz | 1b | 1317104500 |
| | Screw | AC600V | 60Hz | 1b | 1317104600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1b | 1317104700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 1b | 1317104800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 1b | 1317104900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 1b | 1317105000 |
| Screw | DC12V | - | 1b | 1317105100 | |
| Screw | DC20V | - | 1b | 1317105200 | |
| Screw | DC24V | - | 1b | 1317105300 | |
| Screw | DC48V | - | 1b | 1317105400 | |
| Screw | DC60V | - | 1b | 1317105500 | |
| Screw | DC80V | - | 1b | 1317105600 | |
| Screw | DC100V | - | 1b | 1317105700 | |
| Screw | DC110V | - | 1b | 1317105800 | |
| Screw | DC125V | - | 1b | 1317105900 | |
| Screw | DC200V | - | 1b | 1317106000 | |
| Screw | DC250V | - | 1b | 1317106100 | |
| Screw | DC220V | - | 1b | 1317106200 | |

Contactors

MC-18a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-18a | Screw | AC24V | 50/60Hz | 1a | 1328000100 |
| | Screw | AC48V | 50/60Hz | 1a | 1328000200 |
| | Screw | AC100V | 50/60Hz | 1a | 1328000300 |
| | Screw | AC110V | 50/60Hz | 1a | 1328000400 |
| | Screw | AC120V | 50/60Hz | 1a | 1328000500 |
| | Screw | AC200V | 50/60Hz | 1a | 1328000600 |
| | Screw | AC220V | 50/60Hz | 1a | 1328000700 |
| | Screw | AC230V | 50/60Hz | 1a | 1328000800 |
| | Screw | AC240V | 50/60Hz | 1a | 1328000900 |
| | Screw | AC380V | 50/60Hz | 1a | 1328001000 |
| | Screw | AC400V | 50/60Hz | 1a | 1328001100 |
| | Screw | AC415V | 50/60Hz | 1a | 1328001200 |
| | Screw | AC440V | 50/60Hz | 1a | 1328001300 |
| | Screw | AC500V | 50/60Hz | 1a | 1328001400 |
| | Screw | AC550V | 50/60Hz | 1a | 1328001500 |
| | Screw | AC24V | 50Hz | 1a | 1328001600 |
| | Screw | AC36V | 50Hz | 1a | 1328001700 |
| | Screw | AC42V | 50Hz | 1a | 1328001800 |
| | Screw | AC48V | 50Hz | 1a | 1328001900 |
| | Screw | AC80V | 50Hz | 1a | 1328002000 |
| | Screw | AC100V | 50Hz | 1a | 1328002100 |
| | Screw | AC110V | 50Hz | 1a | 1328002200 |
| | Screw | AC220V | 50Hz | 1a | 1328002300 |
| | Screw | AC230V | 50Hz | 1a | 1328002400 |
| | Screw | AC240V | 50Hz | 1a | 1328002500 |
| | Screw | AC380V | 50Hz | 1a | 1328002600 |
| | Screw | AC400V | 50Hz | 1a | 1328002700 |
| | Screw | AC415V | 50Hz | 1a | 1328002800 |
| | Screw | AC440V | 50Hz | 1a | 1328002900 |
| | Screw | AC500V | 50Hz | 1a | 1328003000 |
| | Screw | AC550V | 50Hz | 1a | 1328003100 |
| | Screw | AC24V | 60Hz | 1a | 1328003200 |
| | Screw | AC48V | 60Hz | 1a | 1328003300 |
| | Screw | AC100V | 60Hz | 1a | 1328003400 |
| | Screw | AC110V | 60Hz | 1a | 1328003500 |
| | Screw | AC120V | 60Hz | 1a | 1328003600 |
| | Screw | AC200V | 60Hz | 1a | 1328003700 |
| | Screw | AC208V | 60Hz | 1a | 1328003800 |
| | Screw | AC220V | 60Hz | 1a | 1328003900 |
| | Screw | AC230V | 60Hz | 1a | 1328004000 |
| | Screw | AC240V | 60Hz | 1a | 1328004100 |
| | Screw | AC277V | 60Hz | 1a | 1328004200 |
| | Screw | AC380V | 60Hz | 1a | 1328004300 |
| | Screw | AC440V | 60Hz | 1a | 1328004400 |
| | Screw | AC480V | 60Hz | 1a | 1328004500 |
| | Screw | AC600V | 60Hz | 1a | 1328004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a | 1328004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 1a | 1328004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 1a | 1328004900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 1a | 1328005000 |
| Screw | DC12V | - | 1a | 1328005100 | |
| Screw | DC20V | - | 1a | 1328005200 | |
| Screw | DC24V | - | 1a | 1328005300 | |
| Screw | DC48V | - | 1a | 1328005400 | |
| Screw | DC60V | - | 1a | 1328005500 | |
| Screw | DC80V | - | 1a | 1328005600 | |
| Screw | DC100V | - | 1a | 1328005700 | |
| Screw | DC110V | - | 1a | 1328005800 | |
| Screw | DC125V | - | 1a | 1328005900 | |
| Screw | DC200V | - | 1a | 1328006000 | |
| Screw | DC250V | - | 1a | 1328006100 | |
| Screw | DC220V | - | 1a | 1328006200 | |

Contactors

MC-18a screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-18a | Screw | AC24V | 50/60Hz | 1b | 1328006300 |
| | Screw | AC48V | 50/60Hz | 1b | 1328006400 |
| | Screw | AC100V | 50/60Hz | 1b | 1328006500 |
| | Screw | AC110V | 50/60Hz | 1b | 1328006600 |
| | Screw | AC120V | 50/60Hz | 1b | 1328006700 |
| | Screw | AC200V | 50/60Hz | 1b | 1328006800 |
| | Screw | AC220V | 50/60Hz | 1b | 1328006900 |
| | Screw | AC230V | 50/60Hz | 1b | 1328007000 |
| | Screw | AC240V | 50/60Hz | 1b | 1328007100 |
| | Screw | AC380V | 50/60Hz | 1b | 1328007200 |
| | Screw | AC400V | 50/60Hz | 1b | 1328007300 |
| | Screw | AC415V | 50/60Hz | 1b | 1328007400 |
| | Screw | AC440V | 50/60Hz | 1b | 1328007500 |
| | Screw | AC500V | 50/60Hz | 1b | 1328007600 |
| | Screw | AC550V | 50/60Hz | 1b | 1328007700 |
| | Screw | AC24V | 50Hz | 1b | 1328007800 |
| | Screw | AC36V | 50Hz | 1b | 1328007900 |
| | Screw | AC42V | 50Hz | 1b | 1328008000 |
| | Screw | AC48V | 50Hz | 1b | 1328008100 |
| | Screw | AC80V | 50Hz | 1b | 1328008200 |
| | Screw | AC100V | 50Hz | 1b | 1328008300 |
| | Screw | AC110V | 50Hz | 1b | 1328008400 |
| | Screw | AC220V | 50Hz | 1b | 1328008500 |
| | Screw | AC230V | 50Hz | 1b | 1328008600 |
| | Screw | AC240V | 50Hz | 1b | 1328008700 |
| | Screw | AC380V | 50Hz | 1b | 1328008800 |
| | Screw | AC400V | 50Hz | 1b | 1328008900 |
| | Screw | AC415V | 50Hz | 1b | 1328009000 |
| | Screw | AC440V | 50Hz | 1b | 1328009100 |
| | Screw | AC500V | 50Hz | 1b | 1328009200 |
| | Screw | AC550V | 50Hz | 1b | 1328009300 |
| | Screw | AC24V | 60Hz | 1b | 1328009400 |
| | Screw | AC48V | 60Hz | 1b | 1328009500 |
| | Screw | AC100V | 60Hz | 1b | 1328009600 |
| | Screw | AC110V | 60Hz | 1b | 1328009700 |
| | Screw | AC120V | 60Hz | 1b | 1328009800 |
| | Screw | AC200V | 60Hz | 1b | 1328009900 |
| | Screw | AC208V | 60Hz | 1b | 1328010000 |
| | Screw | AC220V | 60Hz | 1b | 1328010100 |
| | Screw | AC230V | 60Hz | 1b | 1328010200 |
| | Screw | AC240V | 60Hz | 1b | 1328010300 |
| | Screw | AC277V | 60Hz | 1b | 1328010400 |
| Screw | AC380V | 60Hz | 1b | 1328010500 | |
| Screw | AC440V | 60Hz | 1b | 1328010600 | |
| Screw | AC480V | 60Hz | 1b | 1328010700 | |
| Screw | AC600V | 60Hz | 1b | 1328010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1b | 1328010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1b | 1328011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1b | 1328011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1b | 1328011200 | |
| Screw | DC12V | - | 1b | 1328011300 | |
| Screw | DC20V | - | 1b | 1328011400 | |
| Screw | DC24V | - | 1b | 1328011500 | |
| Screw | DC48V | - | 1b | 1328011600 | |
| Screw | DC60V | - | 1b | 1328011700 | |
| Screw | DC80V | - | 1b | 1328011800 | |
| Screw | DC100V | - | 1b | 1328011900 | |
| Screw | DC110V | - | 1b | 1328012000 | |
| Screw | DC125V | - | 1b | 1328012100 | |
| Screw | DC200V | - | 1b | 1328012200 | |
| Screw | DC250V | - | 1b | 1328012300 | |
| Screw | DC220V | - | 1b | 1328012400 | |

Contactors

MC-9b screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|-------|---------------|--------------|------------|--------------|------------|
| MC-9b | Screw | AC24V | 50/60Hz | 1a1b | 1344000100 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1344000200 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1344000300 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1344000400 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1344000500 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1344000600 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1344000700 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1344000800 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1344000900 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1344001000 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1344001100 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1344001200 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1344001300 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1344001400 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1344001500 |
| | Screw | AC24V | 50Hz | 1a1b | 1344001600 |
| | Screw | AC36V | 50Hz | 1a1b | 1344001700 |
| | Screw | AC42V | 50Hz | 1a1b | 1344001800 |
| | Screw | AC48V | 50Hz | 1a1b | 1344001900 |
| | Screw | AC80V | 50Hz | 1a1b | 1344002000 |
| | Screw | AC100V | 50Hz | 1a1b | 1344002100 |
| | Screw | AC110V | 50Hz | 1a1b | 1344002200 |
| | Screw | AC220V | 50Hz | 1a1b | 1344002300 |
| | Screw | AC230V | 50Hz | 1a1b | 1344002400 |
| | Screw | AC240V | 50Hz | 1a1b | 1344002500 |
| | Screw | AC380V | 50Hz | 1a1b | 1344002600 |
| | Screw | AC400V | 50Hz | 1a1b | 1344002700 |
| | Screw | AC415V | 50Hz | 1a1b | 1344002800 |
| | Screw | AC440V | 50Hz | 1a1b | 1344002900 |
| | Screw | AC500V | 50Hz | 1a1b | 1344003000 |
| | Screw | AC550V | 50Hz | 1a1b | 1344003100 |
| | Screw | AC24V | 60Hz | 1a1b | 1344003200 |
| | Screw | AC48V | 60Hz | 1a1b | 1344003300 |
| | Screw | AC100V | 60Hz | 1a1b | 1344003400 |
| | Screw | AC110V | 60Hz | 1a1b | 1344003500 |
| | Screw | AC120V | 60Hz | 1a1b | 1344003600 |
| | Screw | AC200V | 60Hz | 1a1b | 1344003700 |
| | Screw | AC208V | 60Hz | 1a1b | 1344003800 |
| | Screw | AC220V | 60Hz | 1a1b | 1344003900 |
| | Screw | AC230V | 60Hz | 1a1b | 1344004000 |
| | Screw | AC240V | 60Hz | 1a1b | 1344004100 |
| | Screw | AC277V | 60Hz | 1a1b | 1344004200 |
| | Screw | AC380V | 60Hz | 1a1b | 1344004300 |
| | Screw | AC440V | 60Hz | 1a1b | 1344004400 |
| | Screw | AC480V | 60Hz | 1a1b | 1344004500 |
| | Screw | AC600V | 60Hz | 1a1b | 1344004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1344004700 |
| | Screw | AC110V, 120V | 50Hz, 61Hz | 1a1b | 1344004800 |
| | Screw | AC200V, 220V | 50Hz, 62Hz | 1a1b | 1344004900 |
| | Screw | AC240V, 277V | 50Hz, 63Hz | 1a1b | 1344005000 |
| Screw | DC12V | - | 1a1b | 1344005100 | |
| Screw | DC20V | - | 1a1b | 1344005200 | |
| Screw | DC24V | - | 1a1b | 1344005300 | |
| Screw | DC48V | - | 1a1b | 1344005400 | |
| Screw | DC60V | - | 1a1b | 1344005500 | |
| Screw | DC80V | - | 1a1b | 1344005600 | |
| Screw | DC100V | - | 1a1b | 1344005700 | |
| Screw | DC110V | - | 1a1b | 1344005800 | |
| Screw | DC125V | - | 1a1b | 1344005900 | |
| Screw | DC200V | - | 1a1b | 1344006000 | |
| Screw | DC250V | - | 1a1b | 1344006100 | |
| Screw | DC220V | - | 1a1b | 1344006200 | |

Contactors

MC-9b screw only type



18AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code | |
|--------|---------------|--------------|------------|--------------|------------|------------|
| MC-12b | Screw | AC24V | 50/60Hz | 1a1b | 1345000100 | |
| | Screw | AC48V | 50/60Hz | 1a1b | 1345000200 | |
| | Screw | AC100V | 50/60Hz | 1a1b | 1345000300 | |
| | Screw | AC110V | 50/60Hz | 1a1b | 1345000400 | |
| | Screw | AC120V | 50/60Hz | 1a1b | 1345000500 | |
| | Screw | AC200V | 50/60Hz | 1a1b | 1345000600 | |
| | Screw | AC220V | 50/60Hz | 1a1b | 1345000700 | |
| | Screw | AC230V | 50/60Hz | 1a1b | 1345000800 | |
| | Screw | AC240V | 50/60Hz | 1a1b | 1345000900 | |
| | Screw | AC380V | 50/60Hz | 1a1b | 1345001000 | |
| | Screw | AC400V | 50/60Hz | 1a1b | 1345001100 | |
| | Screw | AC415V | 50/60Hz | 1a1b | 1345001200 | |
| | Screw | AC440V | 50/60Hz | 1a1b | 1345001300 | |
| | Screw | AC500V | 50/60Hz | 1a1b | 1345001400 | |
| | Screw | AC550V | 50/60Hz | 1a1b | 1345001500 | |
| | Screw | AC24V | 50Hz | 1a1b | 1345001600 | |
| | Screw | AC36V | 50Hz | 1a1b | 1345001700 | |
| | Screw | AC42V | 50Hz | 1a1b | 1345001800 | |
| | Screw | AC48V | 50Hz | 1a1b | 1345001900 | |
| | Screw | AC80V | 50Hz | 1a1b | 1345002000 | |
| | Screw | AC100V | 50Hz | 1a1b | 1345002100 | |
| | Screw | AC110V | 50Hz | 1a1b | 1345002200 | |
| | Screw | AC220V | 50Hz | 1a1b | 1345002300 | |
| | Screw | AC230V | 50Hz | 1a1b | 1345002400 | |
| | Screw | AC240V | 50Hz | 1a1b | 1345002500 | |
| | Screw | AC380V | 50Hz | 1a1b | 1345002600 | |
| | Screw | AC400V | 50Hz | 1a1b | 1345002700 | |
| | Screw | AC415V | 50Hz | 1a1b | 1345002800 | |
| | Screw | AC440V | 50Hz | 1a1b | 1345002900 | |
| | Screw | AC500V | 50Hz | 1a1b | 1345003000 | |
| | MC-9b | Screw | AC550V | 50Hz | 1a1b | 1345003100 |
| | | Screw | AC24V | 60Hz | 1a1b | 1345003200 |
| | | Screw | AC48V | 60Hz | 1a1b | 1345003300 |
| Screw | | AC100V | 60Hz | 1a1b | 1345003400 | |
| Screw | | AC110V | 60Hz | 1a1b | 1345003500 | |
| Screw | | AC120V | 60Hz | 1a1b | 1345003600 | |
| Screw | | AC200V | 60Hz | 1a1b | 1345003700 | |
| Screw | | AC208V | 60Hz | 1a1b | 1345003800 | |
| Screw | | AC220V | 60Hz | 1a1b | 1345003900 | |
| Screw | | AC230V | 60Hz | 1a1b | 1345004000 | |
| Screw | | AC240V | 60Hz | 1a1b | 1345004100 | |
| Screw | | AC277V | 60Hz | 1a1b | 1345004200 | |
| Screw | | AC380V | 60Hz | 1a1b | 1345004300 | |
| Screw | | AC440V | 60Hz | 1a1b | 1345004400 | |
| Screw | | AC480V | 60Hz | 1a1b | 1345004500 | |
| Screw | | AC600V | 60Hz | 1a1b | 1345004600 | |
| Screw | | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1345004700 | |
| Screw | | AC110V, 120V | 50Hz, 61Hz | 1a1b | 1345004800 | |
| Screw | | AC200V, 220V | 50Hz, 62Hz | 1a1b | 1345004900 | |
| Screw | | AC240V, 277V | 50Hz, 63Hz | 1a1b | 1345005000 | |
| Screw | | DC12V | - | 1a1b | 1345005100 | |
| Screw | | DC20V | - | 1a1b | 1345005200 | |
| Screw | | DC24V | - | 1a1b | 1345005300 | |
| Screw | | DC48V | - | 1a1b | 1345005400 | |
| Screw | | DC60V | - | 1a1b | 1345005500 | |
| Screw | | DC80V | - | 1a1b | 1345005600 | |
| Screw | | DC100V | - | 1a1b | 1345005700 | |
| Screw | | DC110V | - | 1a1b | 1345005800 | |
| Screw | | DC125V | - | 1a1b | 1345005900 | |
| Screw | | DC200V | - | 1a1b | 1345006000 | |
| Screw | | DC250V | - | 1a1b | 1345006100 | |
| Screw | | DC220V | - | 1a1b | 1345006200 | |

Contactors

MC-18b screw only type



22AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-18b | Screw | AC24V | 50/60Hz | 1a1b | 1346000100 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1346000200 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1346000300 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1346000400 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1346000500 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1346000600 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1346000700 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1346000800 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1346000900 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1346001000 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1346001100 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1346001200 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1346001300 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1346001400 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1346001500 |
| | Screw | AC24V | 50Hz | 1a1b | 1346001600 |
| | Screw | AC36V | 50Hz | 1a1b | 1346001700 |
| | Screw | AC42V | 50Hz | 1a1b | 1346001800 |
| | Screw | AC48V | 50Hz | 1a1b | 1346001900 |
| | Screw | AC80V | 50Hz | 1a1b | 1346002000 |
| | Screw | AC100V | 50Hz | 1a1b | 1346002100 |
| | Screw | AC110V | 50Hz | 1a1b | 1346002200 |
| | Screw | AC220V | 50Hz | 1a1b | 1346002300 |
| | Screw | AC230V | 50Hz | 1a1b | 1346002400 |
| | Screw | AC240V | 50Hz | 1a1b | 1346002500 |
| | Screw | AC380V | 50Hz | 1a1b | 1346002600 |
| | Screw | AC400V | 50Hz | 1a1b | 1346002700 |
| | Screw | AC415V | 50Hz | 1a1b | 1346002800 |
| | Screw | AC440V | 50Hz | 1a1b | 1346002900 |
| | Screw | AC500V | 50Hz | 1a1b | 1346003000 |
| | Screw | AC550V | 50Hz | 1a1b | 1346003100 |
| | Screw | AC24V | 60Hz | 1a1b | 1346003200 |
| | Screw | AC48V | 60Hz | 1a1b | 1346003300 |
| | Screw | AC100V | 60Hz | 1a1b | 1346003400 |
| | Screw | AC110V | 60Hz | 1a1b | 1346003500 |
| | Screw | AC120V | 60Hz | 1a1b | 1346003600 |
| | Screw | AC200V | 60Hz | 1a1b | 1346003700 |
| | Screw | AC208V | 60Hz | 1a1b | 1346003800 |
| | Screw | AC220V | 60Hz | 1a1b | 1346003900 |
| | Screw | AC230V | 60Hz | 1a1b | 1346004000 |
| | Screw | AC240V | 60Hz | 1a1b | 1346004100 |
| | Screw | AC277V | 60Hz | 1a1b | 1346004200 |
| | Screw | AC380V | 60Hz | 1a1b | 1346004300 |
| | Screw | AC440V | 60Hz | 1a1b | 1346004400 |
| | Screw | AC480V | 60Hz | 1a1b | 1346004500 |
| | Screw | AC600V | 60Hz | 1a1b | 1346004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1346004700 |
| | Screw | AC110V, 120V | 50Hz, 61Hz | 1a1b | 1346004800 |
| | Screw | AC200V, 220V | 50Hz, 62Hz | 1a1b | 1346004900 |
| | Screw | AC240V, 277V | 50Hz, 63Hz | 1a1b | 1346005000 |
| Screw | DC12V | - | 1a1b | 1346005100 | |
| Screw | DC20V | - | 1a1b | 1346005200 | |
| Screw | DC24V | - | 1a1b | 1346005300 | |
| Screw | DC48V | - | 1a1b | 1346005400 | |
| Screw | DC60V | - | 1a1b | 1346005500 | |
| Screw | DC80V | - | 1a1b | 1346005600 | |
| Screw | DC100V | - | 1a1b | 1346005700 | |
| Screw | DC110V | - | 1a1b | 1346005800 | |
| Screw | DC125V | - | 1a1b | 1346005900 | |
| Screw | DC200V | - | 1a1b | 1346006000 | |
| Screw | DC250V | - | 1a1b | 1346006100 | |
| Screw | DC220V | - | 1a1b | 1346006200 | |

Contactors

MC-22b screw only type



22AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-22b | Screw | AC24V | 50/60Hz | 1a1b | 1347000100 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1347000200 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1347000300 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1347000400 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1347000500 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1347000600 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1347000700 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1347000800 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1347000900 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1347001000 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1347001100 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1347001200 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1347001300 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1347001400 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1347001500 |
| | Screw | AC24V | 50Hz | 1a1b | 1347001600 |
| | Screw | AC36V | 50Hz | 1a1b | 1347001700 |
| | Screw | AC42V | 50Hz | 1a1b | 1347001800 |
| | Screw | AC48V | 50Hz | 1a1b | 1347001900 |
| | Screw | AC80V | 50Hz | 1a1b | 1347002000 |
| | Screw | AC100V | 50Hz | 1a1b | 1347002100 |
| | Screw | AC110V | 50Hz | 1a1b | 1347002200 |
| | Screw | AC220V | 50Hz | 1a1b | 1347002300 |
| | Screw | AC230V | 50Hz | 1a1b | 1347002400 |
| | Screw | AC240V | 50Hz | 1a1b | 1347002500 |
| | Screw | AC380V | 50Hz | 1a1b | 1347002600 |
| | Screw | AC400V | 50Hz | 1a1b | 1347002700 |
| | Screw | AC415V | 50Hz | 1a1b | 1347002800 |
| | Screw | AC440V | 50Hz | 1a1b | 1347002900 |
| | Screw | AC500V | 50Hz | 1a1b | 1347003000 |
| | Screw | AC550V | 50Hz | 1a1b | 1347003100 |
| | Screw | AC24V | 60Hz | 1a1b | 1347003200 |
| | Screw | AC48V | 60Hz | 1a1b | 1347003300 |
| | Screw | AC100V | 60Hz | 1a1b | 1347003400 |
| | Screw | AC110V | 60Hz | 1a1b | 1347003500 |
| | Screw | AC120V | 60Hz | 1a1b | 1347003600 |
| | Screw | AC200V | 60Hz | 1a1b | 1347003700 |
| | Screw | AC208V | 60Hz | 1a1b | 1347003800 |
| | Screw | AC220V | 60Hz | 1a1b | 1347003900 |
| | Screw | AC230V | 60Hz | 1a1b | 1347004000 |
| | Screw | AC240V | 60Hz | 1a1b | 1347004100 |
| | Screw | AC277V | 60Hz | 1a1b | 1347004200 |
| | Screw | AC380V | 60Hz | 1a1b | 1347004300 |
| | Screw | AC440V | 60Hz | 1a1b | 1347004400 |
| | Screw | AC480V | 60Hz | 1a1b | 1347004500 |
| Screw | AC600V | 60Hz | 1a1b | 1347004600 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1347004700 | |
| Screw | AC110V, 120V | 50Hz, 61Hz | 1a1b | 1347004800 | |
| Screw | AC200V, 220V | 50Hz, 62Hz | 1a1b | 1347004900 | |
| Screw | AC240V, 277V | 50Hz, 63Hz | 1a1b | 1347005000 | |
| Screw | DC12V | - | 1a1b | 1347005100 | |
| Screw | DC20V | - | 1a1b | 1347005200 | |
| Screw | DC24V | - | 1a1b | 1347005300 | |
| Screw | DC48V | - | 1a1b | 1347005400 | |
| Screw | DC60V | - | 1a1b | 1347005500 | |
| Screw | DC80V | - | 1a1b | 1347005600 | |
| Screw | DC100V | - | 1a1b | 1347005700 | |
| Screw | DC110V | - | 1a1b | 1347005800 | |
| Screw | DC125V | - | 1a1b | 1347005900 | |
| Screw | DC200V | - | 1a1b | 1347006000 | |
| Screw | DC250V | - | 1a1b | 1347006100 | |
| Screw | DC220V | - | 1a1b | 1347006200 | |

Contactors

MC-32a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-32a | Screw | AC24V | 50/60Hz | - | 1336000100 |
| | Screw | AC48V | 50/60Hz | - | 1336000200 |
| | Screw | AC100V | 50/60Hz | - | 1336000300 |
| | Screw | AC110V | 50/60Hz | - | 1336000400 |
| | Screw | AC120V | 50/60Hz | - | 1336000500 |
| | Screw | AC200V | 50/60Hz | - | 1336000600 |
| | Screw | AC220V | 50/60Hz | - | 1336000700 |
| | Screw | AC230V | 50/60Hz | - | 1336000800 |
| | Screw | AC240V | 50/60Hz | - | 1336000900 |
| | Screw | AC380V | 50/60Hz | - | 1336001000 |
| | Screw | AC400V | 50/60Hz | - | 1336001100 |
| | Screw | AC415V | 50/60Hz | - | 1336001200 |
| | Screw | AC440V | 50/60Hz | - | 1336001300 |
| | Screw | AC500V | 50/60Hz | - | 1336001400 |
| | Screw | AC550V | 50/60Hz | - | 1336001500 |
| | Screw | AC24V | 50Hz | - | 1336001600 |
| | Screw | AC36V | 50Hz | - | 1336001700 |
| | Screw | AC42V | 50Hz | - | 1336001800 |
| | Screw | AC48V | 50Hz | - | 1336001900 |
| | Screw | AC80V | 50Hz | - | 1336002000 |
| | Screw | AC100V | 50Hz | - | 1336002100 |
| | Screw | AC110V | 50Hz | - | 1336002200 |
| | Screw | AC220V | 50Hz | - | 1336002300 |
| | Screw | AC230V | 50Hz | - | 1336002400 |
| | Screw | AC240V | 50Hz | - | 1336002500 |
| | Screw | AC380V | 50Hz | - | 1336002600 |
| | Screw | AC400V | 50Hz | - | 1336002700 |
| | Screw | AC415V | 50Hz | - | 1336002800 |
| | Screw | AC440V | 50Hz | - | 1336002900 |
| | Screw | AC500V | 50Hz | - | 1336003000 |
| | Screw | AC550V | 50Hz | - | 1336003100 |
| | Screw | AC24V | 60Hz | - | 1336003200 |
| | Screw | AC48V | 60Hz | - | 1336003300 |
| | Screw | AC100V | 60Hz | - | 1336003400 |
| | Screw | AC110V | 60Hz | - | 1336003500 |
| | Screw | AC120V | 60Hz | - | 1336003600 |
| | Screw | AC200V | 60Hz | - | 1336003700 |
| | Screw | AC208V | 60Hz | - | 1336003800 |
| | Screw | AC220V | 60Hz | - | 1336003900 |
| | Screw | AC230V | 60Hz | - | 1336004000 |
| | Screw | AC240V | 60Hz | - | 1336004100 |
| | Screw | AC277V | 60Hz | - | 1336004200 |
| | Screw | AC380V | 60Hz | - | 1336004300 |
| | Screw | AC440V | 60Hz | - | 1336004400 |
| | Screw | AC480V | 60Hz | - | 1336004500 |
| | Screw | AC600V | 60Hz | - | 1336004600 |
| Screw | AC100V, 110V | 50Hz, 60Hz | - | 1336004700 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | - | 1336004800 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | - | 1336004900 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1336005000 | |
| Screw | DC12V | - | - | 1336005100 | |
| Screw | DC20V | - | - | 1336005200 | |
| Screw | DC24V | - | - | 1336005300 | |
| Screw | DC48V | - | - | 1336005400 | |
| Screw | DC60V | - | - | 1336005500 | |
| Screw | DC80V | - | - | 1336005600 | |
| Screw | DC100V | - | - | 1336005700 | |
| Screw | DC110V | - | - | 1336005800 | |
| Screw | DC125V | - | - | 1336005900 | |
| Screw | DC200V | - | - | 1336006000 | |
| Screw | DC250V | - | - | 1336006100 | |
| Screw | DC220V | - | - | 1336006200 | |

Contactors

MC-32a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-32a | Screw | AC24V | 50/60Hz | 1a1b | 1336006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1336006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1336006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1336006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1336006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1336006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1336006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1336007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1336007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1336007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1336007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1336007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1336007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1336007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1336007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1336007800 |
| | Screw | AC36V | 50Hz | 1a1b | 1336007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1336008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1336008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1336008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1336008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1336008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1336008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1336008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1336008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1336008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1336008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1336009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1336009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1336009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1336009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1336009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1336009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1336009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1336009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1336009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1336009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1336010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1336010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1336010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1336010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1336010400 |
| Screw | AC380V | 60Hz | 1a1b | 1336010500 | |
| Screw | AC440V | 60Hz | 1a1b | 1336010600 | |
| Screw | AC480V | 60Hz | 1a1b | 1336010700 | |
| Screw | AC600V | 60Hz | 1a1b | 1336010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1336010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1336011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1336011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1336011200 | |
| Screw | DC12V | - | 1a1b | 1336011300 | |
| Screw | DC20V | - | 1a1b | 1336011400 | |
| Screw | DC24V | - | 1a1b | 1336011500 | |
| Screw | DC48V | - | 1a1b | 1336011600 | |
| Screw | DC60V | - | 1a1b | 1336011700 | |
| Screw | DC80V | - | 1a1b | 1336011800 | |
| Screw | DC100V | - | 1a1b | 1336011900 | |
| Screw | DC110V | - | 1a1b | 1336012000 | |
| Screw | DC125V | - | 1a1b | 1336012100 | |
| Screw | DC200V | - | 1a1b | 1336012200 | |
| Screw | DC220V | - | 1a1b | 1336012300 | |
| Screw | DC250V | - | 1a1b | 1336012400 | |

Contactors

MC-32a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-32a | Screw | AC24V | 50/60Hz | 2a2b | 1336012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1336012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1336012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1336012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1336012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1336013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1336013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1336013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1336013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1336013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1336013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1336013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1336013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1336013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1336013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1336014000 |
| | Screw | AC36V | 50Hz | 2a2b | 1336014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1336014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1336014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1336014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1336014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1336014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1336014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1336014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1336014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1336015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1336015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1336015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1336015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1336015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1336015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1336015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1336015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1336015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1336015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1336016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1336016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1336016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1336016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1336016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1336016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1336016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1336016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1336016800 |
| | Screw | AC480V | 60Hz | 2a2b | 1336016900 |
| Screw | AC600V | 60Hz | 2a2b | 1336017000 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1336017100 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1336017200 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1336017300 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1336017400 | |
| Screw | DC12V | - | 2a2b | 1336017500 | |
| Screw | DC20V | - | 2a2b | 1336017600 | |
| Screw | DC24V | - | 2a2b | 1336017700 | |
| Screw | DC48V | - | 2a2b | 1336017800 | |
| Screw | DC60V | - | 2a2b | 1336017900 | |
| Screw | DC80V | - | 2a2b | 1336018000 | |
| Screw | DC100V | - | 2a2b | 1336018100 | |
| Screw | DC110V | - | 2a2b | 1336018200 | |
| Screw | DC125V | - | 2a2b | 1336018300 | |
| Screw | DC200V | - | 2a2b | 1336018400 | |
| Screw | DC220V | - | 2a2b | 1336018500 | |
| Screw | DC250V | - | 2a2b | 1336018600 | |

Contactors

MC-40a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-40a | Screw | AC24V | 50/60Hz | - | 1337000100 |
| | Screw | AC48V | 50/60Hz | - | 1337000200 |
| | Screw | AC100V | 50/60Hz | - | 1337000300 |
| | Screw | AC110V | 50/60Hz | - | 1337000400 |
| | Screw | AC120V | 50/60Hz | - | 1337000500 |
| | Screw | AC200V | 50/60Hz | - | 1337000600 |
| | Screw | AC220V | 50/60Hz | - | 1337000700 |
| | Screw | AC230V | 50/60Hz | - | 1337000800 |
| | Screw | AC240V | 50/60Hz | - | 1337000900 |
| | Screw | AC380V | 50/60Hz | - | 1337001000 |
| | Screw | AC400V | 50/60Hz | - | 1337001100 |
| | Screw | AC415V | 50/60Hz | - | 1337001200 |
| | Screw | AC440V | 50/60Hz | - | 1337001300 |
| | Screw | AC500V | 50/60Hz | - | 1337001400 |
| | Screw | AC550V | 50/60Hz | - | 1337001500 |
| | Screw | AC24V | 50Hz | - | 1337001600 |
| | Screw | AC32V | 50Hz | - | 1337018700 |
| | Screw | AC36V | 50Hz | - | 1337001700 |
| | Screw | AC42V | 50Hz | - | 1337001800 |
| | Screw | AC48V | 50Hz | - | 1337001900 |
| | Screw | AC80V | 50Hz | - | 1337002000 |
| | Screw | AC100V | 50Hz | - | 1337002100 |
| | Screw | AC110V | 50Hz | - | 1337002200 |
| | Screw | AC220V | 50Hz | - | 1337002300 |
| | Screw | AC230V | 50Hz | - | 1337002400 |
| | Screw | AC240V | 50Hz | - | 1337002500 |
| | Screw | AC380V | 50Hz | - | 1337002600 |
| | Screw | AC400V | 50Hz | - | 1337002700 |
| | Screw | AC415V | 50Hz | - | 1337002800 |
| | Screw | AC440V | 50Hz | - | 1337002900 |
| | Screw | AC500V | 50Hz | - | 1337003000 |
| | Screw | AC550V | 50Hz | - | 1337003100 |
| | Screw | AC24V | 60Hz | - | 1337003200 |
| | Screw | AC48V | 60Hz | - | 1337003300 |
| | Screw | AC100V | 60Hz | - | 1337003400 |
| | Screw | AC110V | 60Hz | - | 1337003500 |
| | Screw | AC120V | 60Hz | - | 1337003600 |
| | Screw | AC200V | 60Hz | - | 1337003700 |
| | Screw | AC208V | 60Hz | - | 1337003800 |
| | Screw | AC220V | 60Hz | - | 1337003900 |
| | Screw | AC230V | 60Hz | - | 1337004000 |
| | Screw | AC240V | 60Hz | - | 1337004100 |
| | Screw | AC277V | 60Hz | - | 1337004200 |
| | Screw | AC380V | 60Hz | - | 1337004300 |
| | Screw | AC440V | 60Hz | - | 1337004400 |
| Screw | AC480V | 60Hz | - | 1337004500 | |
| Screw | AC600V | 60Hz | - | 1337004600 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | - | 1337004700 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | - | 1337004800 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | - | 1337004900 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1337005000 | |
| Screw | DC12V | - | - | 1337005100 | |
| Screw | DC20V | - | - | 1337005200 | |
| Screw | DC24V | - | - | 1337005300 | |
| Screw | DC48V | - | - | 1337005400 | |
| Screw | DC60V | - | - | 1337005500 | |
| Screw | DC80V | - | - | 1337005600 | |
| Screw | DC100V | - | - | 1337005700 | |
| Screw | DC110V | - | - | 1337005800 | |
| Screw | DC125V | - | - | 1337005900 | |
| Screw | DC200V | - | - | 1337006000 | |
| Screw | DC250V | - | - | 1337006100 | |
| Screw | DC220V | - | - | 1337006200 | |

Contactors

MC-40a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-40a | Screw | AC24V | 50/60Hz | 1a1b | 1337006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1337006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1337006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1337006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1337006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1337006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1337006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1337007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1337007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1337007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1337007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1337007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1337007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1337007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1337007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1337007800 |
| | Screw | AC32V | 50Hz | 1a1b | 1337018800 |
| | Screw | AC36V | 50Hz | 1a1b | 1337007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1337008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1337008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1337008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1337008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1337008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1337008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1337008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1337008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1337008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1337008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1337009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1337009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1337009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1337009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1337009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1337009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1337009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1337009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1337009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1337009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1337010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1337010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1337010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1337010300 |
| Screw | AC277V | 60Hz | 1a1b | 1337010400 | |
| Screw | AC380V | 60Hz | 1a1b | 1337010500 | |
| Screw | AC440V | 60Hz | 1a1b | 1337010600 | |
| Screw | AC480V | 60Hz | 1a1b | 1337010700 | |
| Screw | AC600V | 60Hz | 1a1b | 1337010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1337010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1337011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1337011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1337011200 | |
| Screw | DC12V | - | 1a1b | 1337011300 | |
| Screw | DC20V | - | 1a1b | 1337011400 | |
| Screw | DC24V | - | 1a1b | 1337011500 | |
| Screw | DC48V | - | 1a1b | 1337011600 | |
| Screw | DC60V | - | 1a1b | 1337011700 | |
| Screw | DC80V | - | 1a1b | 1337011800 | |
| Screw | DC100V | - | 1a1b | 1337011900 | |
| Screw | DC110V | - | 1a1b | 1337012000 | |
| Screw | DC125V | - | 1a1b | 1337012100 | |
| Screw | DC200V | - | 1a1b | 1337012200 | |
| Screw | DC220V | - | 1a1b | 1337012300 | |
| Screw | DC250V | - | 1a1b | 1337012400 | |

Contactors

MC-40a screw only type



40AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-40a | Screw | AC24V | 50/60Hz | 2a2b | 1337012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1337012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1337012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1337012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1337012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1337013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1337013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1337013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1337013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1337013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1337013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1337013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1337013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1337013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1337013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1337014000 |
| | Screw | AC32V | 50Hz | 2a2b | 1337018900 |
| | Screw | AC36V | 50Hz | 2a2b | 1337014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1337014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1337014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1337014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1337014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1337014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1337014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1337014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1337014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1337015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1337015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1337015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1337015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1337015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1337015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1337015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1337015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1337015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1337015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1337016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1337016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1337016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1337016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1337016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1337016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1337016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1337016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1337016800 |
| Screw | AC480V | 60Hz | 2a2b | 1337016900 | |
| Screw | AC600V | 60Hz | 2a2b | 1337017000 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1337017100 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1337017200 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1337017300 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1337017400 | |
| Screw | DC12V | - | 2a2b | 1337017500 | |
| Screw | DC20V | - | 2a2b | 1337017600 | |
| Screw | DC24V | - | 2a2b | 1337017700 | |
| Screw | DC48V | - | 2a2b | 1337017800 | |
| Screw | DC60V | - | 2a2b | 1337017900 | |
| Screw | DC80V | - | 2a2b | 1337018000 | |
| Screw | DC100V | - | 2a2b | 1337018100 | |
| Screw | DC110V | - | 2a2b | 1337018200 | |
| Screw | DC125V | - | 2a2b | 1337018300 | |
| Screw | DC200V | - | 2a2b | 1337018400 | |
| Screw | DC220V | - | 2a2b | 1337018500 | |
| Screw | DC250V | - | 2a2b | 1337018600 | |

Contactors

MC-50a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-50a | Screw | AC24V | 50/60Hz | - | 1338000100 |
| | Screw | AC48V | 50/60Hz | - | 1338000200 |
| | Screw | AC100V | 50/60Hz | - | 1338000300 |
| | Screw | AC110V | 50/60Hz | - | 1338000400 |
| | Screw | AC120V | 50/60Hz | - | 1338000500 |
| | Screw | AC200V | 50/60Hz | - | 1338000600 |
| | Screw | AC220V | 50/60Hz | - | 1338000700 |
| | Screw | AC230V | 50/60Hz | - | 1338000800 |
| | Screw | AC240V | 50/60Hz | - | 1338018700 |
| | Screw | AC380V | 50/60Hz | - | 1338001000 |
| | Screw | AC500V | 50/60Hz | - | 1338001100 |
| | Screw | AC415V | 50/60Hz | - | 1338001200 |
| | Screw | AC440V | 50/60Hz | - | 1338001300 |
| | Screw | AC400V | 50/60Hz | - | 1338018800 |
| | Screw | AC550V | 50/60Hz | - | 1338001500 |
| | Screw | AC24V | 50Hz | - | 1338001600 |
| | Screw | AC36V | 50Hz | - | 1338001700 |
| | Screw | AC42V | 50Hz | - | 1338001800 |
| | Screw | AC48V | 50Hz | - | 1338001900 |
| | Screw | AC80V | 50Hz | - | 1338002000 |
| | Screw | AC100V | 50Hz | - | 1338002100 |
| | Screw | AC110V | 50Hz | - | 1338002200 |
| | Screw | AC220V | 50Hz | - | 1338002300 |
| | Screw | AC230V | 50Hz | - | 1338002400 |
| | Screw | AC240V | 50Hz | - | 1338002500 |
| | Screw | AC380V | 50Hz | - | 1338002600 |
| | Screw | AC500V | 50Hz | - | 1338002700 |
| | Screw | AC415V | 50Hz | - | 1338002800 |
| | Screw | AC440V | 50Hz | - | 1338002900 |
| | Screw | AC400V | 50Hz | - | 1338018900 |
| | Screw | AC550V | 50Hz | - | 1338003100 |
| | Screw | AC24V | 60Hz | - | 1338003200 |
| | Screw | AC48V | 60Hz | - | 1338003300 |
| | Screw | AC100V | 60Hz | - | 1338003400 |
| | Screw | AC110V | 60Hz | - | 1338003500 |
| | Screw | AC120V | 60Hz | - | 1338003600 |
| | Screw | AC200V | 60Hz | - | 1338003700 |
| | Screw | AC208V | 60Hz | - | 1338003800 |
| | Screw | AC220V | 60Hz | - | 1338003900 |
| | Screw | AC230V | 60Hz | - | 1338004000 |
| | Screw | AC240V | 60Hz | - | 1338004100 |
| | Screw | AC277V | 60Hz | - | 1338004200 |
| | Screw | AC380V | 60Hz | - | 1338004300 |
| | Screw | AC440V | 60Hz | - | 1338004400 |
| | Screw | AC480V | 60Hz | - | 1338004500 |
| | Screw | AC600V | 60Hz | - | 1338004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | - | 1338004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | - | 1338004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | - | 1338004900 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | - | 1338005000 |
| Screw | DC12V | - | - | 1338005100 | |
| Screw | DC20V | - | - | 1338005200 | |
| Screw | DC24V | - | - | 1338005300 | |
| Screw | DC48V | - | - | 1338005400 | |
| Screw | DC60V | - | - | 1338005500 | |
| Screw | DC80V | - | - | 1338005600 | |
| Screw | DC100V | - | - | 1338005700 | |
| Screw | DC110V | - | - | 1338005800 | |
| Screw | DC125V | - | - | 1338005900 | |
| Screw | DC200V | - | - | 1338006000 | |
| Screw | DC250V | - | - | 1338006100 | |
| Screw | DC220V | - | - | 1338006200 | |

Contactors

MC-50a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-50a | Screw | AC24V | 50/60Hz | 1a1b | 1338006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1338006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1338006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1338006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1338006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1338006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1338006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1338007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1338007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1338007200 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1338007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1338007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1338007500 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1338019000 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1338007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1338007800 |
| | Screw | AC36V | 50Hz | 1a1b | 1338007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1338008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1338008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1338008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1338008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1338008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1338008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1338008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1338008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1338008800 |
| | Screw | AC500V | 50Hz | 1a1b | 1338008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1338009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1338009100 |
| | Screw | AC400V | 50Hz | 1a1b | 1338019100 |
| | Screw | AC550V | 50Hz | 1a1b | 1338009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1338009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1338009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1338009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1338009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1338009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1338009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1338010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1338010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1338010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1338010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1338010400 |
| | Screw | AC380V | 60Hz | 1a1b | 1338010500 |
| | Screw | AC440V | 60Hz | 1a1b | 1338010600 |
| | Screw | AC480V | 60Hz | 1a1b | 1338010700 |
| Screw | AC600V | 60Hz | 1a1b | 1338010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1338010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1338011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1338011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1338011200 | |
| Screw | DC12V | - | 1a1b | 1338011300 | |
| Screw | DC20V | - | 1a1b | 1338011400 | |
| Screw | DC24V | - | 1a1b | 1338011500 | |
| Screw | DC48V | - | 1a1b | 1338011600 | |
| Screw | DC60V | - | 1a1b | 1338011700 | |
| Screw | DC80V | - | 1a1b | 1338011800 | |
| Screw | DC100V | - | 1a1b | 1338011900 | |
| Screw | DC110V | - | 1a1b | 1338012000 | |
| Screw | DC125V | - | 1a1b | 1338012100 | |
| Screw | DC200V | - | 1a1b | 1338012200 | |
| Screw | DC220V | - | 1a1b | 1338012300 | |
| Screw | DC250V | - | 1a1b | 1338012400 | |

Contactors

MC-50a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-50a | Screw | AC24V | 50/60Hz | 2a2b | 1338012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1338012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1338012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1338012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1338012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1338013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1338013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1338013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1338013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1338013400 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1338013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1338013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1338013700 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1338019200 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1338013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1338014000 |
| | Screw | AC36V | 50Hz | 2a2b | 1338014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1338014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1338014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1338014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1338014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1338014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1338014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1338014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1338014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1338015000 |
| | Screw | AC500V | 50Hz | 2a2b | 1338015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1338015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1338015300 |
| | Screw | AC400V | 50Hz | 2a2b | 1338019300 |
| | Screw | AC550V | 50Hz | 2a2b | 1338015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1338015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1338015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1338015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1338015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1338016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1338016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1338016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1338016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1338016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1338016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1338016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1338016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1338016800 |
| | Screw | AC480V | 60Hz | 2a2b | 1338016900 |
| | Screw | AC600V | 60Hz | 2a2b | 1338017000 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1338017100 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1338017200 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1338017300 |
| | Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1338017400 |
| Screw | DC12V | - | 2a2b | 1338017500 | |
| Screw | DC20V | - | 2a2b | 1338017600 | |
| Screw | DC24V | - | 2a2b | 1338017700 | |
| Screw | DC48V | - | 2a2b | 1338017800 | |
| Screw | DC60V | - | 2a2b | 1338017900 | |
| Screw | DC80V | - | 2a2b | 1338018000 | |
| Screw | DC100V | - | 2a2b | 1338018100 | |
| Screw | DC110V | - | 2a2b | 1338018200 | |
| Screw | DC125V | - | 2a2b | 1338018300 | |
| Screw | DC200V | - | 2a2b | 1338018400 | |
| Screw | DC220V | - | 2a2b | 1338018500 | |
| Screw | DC250V | - | 2a2b | 1338018600 | |

Contactors

MC-65a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-65a | Screw | AC24V | 50/60Hz | - | 1339000100 |
| | Screw | AC48V | 50/60Hz | - | 1339000200 |
| | Screw | AC100V | 50/60Hz | - | 1339000300 |
| | Screw | AC110V | 50/60Hz | - | 1339000400 |
| | Screw | AC120V | 50/60Hz | - | 1339000500 |
| | Screw | AC200V | 50/60Hz | - | 1339000600 |
| | Screw | AC220V | 50/60Hz | - | 1339000700 |
| | Screw | AC230V | 50/60Hz | - | 1339000800 |
| | Screw | AC240V | 50/60Hz | - | 1339019000 |
| | Screw | AC380V | 50/60Hz | - | 1339001000 |
| | Screw | AC400V | 50/60Hz | - | 1339001100 |
| | Screw | AC415V | 50/60Hz | - | 1339001200 |
| | Screw | AC440V | 50/60Hz | - | 1339001300 |
| | Screw | AC500V | 50/60Hz | - | 1339001400 |
| | Screw | AC550V | 50/60Hz | - | 1339001500 |
| | Screw | AC24V | 50Hz | - | 1339001600 |
| | Screw | AC36V | 50Hz | - | 1339001700 |
| | Screw | AC42V | 50Hz | - | 1339001800 |
| | Screw | AC48V | 50Hz | - | 1339001900 |
| | Screw | AC80V | 50Hz | - | 1339002000 |
| | Screw | AC100V | 50Hz | - | 1339002100 |
| | Screw | AC110V | 50Hz | - | 1339002200 |
| | Screw | AC220V | 50Hz | - | 1339002300 |
| | Screw | AC230V | 50Hz | - | 1339002400 |
| | Screw | AC240V | 50Hz | - | 1339002500 |
| | Screw | AC380V | 50Hz | - | 1339002600 |
| | Screw | AC400V | 50Hz | - | 1339002700 |
| | Screw | AC415V | 50Hz | - | 1339002800 |
| | Screw | AC440V | 50Hz | - | 1339002900 |
| | Screw | AC500V | 50Hz | - | 1339003000 |
| | Screw | AC550V | 50Hz | - | 1339003100 |
| | Screw | AC24V | 60Hz | - | 1339003200 |
| | Screw | AC48V | 60Hz | - | 1339003300 |
| | Screw | AC100V | 60Hz | - | 1339003400 |
| | Screw | AC110V | 60Hz | - | 1339003500 |
| | Screw | AC120V | 60Hz | - | 1339003600 |
| | Screw | AC200V | 60Hz | - | 1339003700 |
| | Screw | AC208V | 60Hz | - | 1339003800 |
| | Screw | AC220V | 60Hz | - | 1339003900 |
| | Screw | AC230V | 60Hz | - | 1339004000 |
| | Screw | AC240V | 60Hz | - | 1339004100 |
| | Screw | AC277V | 60Hz | - | 1339004200 |
| | Screw | AC380V | 60Hz | - | 1339004300 |
| | Screw | AC440V | 60Hz | - | 1339004400 |
| | Screw | AC480V | 60Hz | - | 1339004500 |
| Screw | AC600V | 60Hz | - | 1339004600 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | - | 1339004700 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | - | 1339004800 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | - | 1339004900 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1339005000 | |
| Screw | DC12V | - | - | 1339005100 | |
| Screw | DC20V | - | - | 1339005200 | |
| Screw | DC24V | - | - | 1339005300 | |
| Screw | DC48V | - | - | 1339005400 | |
| Screw | DC60V | - | - | 1339005500 | |
| Screw | DC80V | - | - | 1339005600 | |
| Screw | DC100V | - | - | 1339005700 | |
| Screw | DC110V | - | - | 1339005800 | |
| Screw | DC125V | - | - | 1339005900 | |
| Screw | DC200V | - | - | 1339006000 | |
| Screw | DC250V | - | - | 1339006100 | |
| Screw | DC220V | - | - | 1339006200 | |

Contactors

MC-65a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-65a | Screw | AC24V | 50/60Hz | 1a1b | 1339006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1339006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1339006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1339006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1339006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1339006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1339006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1339007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1339007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1339007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1339007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1339007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1339007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1339007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1339007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1339007800 |
| | Screw | AC36V | 50Hz | 1a1b | 1339007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1339008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1339008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1339008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1339008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1339008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1339008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1339008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1339008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1339008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1339008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1339009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1339009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1339009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1339009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1339009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1339009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1339009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1339009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1339009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1339009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1339010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1339010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1339010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1339010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1339010400 |
| | Screw | AC380V | 60Hz | 1a1b | 1339010500 |
| | Screw | AC440V | 60Hz | 1a1b | 1339010600 |
| | Screw | AC480V | 60Hz | 1a1b | 1339010700 |
| Screw | AC600V | 60Hz | 1a1b | 1339010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1339010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1339011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1339011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1339011200 | |
| Screw | DC12V | - | 1a1b | 1339011300 | |
| Screw | DC20V | - | 1a1b | 1339011400 | |
| Screw | DC24V | - | 1a1b | 1339011500 | |
| Screw | DC48V | - | 1a1b | 1339011600 | |
| Screw | DC60V | - | 1a1b | 1339011700 | |
| Screw | DC80V | - | 1a1b | 1339011800 | |
| Screw | DC100V | - | 1a1b | 1339011900 | |
| Screw | DC110V | - | 1a1b | 1339012000 | |
| Screw | DC125V | - | 1a1b | 1339012100 | |
| Screw | DC200V | - | 1a1b | 1339012200 | |
| Screw | DC220V | - | 1a1b | 1339012300 | |
| Screw | DC250V | - | 1a1b | 1339012400 | |

Contactors

MC-65a screw only type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-65a | Screw | AC24V | 50/60Hz | 2a2b | 1339012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1339012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1339012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1339012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1339012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1339013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1339013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1339013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1339013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1339013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1339013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1339013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1339013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1339013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1339013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1339014000 |
| | Screw | AC36V | 50Hz | 2a2b | 1339014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1339014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1339014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1339014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1339014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1339014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1339014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1339014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1339014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1339015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1339015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1339015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1339015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1339015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1339015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1339015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1339015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1339015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1339015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1339016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1339016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1339016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1339016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1339016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1339016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1339016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1339016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1339016800 |
| | Screw | AC480V | 60Hz | 2a2b | 1339016900 |
| Screw | AC600V | 60Hz | 2a2b | 1339017000 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1339017100 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1339017200 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1339017300 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1339017400 | |
| Screw | DC12V | - | 2a2b | 1339017500 | |
| Screw | DC20V | - | 2a2b | 1339017600 | |
| Screw | DC24V | - | 2a2b | 1339017700 | |
| Screw | DC48V | - | 2a2b | 1339017800 | |
| Screw | DC60V | - | 2a2b | 1339017900 | |
| Screw | DC80V | - | 2a2b | 1339018000 | |
| Screw | DC100V | - | 2a2b | 1339018100 | |
| Screw | DC110V | - | 2a2b | 1339018200 | |
| Screw | DC125V | - | 2a2b | 1339018300 | |
| Screw | DC200V | - | 2a2b | 1339018400 | |
| Screw | DC220V | - | 2a2b | 1339018500 | |
| Screw | DC250V | - | 2a2b | 1339018600 | |

Contactors

MC-75a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-75a | Screw | AC24V | 50/60Hz | - | 1340000100 |
| | Screw | AC48V | 50/60Hz | - | 1340000200 |
| | Screw | AC100V | 50/60Hz | - | 1340000300 |
| | Screw | AC110V | 50/60Hz | - | 1340000400 |
| | Screw | AC120V | 50/60Hz | - | 1340000500 |
| | Screw | AC200V | 50/60Hz | - | 1340000600 |
| | Screw | AC220V | 50/60Hz | - | 1340000700 |
| | Screw | AC230V | 50/60Hz | - | 1340000800 |
| | Screw | AC240V | 50/60Hz | - | 1340019100 |
| | Screw | AC380V | 50/60Hz | - | 1340001000 |
| | Screw | AC400V | 50/60Hz | - | 1340019000 |
| | Screw | AC415V | 50/60Hz | - | 1340001200 |
| | Screw | AC440V | 50/60Hz | - | 1340001300 |
| | Screw | AC500V | 50/60Hz | - | 1340001400 |
| | Screw | AC550V | 50/60Hz | - | 1340001500 |
| | Screw | AC24V | 50Hz | - | 1340001600 |
| | Screw | AC32V | 50Hz | - | 1340018700 |
| | Screw | AC36V | 50Hz | - | 1340001700 |
| | Screw | AC42V | 50Hz | - | 1340001800 |
| | Screw | AC48V | 50Hz | - | 1340001900 |
| | Screw | AC80V | 50Hz | - | 1340002000 |
| | Screw | AC100V | 50Hz | - | 1340002100 |
| | Screw | AC110V | 50Hz | - | 1340002200 |
| | Screw | AC220V | 50Hz | - | 1340002300 |
| | Screw | AC230V | 50Hz | - | 1340002400 |
| | Screw | AC240V | 50Hz | - | 1340002500 |
| | Screw | AC380V | 50Hz | - | 1340002600 |
| | Screw | AC400V | 50Hz | - | 1340002700 |
| | Screw | AC415V | 50Hz | - | 1340002800 |
| | Screw | AC440V | 50Hz | - | 1340002900 |
| | Screw | AC500V | 50Hz | - | 1340003000 |
| | Screw | AC550V | 50Hz | - | 1340003100 |
| | Screw | AC24V | 60Hz | - | 1340003200 |
| | Screw | AC48V | 60Hz | - | 1340003300 |
| | Screw | AC100V | 60Hz | - | 1340003400 |
| | Screw | AC110V | 60Hz | - | 1340003500 |
| | Screw | AC120V | 60Hz | - | 1340003600 |
| | Screw | AC200V | 60Hz | - | 1340003700 |
| | Screw | AC208V | 60Hz | - | 1340003800 |
| | Screw | AC220V | 60Hz | - | 1340003900 |
| | Screw | AC230V | 60Hz | - | 1340004000 |
| | Screw | AC240V | 60Hz | - | 1340004100 |
| | Screw | AC277V | 60Hz | - | 1340004200 |
| | Screw | AC380V | 60Hz | - | 1340004300 |
| | Screw | AC440V | 60Hz | - | 1340004400 |
| | Screw | AC480V | 60Hz | - | 1340004500 |
| | Screw | AC600V | 60Hz | - | 1340004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | - | 1340004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | - | 1340004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | - | 1340004900 |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1340005000 | |
| Screw | DC12V | - | - | 1340005100 | |
| Screw | DC20V | - | - | 1340005200 | |
| Screw | DC24V | - | - | 1340005300 | |
| Screw | DC48V | - | - | 1340005400 | |
| Screw | DC60V | - | - | 1340005500 | |
| Screw | DC80V | - | - | 1340005600 | |
| Screw | DC100V | - | - | 1340005700 | |
| Screw | DC110V | - | - | 1340005800 | |
| Screw | DC125V | - | - | 1340005900 | |
| Screw | DC200V | - | - | 1340006000 | |
| Screw | DC250V | - | - | 1340006100 | |
| Screw | DC220V | - | - | 1340006200 | |

Contactors

MC-75a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-75a | Screw | AC24V | 50/60Hz | 1a1b | 1340006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1340006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1340006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1340006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1340006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1340006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1340006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1340007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1340007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1340007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1340007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1340007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1340007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1340007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1340007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1340007800 |
| | Screw | AC32V | 50Hz | 1a1b | 1340018800 |
| | Screw | AC36V | 50Hz | 1a1b | 1340007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1340008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1340008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1340008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1340008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1340008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1340008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1340008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1340008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1340008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1340008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1340009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1340009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1340009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1340009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1340009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1340009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1340009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1340009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1340009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1340009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1340010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1340010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1340010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1340010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1340010400 |
| | Screw | AC380V | 60Hz | 1a1b | 1340010500 |
| | Screw | AC440V | 60Hz | 1a1b | 1340010600 |
| Screw | AC480V | 60Hz | 1a1b | 1340010700 | |
| Screw | AC600V | 60Hz | 1a1b | 1340010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1340010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1340011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1340011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1340011200 | |
| Screw | DC12V | - | 1a1b | 1340011300 | |
| Screw | DC20V | - | 1a1b | 1340011400 | |
| Screw | DC24V | - | 1a1b | 1340011500 | |
| Screw | DC48V | - | 1a1b | 1340011600 | |
| Screw | DC60V | - | 1a1b | 1340011700 | |
| Screw | DC80V | - | 1a1b | 1340011800 | |
| Screw | DC100V | - | 1a1b | 1340011900 | |
| Screw | DC110V | - | 1a1b | 1340012000 | |
| Screw | DC125V | - | 1a1b | 1340012100 | |
| Screw | DC200V | - | 1a1b | 1340012200 | |
| Screw | DC220V | - | 1a1b | 1340012300 | |
| Screw | DC250V | - | 1a1b | 1340012400 | |

Contactors

MC-75a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-75a | Screw | AC24V | 50/60Hz | 2a2b | 1340012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1340012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1340012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1340012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1340012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1340013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1340013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1340013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1340013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1340013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1340013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1340013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1340013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1340013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1340013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1340014000 |
| | Screw | AC32V | 50Hz | 2a2b | 1340018900 |
| | Screw | AC36V | 50Hz | 2a2b | 1340014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1340014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1340014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1340014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1340014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1340014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1340014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1340014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1340014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1340015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1340015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1340015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1340015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1340015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1340015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1340015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1340015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1340015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1340015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1340016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1340016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1340016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1340016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1340016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1340016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1340016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1340016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1340016800 |
| Screw | AC480V | 60Hz | 2a2b | 1340016900 | |
| Screw | AC600V | 60Hz | 2a2b | 1340017000 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1340017100 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1340017200 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1340017300 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1340017400 | |
| Screw | DC12V | - | 2a2b | 1340017500 | |
| Screw | DC20V | - | 2a2b | 1340017600 | |
| Screw | DC24V | - | 2a2b | 1340017700 | |
| Screw | DC48V | - | 2a2b | 1340017800 | |
| Screw | DC60V | - | 2a2b | 1340017900 | |
| Screw | DC80V | - | 2a2b | 1340018000 | |
| Screw | DC100V | - | 2a2b | 1340018100 | |
| Screw | DC110V | - | 2a2b | 1340018200 | |
| Screw | DC125V | - | 2a2b | 1340018300 | |
| Screw | DC200V | - | 2a2b | 1340018400 | |
| Screw | DC220V | - | 2a2b | 1340018500 | |
| Screw | DC250V | - | 2a2b | 1340018600 | |

Contactors

MC-85a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-85a | Screw | AC24V | 50/60Hz | - | 1341000100 |
| | Screw | AC48V | 50/60Hz | - | 1341000200 |
| | Screw | AC100V | 50/60Hz | - | 1341000300 |
| | Screw | AC110V | 50/60Hz | - | 1341000400 |
| | Screw | AC120V | 50/60Hz | - | 1341000500 |
| | Screw | AC200V | 50/60Hz | - | 1341000600 |
| | Screw | AC220V | 50/60Hz | - | 1341000700 |
| | Screw | AC230V | 50/60Hz | - | 1341000800 |
| | Screw | AC240V | 50/60Hz | - | 1341019000 |
| | Screw | AC380V | 50/60Hz | - | 1341001000 |
| | Screw | AC400V | 50/60Hz | - | 1341019100 |
| | Screw | AC415V | 50/60Hz | - | 1341001200 |
| | Screw | AC440V | 50/60Hz | - | 1341001300 |
| | Screw | AC500V | 50/60Hz | - | 1341001400 |
| | Screw | AC550V | 50/60Hz | - | 1341001500 |
| | Screw | AC24V | 50Hz | - | 1341001600 |
| | Screw | AC32V | 50Hz | - | 1341018700 |
| | Screw | AC36V | 50Hz | - | 1341001700 |
| | Screw | AC42V | 50Hz | - | 1341001800 |
| | Screw | AC48V | 50Hz | - | 1341001900 |
| | Screw | AC80V | 50Hz | - | 1341002000 |
| | Screw | AC100V | 50Hz | - | 1341002100 |
| | Screw | AC110V | 50Hz | - | 1341002200 |
| | Screw | AC220V | 50Hz | - | 1341002300 |
| | Screw | AC230V | 50Hz | - | 1341002400 |
| | Screw | AC240V | 50Hz | - | 1341002500 |
| | Screw | AC380V | 50Hz | - | 1341002600 |
| | Screw | AC400V | 50Hz | - | 1341002700 |
| | Screw | AC415V | 50Hz | - | 1341002800 |
| | Screw | AC440V | 50Hz | - | 1341002900 |
| | Screw | AC500V | 50Hz | - | 1341003000 |
| | Screw | AC550V | 50Hz | - | 1341003100 |
| | Screw | AC24V | 60Hz | - | 1341003200 |
| | Screw | AC48V | 60Hz | - | 1341003300 |
| | Screw | AC100V | 60Hz | - | 1341003400 |
| | Screw | AC110V | 60Hz | - | 1341003500 |
| | Screw | AC120V | 60Hz | - | 1341003600 |
| | Screw | AC200V | 60Hz | - | 1341003700 |
| | Screw | AC208V | 60Hz | - | 1341003800 |
| | Screw | AC220V | 60Hz | - | 1341003900 |
| | Screw | AC230V | 60Hz | - | 1341004000 |
| | Screw | AC240V | 60Hz | - | 1341004100 |
| | Screw | AC277V | 60Hz | - | 1341004200 |
| | Screw | AC380V | 60Hz | - | 1341004300 |
| | Screw | AC440V | 60Hz | - | 1341004400 |
| | Screw | AC480V | 60Hz | - | 1341004500 |
| | Screw | AC600V | 60Hz | - | 1341004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | - | 1341004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | - | 1341004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | - | 1341004900 |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1341005000 | |
| Screw | DC12V | - | - | 1341005100 | |
| Screw | DC20V | - | - | 1341005200 | |
| Screw | DC24V | - | - | 1341005300 | |
| Screw | DC48V | - | - | 1341005400 | |
| Screw | DC60V | - | - | 1341005500 | |
| Screw | DC80V | - | - | 1341005600 | |
| Screw | DC100V | - | - | 1341005700 | |
| Screw | DC110V | - | - | 1341005800 | |
| Screw | DC125V | - | - | 1341005900 | |
| Screw | DC200V | - | - | 1341006000 | |
| Screw | DC250V | - | - | 1341006100 | |
| Screw | DC220V | - | - | 1341006200 | |

Contactors

MC-85a screw only type

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|-----------|--------------|------------|
| MC-85a | Screw | AC24V | 50/60Hz | 1a1b | 1341006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1341006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1341006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1341006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1341006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1341006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1341006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1341007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1341007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1341007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1341007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1341007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1341007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1341007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1341007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1341007800 |
| | Screw | AC32V | 50Hz | 1a1b | 1341018800 |
| | Screw | AC36V | 50Hz | 1a1b | 1341007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1341008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1341008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1341008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1341008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1341008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1341008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1341008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1341008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1341008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1341008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1341009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1341009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1341009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1341009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1341009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1341009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1341009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1341009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1341009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1341009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1341010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1341010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1341010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1341010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1341010400 |
| | Screw | AC380V | 60Hz | 1a1b | 1341010500 |
| | Screw | AC440V | 60Hz | 1a1b | 1341010600 |
| Screw | AC480V | 60Hz | 1a1b | 1341010700 | |
| Screw | AC600V | 60Hz | 1a1b | 1341010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1341010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1341011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1341011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1341011200 | |
| Screw | DC12V | - | 1a1b | 1341011300 | |
| Screw | DC20V | - | 1a1b | 1341011400 | |
| Screw | DC24V | - | 1a1b | 1341011500 | |
| Screw | DC48V | - | 1a1b | 1341011600 | |
| Screw | DC60V | - | 1a1b | 1341011700 | |
| Screw | DC80V | - | 1a1b | 1341011800 | |
| Screw | DC100V | - | 1a1b | 1341011900 | |
| Screw | DC110V | - | 1a1b | 1341012000 | |
| Screw | DC125V | - | 1a1b | 1341012100 | |
| Screw | DC200V | - | 1a1b | 1341012200 | |
| Screw | DC220V | - | 1a1b | 1341012300 | |
| Screw | DC250V | - | 1a1b | 1341012400 | |



100AF

Contactors

MC-85a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-85a | Screw | AC24V | 50/60Hz | 2a2b | 1341012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1341012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1341012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1341012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1341012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1341013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1341013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1341013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1341013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1341013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1341013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1341013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1341013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1341013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1341013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1341014000 |
| | Screw | AC32V | 50Hz | 2a2b | 1341018900 |
| | Screw | AC36V | 50Hz | 2a2b | 1341014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1341014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1341014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1341014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1341014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1341014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1341014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1341014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1341014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1341015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1341015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1341015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1341015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1341015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1341015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1341015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1341015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1341015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1341015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1341016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1341016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1341016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1341016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1341016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1341016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1341016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1341016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1341016800 |
| | Screw | AC480V | 60Hz | 2a2b | 1341016900 |
| | Screw | AC600V | 60Hz | 2a2b | 1341017000 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1341017100 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1341017200 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1341017300 |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1341017400 | |
| Screw | DC12V | - | 2a2b | 1341017500 | |
| Screw | DC20V | - | 2a2b | 1341017600 | |
| Screw | DC24V | - | 2a2b | 1341017700 | |
| Screw | DC48V | - | 2a2b | 1341017800 | |
| Screw | DC60V | - | 2a2b | 1341017900 | |
| Screw | DC80V | - | 2a2b | 1341018000 | |
| Screw | DC100V | - | 2a2b | 1341018100 | |
| Screw | DC110V | - | 2a2b | 1341018200 | |
| Screw | DC125V | - | 2a2b | 1341018300 | |
| Screw | DC200V | - | 2a2b | 1341018400 | |
| Screw | DC220V | - | 2a2b | 1341018500 | |
| Screw | DC250V | - | 2a2b | 1341018600 | |

Contactors

MC-100a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|------------|--------------|------------|
| MC-100a | Screw | AC24V | 50/60Hz | - | 1342000100 |
| | Screw | AC48V | 50/60Hz | - | 1342000200 |
| | Screw | AC100V | 50/60Hz | - | 1342000300 |
| | Screw | AC110V | 50/60Hz | - | 1342000400 |
| | Screw | AC120V | 50/60Hz | - | 1342000500 |
| | Screw | AC200V | 50/60Hz | - | 1342000600 |
| | Screw | AC220V | 50/60Hz | - | 1342000700 |
| | Screw | AC230V | 50/60Hz | - | 1342000800 |
| | Screw | AC240V | 50/60Hz | - | 1342019000 |
| | Screw | AC380V | 50/60Hz | - | 1342001000 |
| | Screw | AC400V | 50/60Hz | - | 1342001100 |
| | Screw | AC415V | 50/60Hz | - | 1342001200 |
| | Screw | AC440V | 50/60Hz | - | 1342001300 |
| | Screw | AC500V | 50/60Hz | - | 1342001400 |
| | Screw | AC550V | 50/60Hz | - | 1342001500 |
| | Screw | AC24V | 50Hz | - | 1342001600 |
| | Screw | AC32V | 50Hz | - | 1342018700 |
| | Screw | AC36V | 50Hz | - | 1342001700 |
| | Screw | AC42V | 50Hz | - | 1342001800 |
| | Screw | AC48V | 50Hz | - | 1342001900 |
| | Screw | AC80V | 50Hz | - | 1342002000 |
| | Screw | AC100V | 50Hz | - | 1342002100 |
| | Screw | AC110V | 50Hz | - | 1342002200 |
| | Screw | AC220V | 50Hz | - | 1342002300 |
| | Screw | AC230V | 50Hz | - | 1342002400 |
| | Screw | AC240V | 50Hz | - | 1342002500 |
| | Screw | AC380V | 50Hz | - | 1342002600 |
| | Screw | AC400V | 50Hz | - | 1342002700 |
| | Screw | AC415V | 50Hz | - | 1342002800 |
| | Screw | AC440V | 50Hz | - | 1342002900 |
| | Screw | AC500V | 50Hz | - | 1342003000 |
| | Screw | AC550V | 50Hz | - | 1342003100 |
| | Screw | AC24V | 60Hz | - | 1342003200 |
| | Screw | AC48V | 60Hz | - | 1342003300 |
| | Screw | AC100V | 60Hz | - | 1342003400 |
| | Screw | AC110V | 60Hz | - | 1342003500 |
| | Screw | AC120V | 60Hz | - | 1342003600 |
| | Screw | AC200V | 60Hz | - | 1342003700 |
| | Screw | AC208V | 60Hz | - | 1342003800 |
| | Screw | AC220V | 60Hz | - | 1342003900 |
| | Screw | AC230V | 60Hz | - | 1342004000 |
| | Screw | AC240V | 60Hz | - | 1342004100 |
| | Screw | AC277V | 60Hz | - | 1342004200 |
| | Screw | AC380V | 60Hz | - | 1342004300 |
| | Screw | AC440V | 60Hz | - | 1342004400 |
| | Screw | AC480V | 60Hz | - | 1342004500 |
| | Screw | AC600V | 60Hz | - | 1342004600 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | - | 1342004700 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | - | 1342004800 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | - | 1342004900 |
| Screw | AC240V, 277V | 50Hz, 60Hz | - | 1342005000 | |
| Screw | DC12V | - | - | 1342005100 | |
| Screw | DC20V | - | - | 1342005200 | |
| Screw | DC24V | - | - | 1342005300 | |
| Screw | DC48V | - | - | 1342005400 | |
| Screw | DC60V | - | - | 1342005500 | |
| Screw | DC80V | - | - | 1342005600 | |
| Screw | DC100V | - | - | 1342005700 | |
| Screw | DC110V | - | - | 1342005800 | |
| Screw | DC125V | - | - | 1342005900 | |
| Screw | DC200V | - | - | 1342006000 | |
| Screw | DC250V | - | - | 1342006100 | |
| Screw | DC220V | - | - | 1342006200 | |

Contactors

MC-100a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|-----------|--------------|------------|
| MC-100a | Screw | AC24V | 50/60Hz | 1a1b | 1342006300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1342006400 |
| | Screw | AC100V | 50/60Hz | 1a1b | 1342006500 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1342006600 |
| | Screw | AC120V | 50/60Hz | 1a1b | 1342006700 |
| | Screw | AC200V | 50/60Hz | 1a1b | 1342006800 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1342006900 |
| | Screw | AC230V | 50/60Hz | 1a1b | 1342007000 |
| | Screw | AC240V | 50/60Hz | 1a1b | 1342007100 |
| | Screw | AC380V | 50/60Hz | 1a1b | 1342007200 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1342007300 |
| | Screw | AC415V | 50/60Hz | 1a1b | 1342007400 |
| | Screw | AC440V | 50/60Hz | 1a1b | 1342007500 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1342007600 |
| | Screw | AC550V | 50/60Hz | 1a1b | 1342007700 |
| | Screw | AC24V | 50Hz | 1a1b | 1342007800 |
| | Screw | AC32V | 50Hz | 1a1b | 1342018800 |
| | Screw | AC36V | 50Hz | 1a1b | 1342007900 |
| | Screw | AC42V | 50Hz | 1a1b | 1342008000 |
| | Screw | AC48V | 50Hz | 1a1b | 1342008100 |
| | Screw | AC80V | 50Hz | 1a1b | 1342008200 |
| | Screw | AC100V | 50Hz | 1a1b | 1342008300 |
| | Screw | AC110V | 50Hz | 1a1b | 1342008400 |
| | Screw | AC220V | 50Hz | 1a1b | 1342008500 |
| | Screw | AC230V | 50Hz | 1a1b | 1342008600 |
| | Screw | AC240V | 50Hz | 1a1b | 1342008700 |
| | Screw | AC380V | 50Hz | 1a1b | 1342008800 |
| | Screw | AC400V | 50Hz | 1a1b | 1342008900 |
| | Screw | AC415V | 50Hz | 1a1b | 1342009000 |
| | Screw | AC440V | 50Hz | 1a1b | 1342009100 |
| | Screw | AC500V | 50Hz | 1a1b | 1342009200 |
| | Screw | AC550V | 50Hz | 1a1b | 1342009300 |
| | Screw | AC24V | 60Hz | 1a1b | 1342009400 |
| | Screw | AC48V | 60Hz | 1a1b | 1342009500 |
| | Screw | AC100V | 60Hz | 1a1b | 1342009600 |
| | Screw | AC110V | 60Hz | 1a1b | 1342009700 |
| | Screw | AC120V | 60Hz | 1a1b | 1342009800 |
| | Screw | AC200V | 60Hz | 1a1b | 1342009900 |
| | Screw | AC208V | 60Hz | 1a1b | 1342010000 |
| | Screw | AC220V | 60Hz | 1a1b | 1342010100 |
| | Screw | AC230V | 60Hz | 1a1b | 1342010200 |
| | Screw | AC240V | 60Hz | 1a1b | 1342010300 |
| | Screw | AC277V | 60Hz | 1a1b | 1342010400 |
| | Screw | AC380V | 60Hz | 1a1b | 1342010500 |
| | Screw | AC440V | 60Hz | 1a1b | 1342010600 |
| Screw | AC480V | 60Hz | 1a1b | 1342010700 | |
| Screw | AC600V | 60Hz | 1a1b | 1342010800 | |
| Screw | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1342010900 | |
| Screw | AC110V, 120V | 50Hz, 60Hz | 1a1b | 1342011000 | |
| Screw | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1342011100 | |
| Screw | AC240V, 277V | 50Hz, 60Hz | 1a1b | 1342011200 | |
| Screw | DC12V | - | 1a1b | 1342011300 | |
| Screw | DC20V | - | 1a1b | 1342011400 | |
| Screw | DC24V | - | 1a1b | 1342011500 | |
| Screw | DC48V | - | 1a1b | 1342011600 | |
| Screw | DC60V | - | 1a1b | 1342011700 | |
| Screw | DC80V | - | 1a1b | 1342011800 | |
| Screw | DC100V | - | 1a1b | 1342011900 | |
| Screw | DC110V | - | 1a1b | 1342012000 | |
| Screw | DC125V | - | 1a1b | 1342012100 | |
| Screw | DC200V | - | 1a1b | 1342012200 | |
| Screw | DC220V | - | 1a1b | 1342012300 | |
| Screw | DC250V | - | 1a1b | 1342012400 | |

Contactors

MC-100a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|------------|--------------|------------|
| MC-100a | Screw | AC24V | 50/60Hz | 2a2b | 1342012500 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1342012600 |
| | Screw | AC100V | 50/60Hz | 2a2b | 1342012700 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1342012800 |
| | Screw | AC120V | 50/60Hz | 2a2b | 1342012900 |
| | Screw | AC200V | 50/60Hz | 2a2b | 1342013000 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1342013100 |
| | Screw | AC230V | 50/60Hz | 2a2b | 1342013200 |
| | Screw | AC240V | 50/60Hz | 2a2b | 1342013300 |
| | Screw | AC380V | 50/60Hz | 2a2b | 1342013400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1342013500 |
| | Screw | AC415V | 50/60Hz | 2a2b | 1342013600 |
| | Screw | AC440V | 50/60Hz | 2a2b | 1342013700 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1342013800 |
| | Screw | AC550V | 50/60Hz | 2a2b | 1342013900 |
| | Screw | AC24V | 50Hz | 2a2b | 1342014000 |
| | Screw | AC32V | 50Hz | 2a2b | 1342018900 |
| | Screw | AC36V | 50Hz | 2a2b | 1342014100 |
| | Screw | AC42V | 50Hz | 2a2b | 1342014200 |
| | Screw | AC48V | 50Hz | 2a2b | 1342014300 |
| | Screw | AC80V | 50Hz | 2a2b | 1342014400 |
| | Screw | AC100V | 50Hz | 2a2b | 1342014500 |
| | Screw | AC110V | 50Hz | 2a2b | 1342014600 |
| | Screw | AC220V | 50Hz | 2a2b | 1342014700 |
| | Screw | AC230V | 50Hz | 2a2b | 1342014800 |
| | Screw | AC240V | 50Hz | 2a2b | 1342014900 |
| | Screw | AC380V | 50Hz | 2a2b | 1342015000 |
| | Screw | AC400V | 50Hz | 2a2b | 1342015100 |
| | Screw | AC415V | 50Hz | 2a2b | 1342015200 |
| | Screw | AC440V | 50Hz | 2a2b | 1342015300 |
| | Screw | AC500V | 50Hz | 2a2b | 1342015400 |
| | Screw | AC550V | 50Hz | 2a2b | 1342015500 |
| | Screw | AC24V | 60Hz | 2a2b | 1342015600 |
| | Screw | AC48V | 60Hz | 2a2b | 1342015700 |
| | Screw | AC100V | 60Hz | 2a2b | 1342015800 |
| | Screw | AC110V | 60Hz | 2a2b | 1342015900 |
| | Screw | AC120V | 60Hz | 2a2b | 1342016000 |
| | Screw | AC200V | 60Hz | 2a2b | 1342016100 |
| | Screw | AC208V | 60Hz | 2a2b | 1342016200 |
| | Screw | AC220V | 60Hz | 2a2b | 1342016300 |
| | Screw | AC230V | 60Hz | 2a2b | 1342016400 |
| | Screw | AC240V | 60Hz | 2a2b | 1342016500 |
| | Screw | AC277V | 60Hz | 2a2b | 1342016600 |
| | Screw | AC380V | 60Hz | 2a2b | 1342016700 |
| | Screw | AC440V | 60Hz | 2a2b | 1342016800 |
| | Screw | AC480V | 60Hz | 2a2b | 1342016900 |
| | Screw | AC600V | 60Hz | 2a2b | 1342017000 |
| | Screw | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1342017100 |
| | Screw | AC110V, 120V | 50Hz, 60Hz | 2a2b | 1342017200 |
| | Screw | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1342017300 |
| Screw | AC240V, 277V | 50Hz, 60Hz | 2a2b | 1342017400 | |
| Screw | DC12V | - | 2a2b | 1342017500 | |
| Screw | DC20V | - | 2a2b | 1342017600 | |
| Screw | DC24V | - | 2a2b | 1342017700 | |
| Screw | DC48V | - | 2a2b | 1342017800 | |
| Screw | DC60V | - | 2a2b | 1342017900 | |
| Screw | DC80V | - | 2a2b | 1342018000 | |
| Screw | DC100V | - | 2a2b | 1342018100 | |
| Screw | DC110V | - | 2a2b | 1342018200 | |
| Screw | DC125V | - | 2a2b | 1342018300 | |
| Screw | DC200V | - | 2a2b | 1342018400 | |
| Screw | DC220V | - | 2a2b | 1342018500 | |
| Screw | DC250V | - | 2a2b | 1342018600 | |

Contactors

MC-130a ~ MC-150a screw only type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|-----------|--------------|------------|
| MC-130a | Screw | AC200V | 50/60Hz | - | 1362000100 |
| | Screw | AC24V | 50/60Hz | - | 1362000200 |
| | Screw | AC48V | 50/60Hz | - | 1362000300 |
| | Screw | AC110V | 50/60Hz | - | 1362000400 |
| | Screw | AC300V | 50/60Hz | - | 1362000500 |
| | Screw | AC400V | 50/60Hz | - | 1362000600 |
| | Screw | AC500V | 50/60Hz | - | 1362000700 |
| | Screw | DC24V | - | - | 1362000800 |
| | Screw | DC48V | - | - | 1362000900 |
| | Screw | DC110V | - | - | 1362001000 |
| | Screw | DC220V | - | - | 1362001100 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1362001200 |
| | Screw | AC24V | 50/60Hz | 1a1b | 1362001300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1362001400 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1362001500 |
| | Screw | AC300V | 50/60Hz | 1a1b | 1362001600 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1362001700 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1362001800 |
| | Screw | DC24V | - | 1a1b | 1362001900 |
| | Screw | DC48V | - | 1a1b | 1362002000 |
| | Screw | DC110V | - | 1a1b | 1362002100 |
| | Screw | DC220V | - | 1a1b | 1362002200 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1362002300 |
| | Screw | AC24V | 50/60Hz | 2a2b | 1362002400 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1362002500 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1362002600 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1362002700 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1362002800 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1362002900 |
| | Screw | DC24V | - | 2a2b | 1362003000 |
| | Screw | DC48V | - | 2a2b | 1362003100 |
| | Screw | DC110V | - | 2a2b | 1362003200 |
| | Screw | DC220V | - | 2a2b | 1362003300 |
| MC-150a | Screw | AC220V | 50/60Hz | - | 1364000100 |
| | Screw | AC24V | 50/60Hz | - | 1364000200 |
| | Screw | AC48V | 50/60Hz | - | 1364000300 |
| | Screw | AC110V | 50/60Hz | - | 1364000400 |
| | Screw | AC300V | 50/60Hz | - | 1364000500 |
| | Screw | AC400V | 50/60Hz | - | 1364000600 |
| | Screw | AC500V | 50/60Hz | - | 1364000700 |
| | Screw | DC24V | - | - | 1364000800 |
| | Screw | DC48V | - | - | 1364000900 |
| | Screw | DC110V | - | - | 1364001000 |
| | Screw | DC220V | - | - | 1364001100 |
| | Screw | AC220V | 50/60Hz | 1a1b | 1364001200 |
| | Screw | AC24V | 50/60Hz | 1a1b | 1364001300 |
| | Screw | AC48V | 50/60Hz | 1a1b | 1364001400 |
| | Screw | AC110V | 50/60Hz | 1a1b | 1364001500 |
| | Screw | AC300V | 50/60Hz | 1a1b | 1364001600 |
| | Screw | AC400V | 50/60Hz | 1a1b | 1364001700 |
| | Screw | AC500V | 50/60Hz | 1a1b | 1364001800 |
| | Screw | DC24V | - | 1a1b | 1364001900 |
| | Screw | DC48V | - | 1a1b | 1364002000 |
| | Screw | DC110V | - | 1a1b | 1364002100 |
| | Screw | DC220V | - | 1a1b | 1364002200 |
| | Screw | AC220V | 50/60Hz | 2a2b | 1364002300 |
| | Screw | AC24V | 50/60Hz | 2a2b | 1364002400 |
| | Screw | AC48V | 50/60Hz | 2a2b | 1364002500 |
| | Screw | AC110V | 50/60Hz | 2a2b | 1364002600 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1364002700 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1364002800 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1364002900 |
| | Screw | DC24V | - | 2a2b | 1364003000 |
| | Screw | DC48V | - | 2a2b | 1364003100 |
| | Screw | DC110V | - | 2a2b | 1364003200 |
| | Screw | DC220V | - | 2a2b | 1364003300 |



150AF

Contactors

MC-185a ~ MC-800a screw only type

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|---------------|-----------|--------------|------------|
| MC-185a | Screw | AC/DC100-200V | 50/60Hz | 2a2b | 1366000200 |
| | Screw | AC/DC24V | 50/60Hz | 2a2b | 1366000300 |
| | Screw | AC/DC48V | 50/60Hz | 2a2b | 1366000400 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1366000500 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1366000600 |
| MC-225a | Screw | AC/DC100-200V | 50/60Hz | 2a2b | 1368000200 |
| | Screw | AC/DC24V | 50/60Hz | 2a2b | 1368000300 |
| | Screw | AC/DC48V | 50/60Hz | 2a2b | 1368000400 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1368000500 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1368000600 |
| MC-265a | Screw | AC/DC100-200V | 50/60Hz | 2a2b | 1369000200 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1369000300 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1369000400 |
| MC-330a | Screw | AC/DC100-200V | 50/60Hz | 2a2b | 1370000200 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1370000300 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1370000400 |
| MC-400a | Screw | AC/DC100-200V | 50/60Hz | 2a2b | 1371000200 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1371000300 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1371000400 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1371000500 |
| MC-500a | Screw | AC/DC200V | 50/60Hz | 2a2b | 1372000200 |
| | Screw | AC/DC100V | 50/60Hz | 2a2b | 1372000300 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1372000400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1372000500 |
| MC-630a | Screw | AC/DC200V | 50/60Hz | 2a2b | 1373000200 |
| | Screw | AC/DC100V | 50/60Hz | 2a2b | 1373000300 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1373000400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1373000500 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1373000600 |
| MC-800a | Screw | AC/DC200V | 50/60Hz | 2a2b | 1374000200 |
| | Screw | AC/DC100V | 50/60Hz | 2a2b | 1374000300 |
| | Screw | AC300V | 50/60Hz | 2a2b | 1374000400 |
| | Screw | AC400V | 50/60Hz | 2a2b | 1374000500 |
| | Screw | AC500V | 50/60Hz | 2a2b | 1374000600 |

Contactors

MC-50a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-50a | Lug | AC24V | 50/60Hz | - | 1380000100 |
| | Lug | AC48V | 50/60Hz | - | 1380000200 |
| | Lug | AC110V | 50/60Hz | - | 1380000300 |
| | Lug | AC220V | 50/60Hz | - | 1380000400 |
| | Lug | AC240V | 50/60Hz | - | 1380000500 |
| | Lug | AC380V | 50/60Hz | - | 1380000600 |
| | Lug | AC400V | 50/60Hz | - | 1380000700 |
| | Lug | AC440V | 50/60Hz | - | 1380000800 |
| | Lug | AC500V | 50/60Hz | - | 1380000900 |
| | Lug | AC550V | 50/60Hz | - | 1380001000 |
| | Lug | AC230V | 50/60Hz | - | 1380001100 |
| | Lug | AC200V | 50/60Hz | - | 1380001200 |
| | Lug | AC120V | 50/60Hz | - | 1380001300 |
| | Lug | AC100V | 50/60Hz | - | 1380001400 |
| | Lug | AC415V | 50/60Hz | - | 1380001500 |
| | Lug | AC24V | 60Hz | - | 1380001600 |
| | Lug | AC48V | 60Hz | - | 1380001700 |
| | Lug | AC110V | 60Hz | - | 1380001800 |
| | Lug | AC120V | 60Hz | - | 1380001900 |
| | Lug | AC220V | 60Hz | - | 1380002000 |
| | Lug | AC240V | 60Hz | - | 1380002100 |
| | Lug | AC380V | 60Hz | - | 1380002200 |
| | Lug | AC440V | 60Hz | - | 1380002300 |
| | Lug | AC480V | 60Hz | - | 1380002400 |
| | Lug | AC600V | 60Hz | - | 1380002500 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | - | 1380002600 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | - | 1380002700 |
| | Lug | AC208V | 60Hz | - | 1380002800 |
| | Lug | AC277V | 60Hz | - | 1380002900 |
| | Lug | AC24V | 50Hz | - | 1380003000 |
| | Lug | AC48V | 50Hz | - | 1380003100 |
| | Lug | AC110V | 50Hz | - | 1380003200 |
| | Lug | AC220V | 50Hz | - | 1380003300 |
| | Lug | AC240V | 50Hz | - | 1380003400 |
| | Lug | AC380V | 50Hz | - | 1380003500 |
| | Lug | AC400V | 50Hz | - | 1380003600 |
| | Lug | AC415V | 50Hz | - | 1380003700 |
| | Lug | AC440V | 50Hz | - | 1380003800 |
| | Lug | AC550V | 50Hz | - | 1380003900 |
| | Lug | AC36V | 50Hz | - | 1380004000 |
| | Lug | AC42V | 50Hz | - | 1380004100 |
| | Lug | AC80V | 50Hz | - | 1380004200 |
| | Lug | AC100V | 50Hz | - | 1380004300 |
| | Lug | AC230V | 50Hz | - | 1380004400 |
| | Lug | AC500V | 50Hz | - | 1380004500 |
| Lug | AC32V | 50Hz | - | 1380004600 | |
| Lug | DC12V | - | - | 1380004700 | |
| Lug | DC24V | - | - | 1380004800 | |
| Lug | DC48V | - | - | 1380004900 | |
| Lug | DC100V | - | - | 1380005000 | |
| Lug | DC110V | - | - | 1380005100 | |
| Lug | DC125V | - | - | 1380005200 | |
| Lug | DC200V | - | - | 1380005300 | |
| Lug | DC220V | - | - | 1380005400 | |
| Lug | DC250V | - | - | 1380005500 | |
| Lug | DC20V | - | - | 1380005600 | |

Contactors

MC-50a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-50a | Lug | DC60V | - | - | 1380005700 |
| | Lug | DC80V | - | - | 1380005800 |
| | Lug | AC24V | 50/60Hz | 1a1b | 1380005900 |
| | Lug | AC48V | 50/60Hz | 1a1b | 1380006000 |
| | Lug | AC110V | 50/60Hz | 1a1b | 1380006100 |
| | Lug | AC220V | 50/60Hz | 1a1b | 1380006200 |
| | Lug | AC240V | 50/60Hz | 1a1b | 1380006300 |
| | Lug | AC380V | 50/60Hz | 1a1b | 1380006400 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1380006500 |
| | Lug | AC440V | 50/60Hz | 1a1b | 1380006600 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1380006700 |
| | Lug | AC550V | 50/60Hz | 1a1b | 1380006800 |
| | Lug | AC230V | 50/60Hz | 1a1b | 1380006900 |
| | Lug | AC200V | 50/60Hz | 1a1b | 1380007000 |
| | Lug | AC120V | 50/60Hz | 1a1b | 1380007100 |
| | Lug | AC100V | 50/60Hz | 1a1b | 1380007200 |
| | Lug | AC415V | 50/60Hz | 1a1b | 1380007300 |
| | Lug | AC24V | 60Hz | 1a1b | 1380007400 |
| | Lug | AC48V | 60Hz | 1a1b | 1380007500 |
| | Lug | AC110V | 60Hz | 1a1b | 1380007600 |
| | Lug | AC120V | 60Hz | 1a1b | 1380007700 |
| | Lug | AC220V | 60Hz | 1a1b | 1380007800 |
| | Lug | AC240V | 60Hz | 1a1b | 1380007900 |
| | Lug | AC380V | 60Hz | 1a1b | 1380008000 |
| | Lug | AC440V | 60Hz | 1a1b | 1380008100 |
| | Lug | AC480V | 60Hz | 1a1b | 1380008200 |
| | Lug | AC600V | 60Hz | 1a1b | 1380008300 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1380008400 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1380008500 |
| | Lug | AC208V | 60Hz | 1a1b | 1380008600 |
| | Lug | AC277V | 60Hz | 1a1b | 1380008700 |
| | Lug | AC24V | 50Hz | 1a1b | 1380008800 |
| | Lug | AC48V | 50Hz | 1a1b | 1380008900 |
| | Lug | AC110V | 50Hz | 1a1b | 1380009000 |
| | Lug | AC220V | 50Hz | 1a1b | 1380009100 |
| | Lug | AC240V | 50Hz | 1a1b | 1380009200 |
| | Lug | AC380V | 50Hz | 1a1b | 1380009300 |
| | Lug | AC400V | 50Hz | 1a1b | 1380009400 |
| | Lug | AC415V | 50Hz | 1a1b | 1380009500 |
| | Lug | AC440V | 50Hz | 1a1b | 1380009600 |
| | Lug | AC550V | 50Hz | 1a1b | 1380009700 |
| | Lug | AC36V | 50Hz | 1a1b | 1380009800 |
| | Lug | AC42V | 50Hz | 1a1b | 1380009900 |
| | Lug | AC80V | 50Hz | 1a1b | 1380010000 |
| | Lug | AC100V | 50Hz | 1a1b | 1380010100 |
| | Lug | AC230V | 50Hz | 1a1b | 1380010200 |
| | Lug | AC500V | 50Hz | 1a1b | 1380010300 |
| | Lug | AC32V | 50Hz | 1a1b | 1380010400 |
| | Lug | DC12V | - | 1a1b | 1380010500 |
| | Lug | DC24V | - | 1a1b | 1380010600 |
| Lug | DC48V | - | 1a1b | 1380010700 | |
| Lug | DC100V | - | 1a1b | 1380010800 | |
| Lug | DC110V | - | 1a1b | 1380010900 | |
| Lug | DC125V | - | 1a1b | 1380011000 | |
| Lug | DC200V | - | 1a1b | 1380011100 | |
| Lug | DC220V | - | 1a1b | 1380011200 | |
| Lug | DC250V | - | 1a1b | 1380011300 | |
| Lug | DC20V | - | 1a1b | 1380011400 | |
| Lug | DC60V | - | 1a1b | 1380011500 | |
| Lug | DC80V | - | 1a1b | 1380011600 | |
| Lug | AC24V | 50/60Hz | 2a2b | 1380011700 | |
| Lug | AC48V | 50/60Hz | 2a2b | 1380011800 | |

Contactors

MC-50a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-50a | Lug | AC110V | 50/60Hz | 2a2b | 1380011900 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1380012000 |
| | Lug | AC240V | 50/60Hz | 2a2b | 1380012100 |
| | Lug | AC380V | 50/60Hz | 2a2b | 1380012200 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1380012300 |
| | Lug | AC440V | 50/60Hz | 2a2b | 1380012400 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1380012500 |
| | Lug | AC550V | 50/60Hz | 2a2b | 1380012600 |
| | Lug | AC230V | 50/60Hz | 2a2b | 1380012700 |
| | Lug | AC200V | 50/60Hz | 2a2b | 1380012800 |
| | Lug | AC120V | 50/60Hz | 2a2b | 1380012900 |
| | Lug | AC100V | 50/60Hz | 2a2b | 1380013000 |
| | Lug | AC415V | 50/60Hz | 2a2b | 1380013100 |
| | Lug | AC24V | 60Hz | 2a2b | 1380013200 |
| | Lug | AC48V | 60Hz | 2a2b | 1380013300 |
| | Lug | AC110V | 60Hz | 2a2b | 1380013400 |
| | Lug | AC120V | 60Hz | 2a2b | 1380013500 |
| | Lug | AC220V | 60Hz | 2a2b | 1380013600 |
| | Lug | AC240V | 60Hz | 2a2b | 1380013700 |
| | Lug | AC380V | 60Hz | 2a2b | 1380013800 |
| | Lug | AC440V | 60Hz | 2a2b | 1380013900 |
| | Lug | AC480V | 60Hz | 2a2b | 1380014000 |
| | Lug | AC600V | 60Hz | 2a2b | 1380014100 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1380014200 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1380014300 |
| | Lug | AC208V | 60Hz | 2a2b | 1380014400 |
| | Lug | AC277V | 60Hz | 2a2b | 1380014500 |
| | Lug | AC24V | 50Hz | 2a2b | 1380014600 |
| | Lug | AC48V | 50Hz | 2a2b | 1380014700 |
| | Lug | AC110V | 50Hz | 2a2b | 1380014800 |
| | Lug | AC220V | 50Hz | 2a2b | 1380014900 |
| | Lug | AC240V | 50Hz | 2a2b | 1380015000 |
| | Lug | AC380V | 50Hz | 2a2b | 1380015100 |
| | Lug | AC400V | 50Hz | 2a2b | 1380015200 |
| | Lug | AC415V | 50Hz | 2a2b | 1380015300 |
| | Lug | AC440V | 50Hz | 2a2b | 1380015400 |
| | Lug | AC550V | 50Hz | 2a2b | 1380015500 |
| | Lug | AC36V | 50Hz | 2a2b | 1380015600 |
| | Lug | AC42V | 50Hz | 2a2b | 1380015700 |
| | Lug | AC80V | 50Hz | 2a2b | 1380015800 |
| | Lug | AC100V | 50Hz | 2a2b | 1380015900 |
| | Lug | AC230V | 50Hz | 2a2b | 1380016000 |
| | Lug | AC500V | 50Hz | 2a2b | 1380016100 |
| | Lug | AC32V | 50Hz | 2a2b | 1380016200 |
| | Lug | DC12V | - | 2a2b | 1380016300 |
| Lug | DC24V | - | 2a2b | 1380016400 | |
| Lug | DC48V | - | 2a2b | 1380016500 | |
| Lug | DC100V | - | 2a2b | 1380016600 | |
| Lug | DC110V | - | 2a2b | 1380016700 | |
| Lug | DC125V | - | 2a2b | 1380016800 | |
| Lug | DC200V | - | 2a2b | 1380016900 | |
| Lug | DC220V | - | 2a2b | 1380017000 | |
| Lug | DC250V | - | 2a2b | 1380017100 | |
| Lug | DC20V | - | 2a2b | 1380017200 | |
| Lug | DC60V | - | 2a2b | 1380017300 | |
| Lug | DC80V | - | 2a2b | 1380017400 | |

Contactors

MC-65a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-65a | Lug | AC24V | 50/60Hz | - | 1381000100 |
| | Lug | AC48V | 50/60Hz | - | 1381000300 |
| | Lug | AC110V | 50/60Hz | - | 1381000400 |
| | Lug | AC220V | 50/60Hz | - | 1381000500 |
| | Lug | AC240V | 50/60Hz | - | 1381000600 |
| | Lug | AC380V | 50/60Hz | - | 1381000700 |
| | Lug | AC400V | 50/60Hz | - | 1381000800 |
| | Lug | AC440V | 50/60Hz | - | 1381000900 |
| | Lug | AC500V | 50/60Hz | - | 1381001000 |
| | Lug | AC550V | 50/60Hz | - | 1381001100 |
| | Lug | AC230V | 50/60Hz | - | 1381001200 |
| | Lug | AC200V | 50/60Hz | - | 1381001300 |
| | Lug | AC120V | 50/60Hz | - | 1381001400 |
| | Lug | AC100V | 50/60Hz | - | 1381001500 |
| | Lug | AC415V | 50/60Hz | - | 1381001600 |
| | Lug | AC24V | 60Hz | - | 1381001700 |
| | Lug | AC48V | 60Hz | - | 1381001800 |
| | Lug | AC110V | 60Hz | - | 1381001900 |
| | Lug | AC120V | 60Hz | - | 1381002000 |
| | Lug | AC220V | 60Hz | - | 1381002100 |
| | Lug | AC240V | 60Hz | - | 1381002200 |
| | Lug | AC380V | 60Hz | - | 1381002300 |
| | Lug | AC440V | 60Hz | - | 1381002400 |
| | Lug | AC480V | 60Hz | - | 1381002500 |
| | Lug | AC600V | 60Hz | - | 1381002600 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | - | 1381002700 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | - | 1381002800 |
| | Lug | AC208V | 60Hz | - | 1381002900 |
| | Lug | AC277V | 60Hz | - | 1381003000 |
| | Lug | AC24V | 50Hz | - | 1381003100 |
| | Lug | AC48V | 50Hz | - | 1381003200 |
| | Lug | AC110V | 50Hz | - | 1381003300 |
| | Lug | AC220V | 50Hz | - | 1381003400 |
| | Lug | AC240V | 50Hz | - | 1381003500 |
| | Lug | AC380V | 50Hz | - | 1381003600 |
| | Lug | AC400V | 50Hz | - | 1381003700 |
| | Lug | AC415V | 50Hz | - | 1381003800 |
| | Lug | AC440V | 50Hz | - | 1381003900 |
| | Lug | AC550V | 50Hz | - | 1381004000 |
| | Lug | AC36V | 50Hz | - | 1381004100 |
| | Lug | AC42V | 50Hz | - | 1381004200 |
| | Lug | AC80V | 50Hz | - | 1381004300 |
| | Lug | AC100V | 50Hz | - | 1381004400 |
| | Lug | AC230V | 50Hz | - | 1381004500 |
| | Lug | AC500V | 50Hz | - | 1381004600 |
| Lug | AC32V | 50Hz | - | 1381004700 | |
| Lug | DC12V | - | - | 1381000200 | |
| Lug | DC24V | - | - | 1381004800 | |
| Lug | DC48V | - | - | 1381004900 | |
| Lug | DC100V | - | - | 1381005000 | |
| Lug | DC110V | - | - | 1381005100 | |
| Lug | DC125V | - | - | 1381005200 | |
| Lug | DC200V | - | - | 1381005300 | |
| Lug | DC220V | - | - | 1381005400 | |
| Lug | DC250V | - | - | 1381005500 | |
| Lug | DC20V | - | - | 1381005600 | |
| Lug | DC60V | - | - | 1381005700 | |
| Lug | DC80V | - | - | 1381005800 | |
| Lug | AC24V | 50/60Hz | 1a1b | 1381005900 | |
| Lug | AC48V | 50/60Hz | 1a1b | 1381006000 | |
| Lug | AC110V | 50/60Hz | 1a1b | 1381006100 | |
| Lug | AC220V | 50/60Hz | 1a1b | 1381006200 | |

Contactors

MC-65a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-65a | Lug | AC240V | 50/60Hz | 1a1b | 1381006300 |
| | Lug | AC380V | 50/60Hz | 1a1b | 1381006400 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1381006500 |
| | Lug | AC440V | 50/60Hz | 1a1b | 1381006600 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1381006700 |
| | Lug | AC550V | 50/60Hz | 1a1b | 1381006800 |
| | Lug | AC230V | 50/60Hz | 1a1b | 1381006900 |
| | Lug | AC200V | 50/60Hz | 1a1b | 1381007000 |
| | Lug | AC120V | 50/60Hz | 1a1b | 1381007100 |
| | Lug | AC100V | 50/60Hz | 1a1b | 1381007200 |
| | Lug | AC415V | 50/60Hz | 1a1b | 1381007300 |
| | Lug | AC24V | 60Hz | 1a1b | 1381007400 |
| | Lug | AC48V | 60Hz | 1a1b | 1381007500 |
| | Lug | AC110V | 60Hz | 1a1b | 1381007600 |
| | Lug | AC120V | 60Hz | 1a1b | 1381007700 |
| | Lug | AC220V | 60Hz | 1a1b | 1381007800 |
| | Lug | AC240V | 60Hz | 1a1b | 1381007900 |
| | Lug | AC380V | 60Hz | 1a1b | 1381008000 |
| | Lug | AC440V | 60Hz | 1a1b | 1381008100 |
| | Lug | AC480V | 60Hz | 1a1b | 1381008200 |
| | Lug | AC600V | 60Hz | 1a1b | 1381008400 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1381008500 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1381008600 |
| | Lug | AC208V | 60Hz | 1a1b | 1381008700 |
| | Lug | AC277V | 60Hz | 1a1b | 1381008800 |
| | Lug | AC24V | 50Hz | 1a1b | 1381008900 |
| | Lug | AC48V | 50Hz | 1a1b | 1381009000 |
| | Lug | AC110V | 50Hz | 1a1b | 1381009100 |
| | Lug | AC220V | 50Hz | 1a1b | 1381009200 |
| | Lug | AC240V | 50Hz | 1a1b | 1381009300 |
| | Lug | AC380V | 50Hz | 1a1b | 1381009400 |
| | Lug | AC400V | 50Hz | 1a1b | 1381009800 |
| | Lug | AC415V | 50Hz | 1a1b | 1381009900 |
| | Lug | AC440V | 50Hz | 1a1b | 1381010000 |
| | Lug | AC550V | 50Hz | 1a1b | 1381010100 |
| | Lug | AC36V | 50Hz | 1a1b | 1381010200 |
| | Lug | AC42V | 50Hz | 1a1b | 1381010300 |
| | Lug | AC80V | 50Hz | 1a1b | 1381010400 |
| | Lug | AC100V | 50Hz | 1a1b | 1381010500 |
| | Lug | AC230V | 50Hz | 1a1b | 1381010600 |
| | Lug | AC500V | 50Hz | 1a1b | 1381010700 |
| | Lug | AC32V | 50Hz | 1a1b | 1381010800 |
| | Lug | DC12V | - | 1a1b | 1381009500 |
| | Lug | DC24V | - | 1a1b | 1381010900 |
| | Lug | DC48V | - | 1a1b | 1381011000 |
| | Lug | DC100V | - | 1a1b | 1381011100 |
| | Lug | DC110V | - | 1a1b | 1381011200 |
| Lug | DC125V | - | 1a1b | 1381011300 | |
| Lug | DC200V | - | 1a1b | 1381011400 | |
| Lug | DC220V | - | 1a1b | 1381011500 | |
| Lug | DC250V | - | 1a1b | 1381011600 | |
| Lug | DC20V | - | 1a1b | 1381011700 | |
| Lug | DC60V | - | 1a1b | 1381011800 | |
| Lug | DC80V | - | 1a1b | 1381011900 | |
| Lug | AC24V | 50/60Hz | 2a2b | 1381009600 | |
| Lug | AC48V | 50/60Hz | 2a2b | 1381012000 | |

Contactors

MC-65a Lug type



65AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-65a | Lug | AC110V | 50/60Hz | 2a2b | 1381012100 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1381012200 |
| | Lug | AC240V | 50/60Hz | 2a2b | 1381012300 |
| | Lug | AC380V | 50/60Hz | 2a2b | 1381012400 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1381012500 |
| | Lug | AC440V | 50/60Hz | 2a2b | 1381012600 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1381012700 |
| | Lug | AC550V | 50/60Hz | 2a2b | 1381012800 |
| | Lug | AC230V | 50/60Hz | 2a2b | 1381012900 |
| | Lug | AC200V | 50/60Hz | 2a2b | 1381013000 |
| | Lug | AC120V | 50/60Hz | 2a2b | 1381013100 |
| | Lug | AC100V | 50/60Hz | 2a2b | 1381013200 |
| | Lug | AC415V | 50/60Hz | 2a2b | 1381013300 |
| | Lug | AC24V | 60Hz | 2a2b | 1381013400 |
| | Lug | AC48V | 60Hz | 2a2b | 1381013500 |
| | Lug | AC110V | 60Hz | 2a2b | 1381013600 |
| | Lug | AC120V | 60Hz | 2a2b | 1381013700 |
| | Lug | AC220V | 60Hz | 2a2b | 1381013800 |
| | Lug | AC240V | 60Hz | 2a2b | 1381013900 |
| | Lug | AC380V | 60Hz | 2a2b | 1381014000 |
| | Lug | AC440V | 60Hz | 2a2b | 1381014100 |
| | Lug | AC480V | 60Hz | 2a2b | 1381014200 |
| | Lug | AC600V | 60Hz | 2a2b | 1381014300 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1381014400 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1381014500 |
| | Lug | AC208V | 60Hz | 2a2b | 1381014600 |
| | Lug | AC277V | 60Hz | 2a2b | 1381014700 |
| | Lug | AC24V | 50Hz | 2a2b | 1381014800 |
| | Lug | AC48V | 50Hz | 2a2b | 1381014900 |
| | Lug | AC110V | 50Hz | 2a2b | 1381015000 |
| | Lug | AC220V | 50Hz | 2a2b | 1381015100 |
| | Lug | AC240V | 50Hz | 2a2b | 1381015200 |
| | Lug | AC380V | 50Hz | 2a2b | 1381015300 |
| | Lug | AC400V | 50Hz | 2a2b | 1381015400 |
| | Lug | AC415V | 50Hz | 2a2b | 1381015500 |
| | Lug | AC440V | 50Hz | 2a2b | 1381015600 |
| | Lug | AC550V | 50Hz | 2a2b | 1381015700 |
| | Lug | AC36V | 50Hz | 2a2b | 1381015800 |
| | Lug | AC42V | 50Hz | 2a2b | 1381015900 |
| | Lug | AC80V | 50Hz | 2a2b | 1381016000 |
| | Lug | AC100V | 50Hz | 2a2b | 1381016100 |
| | Lug | AC230V | 50Hz | 2a2b | 1381016200 |
| Lug | AC500V | 50Hz | 2a2b | 1381016300 | |
| Lug | AC32V | 50Hz | 2a2b | 1381016400 | |
| Lug | DC12V | - | 2a2b | 1381009700 | |
| Lug | DC24V | - | 2a2b | 1381016500 | |
| Lug | DC48V | - | 2a2b | 1381016600 | |
| Lug | DC100V | - | 2a2b | 1381016700 | |
| Lug | DC110V | - | 2a2b | 1381016800 | |
| Lug | DC125V | - | 2a2b | 1381016900 | |
| Lug | DC200V | - | 2a2b | 1381017000 | |
| Lug | DC220V | - | 2a2b | 1381017100 | |
| Lug | DC250V | - | 2a2b | 1381017200 | |
| Lug | DC20V | - | 2a2b | 1381017300 | |
| Lug | DC60V | - | 2a2b | 1381017400 | |
| Lug | DC80V | - | 2a2b | 1381017500 | |

Contactors

MC-75a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-75a | Lug | AC24V | 50/60Hz | - | 1382000100 |
| | Lug | AC48V | 50/60Hz | - | 1382000700 |
| | Lug | AC110V | 50/60Hz | - | 1382000800 |
| | Lug | AC220V | 50/60Hz | - | 1382000900 |
| | Lug | AC240V | 50/60Hz | - | 1382001000 |
| | Lug | AC380V | 50/60Hz | - | 1382001100 |
| | Lug | AC400V | 50/60Hz | - | 1382001200 |
| | Lug | AC440V | 50/60Hz | - | 1382001300 |
| | Lug | AC500V | 50/60Hz | - | 1382001400 |
| | Lug | AC550V | 50/60Hz | - | 1382001500 |
| | Lug | AC230V | 50/60Hz | - | 1382001600 |
| | Lug | AC200V | 50/60Hz | - | 1382001700 |
| | Lug | AC120V | 50/60Hz | - | 1382001800 |
| | Lug | AC100V | 50/60Hz | - | 1382001900 |
| | Lug | AC415V | 50/60Hz | - | 1382002000 |
| | Lug | AC24V | 60Hz | - | 1382002100 |
| | Lug | AC48V | 60Hz | - | 1382002200 |
| | Lug | AC110V | 60Hz | - | 1382002300 |
| | Lug | AC120V | 60Hz | - | 1382002400 |
| | Lug | AC220V | 60Hz | - | 1382002500 |
| | Lug | AC240V | 60Hz | - | 1382002600 |
| | Lug | AC380V | 60Hz | - | 1382002700 |
| | Lug | AC440V | 60Hz | - | 1382002800 |
| | Lug | AC480V | 60Hz | - | 1382002900 |
| | Lug | AC600V | 60Hz | - | 1382003000 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | - | 1382003100 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | - | 1382003200 |
| | Lug | AC208V | 60Hz | - | 1382003300 |
| | Lug | AC277V | 60Hz | - | 1382003400 |
| | Lug | AC24V | 50Hz | - | 1382003500 |
| | Lug | AC48V | 50Hz | - | 1382003600 |
| | Lug | AC110V | 50Hz | - | 1382003700 |
| | Lug | AC220V | 50Hz | - | 1382003800 |
| | Lug | AC240V | 50Hz | - | 1382003900 |
| | Lug | AC380V | 50Hz | - | 1382004000 |
| | Lug | AC400V | 50Hz | - | 1382004100 |
| | Lug | AC415V | 50Hz | - | 1382004200 |
| | Lug | AC440V | 50Hz | - | 1382004300 |
| | Lug | AC550V | 50Hz | - | 1382004400 |
| | Lug | AC36V | 50Hz | - | 1382004500 |
| | Lug | AC42V | 50Hz | - | 1382004600 |
| | Lug | AC80V | 50Hz | - | 1382004700 |
| | Lug | AC100V | 50Hz | - | 1382004800 |
| | Lug | AC230V | 50Hz | - | 1382004900 |
| | Lug | AC500V | 50Hz | - | 1382005000 |
| | Lug | AC32V | 50Hz | - | 1382005100 |
| | Lug | DC12V | - | - | 1382000200 |
| | Lug | DC24V | - | - | 1382005200 |
| | Lug | DC48V | - | - | 1382005300 |
| | Lug | DC100V | - | - | 1382005400 |
| Lug | DC110V | - | - | 1382005500 | |
| Lug | DC125V | - | - | 1382005600 | |
| Lug | DC200V | - | - | 1382005700 | |
| Lug | DC220V | - | - | 1382005800 | |
| Lug | DC250V | - | - | 1382005900 | |
| Lug | DC20V | - | - | 1382006000 | |
| Lug | DC60V | - | - | 1382006100 | |
| Lug | DC80V | - | - | 1382006200 | |
| Lug | AC24V | 50/60Hz | 1a1b | 1382000300 | |
| Lug | AC48V | 50/60Hz | 1a1b | 1382006300 | |
| Lug | AC110V | 50/60Hz | 1a1b | 1382006400 | |
| Lug | AC220V | 50/60Hz | 1a1b | 1382006500 | |

Contactors

MC-75a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-75a | Lug | AC240V | 50/60Hz | 1a1b | 1382006600 |
| | Lug | AC380V | 50/60Hz | 1a1b | 1382006700 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1382006800 |
| | Lug | AC440V | 50/60Hz | 1a1b | 1382006900 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1382007000 |
| | Lug | AC550V | 50/60Hz | 1a1b | 1382007100 |
| | Lug | AC230V | 50/60Hz | 1a1b | 1382007200 |
| | Lug | AC200V | 50/60Hz | 1a1b | 1382007300 |
| | Lug | AC120V | 50/60Hz | 1a1b | 1382007400 |
| | Lug | AC100V | 50/60Hz | 1a1b | 1382007500 |
| | Lug | AC415V | 50/60Hz | 1a1b | 1382007600 |
| | Lug | AC24V | 60Hz | 1a1b | 1382007700 |
| | Lug | AC48V | 60Hz | 1a1b | 1382007800 |
| | Lug | AC110V | 60Hz | 1a1b | 1382007900 |
| | Lug | AC120V | 60Hz | 1a1b | 1382008000 |
| | Lug | AC220V | 60Hz | 1a1b | 1382008100 |
| | Lug | AC240V | 60Hz | 1a1b | 1382008200 |
| | Lug | AC380V | 60Hz | 1a1b | 1382008300 |
| | Lug | AC440V | 60Hz | 1a1b | 1382008400 |
| | Lug | AC480V | 60Hz | 1a1b | 1382008500 |
| | Lug | AC600V | 60Hz | 1a1b | 1382008600 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1382008700 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1382008800 |
| | Lug | AC208V | 60Hz | 1a1b | 1382008900 |
| | Lug | AC277V | 60Hz | 1a1b | 1382009000 |
| | Lug | AC24V | 50Hz | 1a1b | 1382009100 |
| | Lug | AC48V | 50Hz | 1a1b | 1382009200 |
| | Lug | AC110V | 50Hz | 1a1b | 1382009300 |
| | Lug | AC220V | 50Hz | 1a1b | 1382009400 |
| | Lug | AC240V | 50Hz | 1a1b | 1382009500 |
| | Lug | AC380V | 50Hz | 1a1b | 1382009600 |
| | Lug | AC400V | 50Hz | 1a1b | 1382009700 |
| | Lug | AC415V | 50Hz | 1a1b | 1382009800 |
| | Lug | AC440V | 50Hz | 1a1b | 1382009900 |
| | Lug | AC550V | 50Hz | 1a1b | 1382010000 |
| | Lug | AC36V | 50Hz | 1a1b | 1382010100 |
| | Lug | AC42V | 50Hz | 1a1b | 1382010200 |
| | Lug | AC80V | 50Hz | 1a1b | 1382010300 |
| | Lug | AC100V | 50Hz | 1a1b | 1382010400 |
| | Lug | AC230V | 50Hz | 1a1b | 1382010500 |
| | Lug | AC500V | 50Hz | 1a1b | 1382010600 |
| | Lug | AC32V | 50Hz | 1a1b | 1382010700 |
| | Lug | DC12V | - | 1a1b | 1382000400 |
| | Lug | DC24V | - | 1a1b | 1382016400 |
| | Lug | DC48V | - | 1a1b | 1382016500 |
| | Lug | DC100V | - | 1a1b | 1382016600 |
| | Lug | DC110V | - | 1a1b | 1382016700 |
| Lug | DC125V | - | 1a1b | 1382016800 | |
| Lug | DC200V | - | 1a1b | 1382016900 | |
| Lug | DC220V | - | 1a1b | 1382017000 | |
| Lug | DC250V | - | 1a1b | 1382017100 | |
| Lug | DC20V | - | 1a1b | 1382017200 | |
| Lug | DC60V | - | 1a1b | 1382017300 | |
| Lug | DC80V | - | 1a1b | 1382017400 | |
| Lug | AC24V | 50/60Hz | 2a2b | 1382000500 | |
| Lug | AC48V | 50/60Hz | 2a2b | 1382011900 | |

Contactors

MC-75a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-75a | Lug | AC110V | 50/60Hz | 2a2b | 1382012000 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1382012100 |
| | Lug | AC240V | 50/60Hz | 2a2b | 1382012200 |
| | Lug | AC380V | 50/60Hz | 2a2b | 1382012300 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1382012400 |
| | Lug | AC440V | 50/60Hz | 2a2b | 1382012500 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1382012600 |
| | Lug | AC550V | 50/60Hz | 2a2b | 1382012700 |
| | Lug | AC230V | 50/60Hz | 2a2b | 1382012800 |
| | Lug | AC200V | 50/60Hz | 2a2b | 1382012900 |
| | Lug | AC120V | 50/60Hz | 2a2b | 1382013000 |
| | Lug | AC100V | 50/60Hz | 2a2b | 1382013100 |
| | Lug | AC415V | 50/60Hz | 2a2b | 1382013200 |
| | Lug | AC24V | 60Hz | 2a2b | 1382013300 |
| | Lug | AC48V | 60Hz | 2a2b | 1382013400 |
| | Lug | AC110V | 60Hz | 2a2b | 1382013500 |
| | Lug | AC120V | 60Hz | 2a2b | 1382013600 |
| | Lug | AC220V | 60Hz | 2a2b | 1382013700 |
| | Lug | AC240V | 60Hz | 2a2b | 1382013800 |
| | Lug | AC380V | 60Hz | 2a2b | 1382013900 |
| | Lug | AC440V | 60Hz | 2a2b | 1382014000 |
| | Lug | AC480V | 60Hz | 2a2b | 1382014100 |
| | Lug | AC600V | 60Hz | 2a2b | 1382014200 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1382014300 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1382014400 |
| | Lug | AC208V | 60Hz | 2a2b | 1382014500 |
| | Lug | AC277V | 60Hz | 2a2b | 1382014600 |
| | Lug | AC24V | 50Hz | 2a2b | 1382014700 |
| | Lug | AC48V | 50Hz | 2a2b | 1382014800 |
| | Lug | AC110V | 50Hz | 2a2b | 1382014900 |
| | Lug | AC220V | 50Hz | 2a2b | 1382015000 |
| | Lug | AC240V | 50Hz | 2a2b | 1382015100 |
| | Lug | AC380V | 50Hz | 2a2b | 1382015200 |
| | Lug | AC400V | 50Hz | 2a2b | 1382015300 |
| | Lug | AC415V | 50Hz | 2a2b | 1382015400 |
| | Lug | AC440V | 50Hz | 2a2b | 1382015500 |
| | Lug | AC550V | 50Hz | 2a2b | 1382015600 |
| | Lug | AC36V | 50Hz | 2a2b | 1382015700 |
| | Lug | AC42V | 50Hz | 2a2b | 1382015800 |
| | Lug | AC80V | 50Hz | 2a2b | 1382015900 |
| | Lug | AC100V | 50Hz | 2a2b | 1382016000 |
| | Lug | AC230V | 50Hz | 2a2b | 1382016100 |
| | Lug | AC500V | 50Hz | 2a2b | 1382016200 |
| | Lug | AC32V | 50Hz | 2a2b | 1382016300 |
| | Lug | DC12V | - | 2a2b | 1382000600 |
| | Lug | DC24V | - | 2a2b | 1382010800 |
| | Lug | DC48V | - | 2a2b | 1382010900 |
| | Lug | DC100V | - | 2a2b | 1382011000 |
| | Lug | DC110V | - | 2a2b | 1382011100 |
| | Lug | DC125V | - | 2a2b | 1382011200 |
| | Lug | DC200V | - | 2a2b | 1382011300 |
| | Lug | DC220V | - | 2a2b | 1382011400 |
| | Lug | DC250V | - | 2a2b | 1382011500 |
| Lug | DC20V | - | 2a2b | 1382011600 | |
| Lug | DC60V | - | 2a2b | 1382011700 | |
| Lug | DC80V | - | 2a2b | 1382011800 | |

Contactors

MC-85a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-85a | Lug | AC24V | 50/60Hz | - | 1383000100 |
| | Lug | AC48V | 50/60Hz | - | 1383013100 |
| | Lug | AC110V | 50/60Hz | - | 1383013200 |
| | Lug | AC220V | 50/60Hz | - | 1383013300 |
| | Lug | AC240V | 50/60Hz | - | 1383013400 |
| | Lug | AC380V | 50/60Hz | - | 1383013500 |
| | Lug | AC400V | 50/60Hz | - | 1383013600 |
| | Lug | AC440V | 50/60Hz | - | 1383013700 |
| | Lug | AC500V | 50/60Hz | - | 1383013800 |
| | Lug | AC550V | 50/60Hz | - | 1383013900 |
| | Lug | AC230V | 50/60Hz | - | 1383014000 |
| | Lug | AC200V | 50/60Hz | - | 1383014100 |
| | Lug | AC120V | 50/60Hz | - | 1383014200 |
| | Lug | AC100V | 50/60Hz | - | 1383014300 |
| | Lug | AC415V | 50/60Hz | - | 1383014400 |
| | Lug | AC24V | 60Hz | - | 1383014500 |
| | Lug | AC48V | 60Hz | - | 1383014600 |
| | Lug | AC110V | 60Hz | - | 1383014700 |
| | Lug | AC120V | 60Hz | - | 1383014900 |
| | Lug | AC220V | 60Hz | - | 1383015000 |
| | Lug | AC240V | 60Hz | - | 1383015100 |
| | Lug | AC380V | 60Hz | - | 1383015200 |
| | Lug | AC440V | 60Hz | - | 1383015300 |
| | Lug | AC480V | 60Hz | - | 1383015400 |
| | Lug | AC600V | 60Hz | - | 1383015500 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | - | 1383015600 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | - | 1383015700 |
| | Lug | AC208V | 60Hz | - | 1383015800 |
| | Lug | AC277V | 60Hz | - | 1383015900 |
| | Lug | AC24V | 50Hz | - | 1383016000 |
| | Lug | AC48V | 50Hz | - | 1383016100 |
| | Lug | AC110V | 50Hz | - | 1383016200 |
| | Lug | AC220V | 50Hz | - | 1383016300 |
| | Lug | AC240V | 50Hz | - | 1383016400 |
| | Lug | AC380V | 50Hz | - | 1383016500 |
| | Lug | AC400V | 50Hz | - | 1383016600 |
| | Lug | AC415V | 50Hz | - | 1383016700 |
| | Lug | AC440V | 50Hz | - | 1383016800 |
| | Lug | AC550V | 50Hz | - | 1383016900 |
| | Lug | AC36V | 50Hz | - | 1383017000 |
| | Lug | AC42V | 50Hz | - | 1383017100 |
| | Lug | AC80V | 50Hz | - | 1383017200 |
| | Lug | AC100V | 50Hz | - | 1383017300 |
| | Lug | AC230V | 50Hz | - | 1383017400 |
| | Lug | AC500V | 50Hz | - | 1383017500 |
| Lug | AC32V | 50Hz | - | 1383017600 | |
| Lug | DC12V | - | - | 1383000300 | |
| Lug | DC24V | - | - | 1383012000 | |
| Lug | DC48V | - | - | 1383012100 | |
| Lug | DC100V | - | - | 1383012200 | |
| Lug | DC110V | - | - | 1383012300 | |
| Lug | DC125V | - | - | 1383012400 | |
| Lug | DC200V | - | - | 1383012500 | |
| Lug | DC220V | - | - | 1383012600 | |
| Lug | DC250V | - | - | 1383012700 | |
| Lug | DC20V | - | - | 1383012800 | |
| Lug | DC60V | - | - | 1383012900 | |
| Lug | DC80V | - | - | 1383013000 | |
| Lug | AC24V | 50/60Hz | 1a1b | 1383000400 | |
| Lug | AC48V | 50/60Hz | 1a1b | 1383007400 | |
| Lug | AC110V | 50/60Hz | 1a1b | 1383007500 | |
| Lug | AC220V | 50/60Hz | 1a1b | 1383007600 | |

Contactors

MC-85a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-85a | Lug | AC240V | 50/60Hz | 1a1b | 1383007700 |
| | Lug | AC380V | 50/60Hz | 1a1b | 1383007800 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1383007900 |
| | Lug | AC440V | 50/60Hz | 1a1b | 1383008000 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1383008100 |
| | Lug | AC550V | 50/60Hz | 1a1b | 1383008200 |
| | Lug | AC230V | 50/60Hz | 1a1b | 1383008300 |
| | Lug | AC200V | 50/60Hz | 1a1b | 1383008500 |
| | Lug | AC120V | 50/60Hz | 1a1b | 1383008600 |
| | Lug | AC100V | 50/60Hz | 1a1b | 1383008700 |
| | Lug | AC415V | 50/60Hz | 1a1b | 1383008800 |
| | Lug | AC24V | 60Hz | 1a1b | 1383008900 |
| | Lug | AC48V | 60Hz | 1a1b | 1383009000 |
| | Lug | AC110V | 60Hz | 1a1b | 1383009100 |
| | Lug | AC120V | 60Hz | 1a1b | 1383009200 |
| | Lug | AC220V | 60Hz | 1a1b | 1383009300 |
| | Lug | AC240V | 60Hz | 1a1b | 1383009400 |
| | Lug | AC380V | 60Hz | 1a1b | 1383009500 |
| | Lug | AC440V | 60Hz | 1a1b | 1383009600 |
| | Lug | AC480V | 60Hz | 1a1b | 1383009700 |
| | Lug | AC600V | 60Hz | 1a1b | 1383009800 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1383009900 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1383010000 |
| | Lug | AC208V | 60Hz | 1a1b | 1383010100 |
| | Lug | AC277V | 60Hz | 1a1b | 1383010200 |
| | Lug | AC24V | 50Hz | 1a1b | 1383010300 |
| | Lug | AC48V | 50Hz | 1a1b | 1383010400 |
| | Lug | AC110V | 50Hz | 1a1b | 1383010500 |
| | Lug | AC220V | 50Hz | 1a1b | 1383010600 |
| | Lug | AC240V | 50Hz | 1a1b | 1383010700 |
| | Lug | AC380V | 50Hz | 1a1b | 1383010800 |
| | Lug | AC400V | 50Hz | 1a1b | 1383010900 |
| | Lug | AC415V | 50Hz | 1a1b | 1383011000 |
| | Lug | AC440V | 50Hz | 1a1b | 1383011100 |
| | Lug | AC550V | 50Hz | 1a1b | 1383011200 |
| | Lug | AC36V | 50Hz | 1a1b | 1383011300 |
| | Lug | AC42V | 50Hz | 1a1b | 1383011400 |
| | Lug | AC80V | 50Hz | 1a1b | 1383011500 |
| | Lug | AC100V | 50Hz | 1a1b | 1383011600 |
| | Lug | AC230V | 50Hz | 1a1b | 1383011700 |
| | Lug | AC500V | 50Hz | 1a1b | 1383011800 |
| | Lug | AC32V | 50Hz | 1a1b | 1383011900 |
| | Lug | DC12V | - | 1a1b | 1383000500 |
| | Lug | DC24V | - | 1a1b | 1383006300 |
| | Lug | DC48V | - | 1a1b | 1383006400 |
| | Lug | DC100V | - | 1a1b | 1383006500 |
| Lug | DC110V | - | 1a1b | 1383006600 | |
| Lug | DC125V | - | 1a1b | 1383006700 | |
| Lug | DC200V | - | 1a1b | 1383006800 | |
| Lug | DC220V | - | 1a1b | 1383006900 | |
| Lug | DC250V | - | 1a1b | 1383007000 | |
| Lug | DC20V | - | 1a1b | 1383007100 | |
| Lug | DC60V | - | 1a1b | 1383007200 | |
| Lug | DC80V | - | 1a1b | 1383007300 | |
| Lug | AC24V | 50/60Hz | 2a2b | 1383000600 | |
| Lug | AC48V | 50/60Hz | 2a2b | 1383001800 | |

Contactors

MC-85a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|--------|---------------|--------------|------------|--------------|------------|
| MC-85a | Lug | AC110V | 50/60Hz | 2a2b | 1383001900 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1383002000 |
| | Lug | AC240V | 50/60Hz | 2a2b | 1383002100 |
| | Lug | AC380V | 50/60Hz | 2a2b | 1383002200 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1383002300 |
| | Lug | AC440V | 50/60Hz | 2a2b | 1383002400 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1383002500 |
| | Lug | AC550V | 50/60Hz | 2a2b | 1383002600 |
| | Lug | AC230V | 50/60Hz | 2a2b | 1383002700 |
| | Lug | AC200V | 50/60Hz | 2a2b | 1383002800 |
| | Lug | AC120V | 50/60Hz | 2a2b | 1383002900 |
| | Lug | AC100V | 50/60Hz | 2a2b | 1383003000 |
| | Lug | AC415V | 50/60Hz | 2a2b | 1383003100 |
| | Lug | AC24V | 60Hz | 2a2b | 1383003200 |
| | Lug | AC48V | 60Hz | 2a2b | 1383003300 |
| | Lug | AC110V | 60Hz | 2a2b | 1383003400 |
| | Lug | AC120V | 60Hz | 2a2b | 1383003500 |
| | Lug | AC220V | 60Hz | 2a2b | 1383003600 |
| | Lug | AC240V | 60Hz | 2a2b | 1383003700 |
| | Lug | AC380V | 60Hz | 2a2b | 1383003800 |
| | Lug | AC440V | 60Hz | 2a2b | 1383003900 |
| | Lug | AC480V | 60Hz | 2a2b | 1383004000 |
| | Lug | AC600V | 60Hz | 2a2b | 1383004100 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1383004200 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1383004300 |
| | Lug | AC208V | 60Hz | 2a2b | 1383004400 |
| | Lug | AC277V | 60Hz | 2a2b | 1383004500 |
| | Lug | AC24V | 50Hz | 2a2b | 1383004600 |
| | Lug | AC48V | 50Hz | 2a2b | 1383004700 |
| | Lug | AC110V | 50Hz | 2a2b | 1383004800 |
| | Lug | AC220V | 50Hz | 2a2b | 1383004900 |
| | Lug | AC240V | 50Hz | 2a2b | 1383005000 |
| | Lug | AC380V | 50Hz | 2a2b | 1383005100 |
| | Lug | AC400V | 50Hz | 2a2b | 1383005200 |
| | Lug | AC415V | 50Hz | 2a2b | 1383005300 |
| | Lug | AC440V | 50Hz | 2a2b | 1383005400 |
| | Lug | AC550V | 50Hz | 2a2b | 1383005500 |
| | Lug | AC36V | 50Hz | 2a2b | 1383005600 |
| | Lug | AC42V | 50Hz | 2a2b | 1383005700 |
| | Lug | AC80V | 50Hz | 2a2b | 1383005800 |
| | Lug | AC100V | 50Hz | 2a2b | 1383005900 |
| | Lug | AC230V | 50Hz | 2a2b | 1383006000 |
| | Lug | AC500V | 50Hz | 2a2b | 1383006100 |
| | Lug | AC32V | 50Hz | 2a2b | 1383006200 |
| | Lug | DC12V | - | 2a2b | 1383000200 |
| | Lug | DC24V | - | 2a2b | 1383000700 |
| Lug | DC48V | - | 2a2b | 1383000800 | |
| Lug | DC100V | - | 2a2b | 1383000900 | |
| Lug | DC110V | - | 2a2b | 1383001000 | |
| Lug | DC125V | - | 2a2b | 1383001100 | |
| Lug | DC200V | - | 2a2b | 1383001200 | |
| Lug | DC220V | - | 2a2b | 1383001300 | |
| Lug | DC250V | - | 2a2b | 1383001400 | |
| Lug | DC20V | - | 2a2b | 1383001500 | |
| Lug | DC60V | - | 2a2b | 1383001600 | |
| Lug | DC80V | - | 2a2b | 1383001700 | |

Contactors

MC-100a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|------------|--------------|------------|
| MC-100a | Lug | AC24V | 50/60Hz | - | 1384000600 |
| | Lug | AC48V | 50/60Hz | - | 1384013000 |
| | Lug | AC110V | 50/60Hz | - | 1384013100 |
| | Lug | AC220V | 50/60Hz | - | 1384013200 |
| | Lug | AC240V | 50/60Hz | - | 1384013300 |
| | Lug | AC380V | 50/60Hz | - | 1384013400 |
| | Lug | AC400V | 50/60Hz | - | 1384013500 |
| | Lug | AC440V | 50/60Hz | - | 1384013600 |
| | Lug | AC500V | 50/60Hz | - | 1384013700 |
| | Lug | AC550V | 50/60Hz | - | 1384013800 |
| | Lug | AC230V | 50/60Hz | - | 1384013900 |
| | Lug | AC200V | 50/60Hz | - | 1384014000 |
| | Lug | AC120V | 50/60Hz | - | 1384014100 |
| | Lug | AC100V | 50/60Hz | - | 1384014200 |
| | Lug | AC415V | 50/60Hz | - | 1384014300 |
| | Lug | AC24V | 60Hz | - | 1384014400 |
| | Lug | AC48V | 60Hz | - | 1384014500 |
| | Lug | AC110V | 60Hz | - | 1384014600 |
| | Lug | AC120V | 60Hz | - | 1384014700 |
| | Lug | AC220V | 60Hz | - | 1384014800 |
| | Lug | AC240V | 60Hz | - | 1384014900 |
| | Lug | AC380V | 60Hz | - | 1384015000 |
| | Lug | AC440V | 60Hz | - | 1384015100 |
| | Lug | AC480V | 60Hz | - | 1384015200 |
| | Lug | AC600V | 60Hz | - | 1384015300 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | - | 1384015400 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | - | 1384015500 |
| | Lug | AC208V | 60Hz | - | 1384015600 |
| | Lug | AC277V | 60Hz | - | 1384015700 |
| | Lug | AC24V | 50Hz | - | 1384015800 |
| | Lug | AC48V | 50Hz | - | 1384015900 |
| | Lug | AC110V | 50Hz | - | 1384016000 |
| | Lug | AC220V | 50Hz | - | 1384016100 |
| | Lug | AC240V | 50Hz | - | 1384016200 |
| | Lug | AC380V | 50Hz | - | 1384016300 |
| | Lug | AC400V | 50Hz | - | 1384016400 |
| | Lug | AC415V | 50Hz | - | 1384016500 |
| | Lug | AC440V | 50Hz | - | 1384016600 |
| | Lug | AC550V | 50Hz | - | 1384016700 |
| | Lug | AC36V | 50Hz | - | 1384016800 |
| | Lug | AC42V | 50Hz | - | 1384016900 |
| | Lug | AC80V | 50Hz | - | 1384017000 |
| | Lug | AC100V | 50Hz | - | 1384017100 |
| | Lug | AC230V | 50Hz | - | 1384017200 |
| | Lug | AC500V | 50Hz | - | 1384017300 |
| | Lug | AC32V | 50Hz | - | 1384017400 |
| Lug | DC12V | - | - | 1384000500 | |
| Lug | DC24V | - | - | 1384011900 | |
| Lug | DC48V | - | - | 1384012000 | |
| Lug | DC100V | - | - | 1384012100 | |
| Lug | DC110V | - | - | 1384012200 | |
| Lug | DC125V | - | - | 1384012300 | |
| Lug | DC200V | - | - | 1384012400 | |
| Lug | DC220V | - | - | 1384012500 | |
| Lug | DC250V | - | - | 1384012600 | |
| Lug | DC20V | - | - | 1384012700 | |
| Lug | DC60V | - | - | 1384012800 | |
| Lug | DC80V | - | - | 1384012900 | |
| Lug | AC24V | 50/60Hz | 1a1b | 1384000400 | |
| Lug | AC48V | 50/60Hz | 1a1b | 1384007400 | |
| Lug | AC110V | 50/60Hz | 1a1b | 1384007500 | |
| Lug | AC220V | 50/60Hz | 1a1b | 1384007600 | |

Contactors

MC-100a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|------------|--------------|------------|
| MC-100a | Lug | AC240V | 50/60Hz | 1a1b | 1384007700 |
| | Lug | AC380V | 50/60Hz | 1a1b | 1384007800 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1384007900 |
| | Lug | AC440V | 50/60Hz | 1a1b | 1384008000 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1384008100 |
| | Lug | AC550V | 50/60Hz | 1a1b | 1384008200 |
| | Lug | AC230V | 50/60Hz | 1a1b | 1384008300 |
| | Lug | AC200V | 50/60Hz | 1a1b | 1384008400 |
| | Lug | AC120V | 50/60Hz | 1a1b | 1384008500 |
| | Lug | AC100V | 50/60Hz | 1a1b | 1384008600 |
| | Lug | AC415V | 50/60Hz | 1a1b | 1384008700 |
| | Lug | AC24V | 60Hz | 1a1b | 1384008800 |
| | Lug | AC48V | 60Hz | 1a1b | 1384008900 |
| | Lug | AC110V | 60Hz | 1a1b | 1384009000 |
| | Lug | AC120V | 60Hz | 1a1b | 1384009100 |
| | Lug | AC220V | 60Hz | 1a1b | 1384009200 |
| | Lug | AC240V | 60Hz | 1a1b | 1384009300 |
| | Lug | AC380V | 60Hz | 1a1b | 1384009400 |
| | Lug | AC440V | 60Hz | 1a1b | 1384009500 |
| | Lug | AC480V | 60Hz | 1a1b | 1384009600 |
| | Lug | AC600V | 60Hz | 1a1b | 1384009700 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 1a1b | 1384009800 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 1a1b | 1384009900 |
| | Lug | AC208V | 60Hz | 1a1b | 1384010000 |
| | Lug | AC277V | 60Hz | 1a1b | 1384010100 |
| | Lug | AC24V | 50Hz | 1a1b | 1384010200 |
| | Lug | AC48V | 50Hz | 1a1b | 1384010300 |
| | Lug | AC110V | 50Hz | 1a1b | 1384010400 |
| | Lug | AC220V | 50Hz | 1a1b | 1384010500 |
| | Lug | AC240V | 50Hz | 1a1b | 1384010600 |
| | Lug | AC380V | 50Hz | 1a1b | 1384010700 |
| | Lug | AC400V | 50Hz | 1a1b | 1384010800 |
| | Lug | AC415V | 50Hz | 1a1b | 1384010900 |
| | Lug | AC440V | 50Hz | 1a1b | 1384011000 |
| | Lug | AC550V | 50Hz | 1a1b | 1384011100 |
| | Lug | AC36V | 50Hz | 1a1b | 1384011200 |
| | Lug | AC42V | 50Hz | 1a1b | 1384011300 |
| | Lug | AC80V | 50Hz | 1a1b | 1384011400 |
| | Lug | AC100V | 50Hz | 1a1b | 1384011500 |
| | Lug | AC230V | 50Hz | 1a1b | 1384011600 |
| | Lug | AC500V | 50Hz | 1a1b | 1384011700 |
| | Lug | AC32V | 50Hz | 1a1b | 1384011800 |
| | Lug | DC12V | - | 1a1b | 1384000300 |
| | Lug | DC24V | - | 1a1b | 1384006300 |
| | Lug | DC48V | - | 1a1b | 1384006400 |
| | Lug | DC100V | - | 1a1b | 1384006500 |
| | Lug | DC110V | - | 1a1b | 1384006600 |
| Lug | DC125V | - | 1a1b | 1384006700 | |
| Lug | DC200V | - | 1a1b | 1384006800 | |
| Lug | DC220V | - | 1a1b | 1384006900 | |
| Lug | DC250V | - | 1a1b | 1384007000 | |
| Lug | DC20V | - | 1a1b | 1384007100 | |
| Lug | DC60V | - | 1a1b | 1384007200 | |
| Lug | DC80V | - | 1a1b | 1384007300 | |
| Lug | AC24V | 50/60Hz | 2a2b | 1384000200 | |
| Lug | AC48V | 50/60Hz | 2a2b | 1384001800 | |

Contactors

MC-100a Lug type



100AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|------------|--------------|------------|
| MC-100a | Lug | AC110V | 50/60Hz | 2a2b | 1384001900 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1384002000 |
| | Lug | AC240V | 50/60Hz | 2a2b | 1384002100 |
| | Lug | AC380V | 50/60Hz | 2a2b | 1384002200 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1384002300 |
| | Lug | AC440V | 50/60Hz | 2a2b | 1384002400 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1384002500 |
| | Lug | AC550V | 50/60Hz | 2a2b | 1384002600 |
| | Lug | AC230V | 50/60Hz | 2a2b | 1384002700 |
| | Lug | AC200V | 50/60Hz | 2a2b | 1384002800 |
| | Lug | AC120V | 50/60Hz | 2a2b | 1384002900 |
| | Lug | AC100V | 50/60Hz | 2a2b | 1384003000 |
| | Lug | AC415V | 50/60Hz | 2a2b | 1384003100 |
| | Lug | AC24V | 60Hz | 2a2b | 1384003200 |
| | Lug | AC48V | 60Hz | 2a2b | 1384003300 |
| | Lug | AC110V | 60Hz | 2a2b | 1384003400 |
| | Lug | AC120V | 60Hz | 2a2b | 1384003500 |
| | Lug | AC220V | 60Hz | 2a2b | 1384003600 |
| | Lug | AC240V | 60Hz | 2a2b | 1384003700 |
| | Lug | AC380V | 60Hz | 2a2b | 1384003800 |
| | Lug | AC440V | 60Hz | 2a2b | 1384003900 |
| | Lug | AC480V | 60Hz | 2a2b | 1384004000 |
| | Lug | AC600V | 60Hz | 2a2b | 1384004100 |
| | Lug | AC100V, 110V | 50Hz, 60Hz | 2a2b | 1384004200 |
| | Lug | AC200V, 220V | 50Hz, 60Hz | 2a2b | 1384004300 |
| | Lug | AC208V | 60Hz | 2a2b | 1384004400 |
| | Lug | AC277V | 60Hz | 2a2b | 1384004500 |
| | Lug | AC24V | 50Hz | 2a2b | 1384004600 |
| | Lug | AC48V | 50Hz | 2a2b | 1384004700 |
| | Lug | AC110V | 50Hz | 2a2b | 1384004800 |
| | Lug | AC220V | 50Hz | 2a2b | 1384004900 |
| | Lug | AC240V | 50Hz | 2a2b | 1384005000 |
| | Lug | AC380V | 50Hz | 2a2b | 1384005100 |
| | Lug | AC400V | 50Hz | 2a2b | 1384005200 |
| | Lug | AC415V | 50Hz | 2a2b | 1384005300 |
| | Lug | AC440V | 50Hz | 2a2b | 1384005400 |
| | Lug | AC550V | 50Hz | 2a2b | 1384005500 |
| | Lug | AC36V | 50Hz | 2a2b | 1384005600 |
| | Lug | AC42V | 50Hz | 2a2b | 1384005700 |
| | Lug | AC80V | 50Hz | 2a2b | 1384005800 |
| | Lug | AC100V | 50Hz | 2a2b | 1384005900 |
| | Lug | AC230V | 50Hz | 2a2b | 1384006000 |
| | Lug | AC500V | 50Hz | 2a2b | 1384006100 |
| | Lug | AC32V | 50Hz | 2a2b | 1384006200 |
| | Lug | DC12V | - | 2a2b | 1384000100 |
| Lug | DC24V | - | 2a2b | 1384000700 | |
| Lug | DC48V | - | 2a2b | 1384000800 | |
| Lug | DC100V | - | 2a2b | 1384000900 | |
| Lug | DC110V | - | 2a2b | 1384001000 | |
| Lug | DC125V | - | 2a2b | 1384001100 | |
| Lug | DC200V | - | 2a2b | 1384001200 | |
| Lug | DC220V | - | 2a2b | 1384001300 | |
| Lug | DC250V | - | 2a2b | 1384001400 | |
| Lug | DC20V | - | 2a2b | 1384001500 | |
| Lug | DC60V | - | 2a2b | 1384001600 | |
| Lug | DC80V | - | 2a2b | 1384001700 | |

Contactors

MC-130a Lug type



150AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|-----------|--------------|------------|
| MC-130a | Lug | AC220V | 50/60Hz | - | 1385000100 |
| | Lug | AC24V | 50/60Hz | - | 1385000700 |
| | Lug | AC48V | 50/60Hz | - | 1385000800 |
| | Lug | AC110V | 50/60Hz | - | 1385000900 |
| | Lug | AC300V | 50/60Hz | - | 1385001000 |
| | Lug | AC400V | 50/60Hz | - | 1385001100 |
| | Lug | AC500V | 50/60Hz | - | 1385001200 |
| | Lug | DC24V | - | - | 1385000200 |
| | Lug | DC48V | - | - | 1385001300 |
| | Lug | DC110V | - | - | 1385001400 |
| | Lug | DC220V | - | - | 1385001500 |
| | Lug | AC220V | 50/60Hz | 1a1b | 1385000300 |
| | Lug | AC24V | 50/60Hz | 1a1b | 1385001600 |
| | Lug | AC48V | 50/60Hz | 1a1b | 1385001700 |
| | Lug | AC110V | 50/60Hz | 1a1b | 1385001800 |
| | Lug | AC300V | 50/60Hz | 1a1b | 1385001900 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1385002000 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1385002100 |
| | Lug | DC24V | - | 1a1b | 1385000400 |
| | Lug | DC48V | - | 1a1b | 1385002200 |
| | Lug | DC110V | - | 1a1b | 1385002300 |
| | Lug | DC220V | - | 1a1b | 1385002400 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1385000500 |
| | Lug | AC24V | 50/60Hz | 2a2b | 1385002500 |
| | Lug | AC48V | 50/60Hz | 2a2b | 1385002600 |
| | Lug | AC110V | 50/60Hz | 2a2b | 1385002700 |
| | Lug | AC300V | 50/60Hz | 2a2b | 1385002800 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1385002900 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1385003000 |
| | Lug | DC24V | - | 2a2b | 1385000600 |
| | Lug | DC48V | - | 2a2b | 1385003100 |
| | Lug | DC110V | - | 2a2b | 1385003200 |
| | Lug | DC220V | - | 2a2b | 1385003300 |

Contactors

MC-150a Lug type



150AF

| Model | Terminal type | Coil Voltage | Frequency | Aux. Contact | Code |
|---------|---------------|--------------|-----------|--------------|------------|
| MC-150a | Lug | AC220V | 50/60Hz | - | 1386000100 |
| | Lug | AC24V | 50/60Hz | - | 1386000700 |
| | Lug | AC48V | 50/60Hz | - | 1386000800 |
| | Lug | AC110V | 50/60Hz | - | 1386000900 |
| | Lug | AC300V | 50/60Hz | - | 1386001000 |
| | Lug | AC400V | 50/60Hz | - | 1386001100 |
| | Lug | AC500V | 50/60Hz | - | 1386001200 |
| | Lug | DC24V | - | - | 1386000200 |
| | Lug | DC48V | - | - | 1386001300 |
| | Lug | DC110V | - | - | 1386001400 |
| | Lug | DC220V | - | - | 1386001500 |
| | Lug | AC220V | 50/60Hz | 1a1b | 1386000300 |
| | Lug | AC24V | 50/60Hz | 1a1b | 1386001600 |
| | Lug | AC48V | 50/60Hz | 1a1b | 1386001700 |
| | Lug | AC110V | 50/60Hz | 1a1b | 1386001800 |
| | Lug | AC300V | 50/60Hz | 1a1b | 1386001900 |
| | Lug | AC400V | 50/60Hz | 1a1b | 1386002000 |
| | Lug | AC500V | 50/60Hz | 1a1b | 1386002100 |
| | Lug | DC24V | - | 1a1b | 1386000400 |
| | Lug | DC48V | - | 1a1b | 1386002200 |
| | Lug | DC110V | - | 1a1b | 1386002300 |
| | Lug | DC220V | - | 1a1b | 1386002400 |
| | Lug | AC220V | 50/60Hz | 2a2b | 1386000500 |
| | Lug | AC24V | 50/60Hz | 2a2b | 1386002500 |
| | Lug | AC48V | 50/60Hz | 2a2b | 1386002600 |
| | Lug | AC110V | 50/60Hz | 2a2b | 1386002700 |
| | Lug | AC300V | 50/60Hz | 2a2b | 1386002800 |
| | Lug | AC400V | 50/60Hz | 2a2b | 1386002900 |
| | Lug | AC500V | 50/60Hz | 2a2b | 1386003000 |
| | Lug | DC24V | - | 2a2b | 1386000600 |
| | Lug | DC48V | - | 2a2b | 1386003100 |
| | Lug | DC110V | - | 2a2b | 1386003200 |
| | Lug | DC220V | - | 2a2b | 1386003300 |

Contactors

MT-12 Screw type



18AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|--------------|----------------------|------------|
| MT-12 | Screw | 5A | 4~6 | Non-differential(2H) | 1318000900 |
| | Screw | 6.5A | 5~8 | Non-differential(2H) | 1318001000 |
| | Screw | 7.5A | 6~9 | Non-differential(2H) | 1318001100 |
| | Screw | 8.5A | 7~10 | Non-differential(2H) | 1318001200 |
| | Screw | 11A | 9~13 | Non-differential(2H) | 1318001300 |
| | Screw | 15A | 12~18 | Non-differential(2H) | 1318001400 |
| | Screw | 0.14A | 0.1~0.16 | Non-differential(3H) | 1319000100 |
| | Screw | 0.21A | 0.16~0.25 | Non-differential(3H) | 1319000200 |
| | Screw | 0.33A | 0.25~0.4 | Non-differential(3H) | 1319000300 |
| | Screw | 0.52A | 0.4~0.63 | Non-differential(3H) | 1319000400 |
| | Screw | 0.82A | 0.63~1 | Non-differential(3H) | 1319000500 |
| | Screw | 1.3A | 1~1.6 | Non-differential(3H) | 1319000600 |
| | Screw | 2.1A | 1.6~2.5 | Non-differential(3H) | 1319000700 |
| | Screw | 3.3A | 2.5~4 | Non-differential(3H) | 1319000800 |
| | Screw | 5A | 4~6 | Non-differential(3H) | 1319000900 |
| | Screw | 6.5A | 5~8 | Non-differential(3H) | 1319001000 |
| | Screw | 7.5A | 6~9 | Non-differential(3H) | 1319001100 |
| | Screw | 8.5A | 7~10 | Non-differential(3H) | 1319001200 |
| | Screw | 11A | 9~13 | Non-differential(3H) | 1319001300 |
| | Screw | 15A | 12~18 | Non-differential(3H) | 1319001400 |
| | Screw | 0.14A | 0.1~0.16 | Differential(3K) | 1323000100 |
| | Screw | 0.21A | 0.16~0.25 | Differential(3K) | 1323000200 |
| | Screw | 0.33A | 0.25~0.4 | Differential(3K) | 1323000300 |
| | Screw | 0.52A | 0.4~0.63 | Differential(3K) | 1323000400 |
| | Screw | 0.82A | 0.63~1 | Differential(3K) | 1323000500 |
| | Screw | 1.3A | 1~1.6 | Differential(3K) | 1323000600 |
| | Screw | 2.1A | 1.6~2.5 | Differential(3K) | 1323000700 |
| | Screw | 3.3A | 2.5~4 | Differential(3K) | 1323000800 |
| | Screw | 5A | 4~6 | Differential(3K) | 1323000900 |
| | Screw | 6.5A | 5~8 | Differential(3K) | 1323001000 |
| | Screw | 7.5A | 6~9 | Differential(3K) | 1323001100 |
| | Screw | 8.5A | 7~10 | Differential(3K) | 1323001200 |
| | Screw | 11A | 9~13 | Differential(3K) | 1323001300 |
| | Screw | 15A | 12~18 | Differential(3K) | 1323002700 |
| | Screw | 1.3A | 1~1.6 | Class 20(3D) | 1324000100 |
| | Screw | 2.1A | 1.6~2.5 | Class 20(3D) | 1324000200 |
| | Screw | 3.3A | 2.5~4 | Class 20(3D) | 1324000300 |
| | Screw | 5A | 4~6 | Class 20(3D) | 1324000400 |
| | Screw | 6.5A | 5~8 | Class 20(3D) | 1324000500 |
| | Screw | 7.5A | 6~9 | Class 20(3D) | 1324000600 |
| | Screw | 8.5A | 7~10 | Class 20(3D) | 1324000700 |
| | Screw | 11A | 9~13 | Class 20(3D) | 1324000800 |
| Screw | 15A | 12~18 | Class 20(3D) | 1324000900 | |

Contactors

MT-32 Screw type



40AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|------------------|----------------------|------------|
| MT-32 | Screw | 0.14A | 0.1~0.16 | Non-differential(2H) | 1296000100 |
| | Screw | 0.21A | 0.16~0.25 | Non-differential(2H) | 1296000200 |
| | Screw | 0.33A | 0.25~0.4 | Non-differential(2H) | 1296000300 |
| | Screw | 0.52A | 0.4~0.63 | Non-differential(2H) | 1296000400 |
| | Screw | 0.82A | 0.63~1 | Non-differential(2H) | 1296000500 |
| | Screw | 1.3A | 1~1.6 | Non-differential(2H) | 1296000600 |
| | Screw | 2.1A | 1.6~2.5 | Non-differential(2H) | 1296000700 |
| | Screw | 3.3A | 2.5~4 | Non-differential(2H) | 1296000800 |
| | Screw | 5A | 4~6 | Non-differential(2H) | 1296000900 |
| | Screw | 6.5A | 5~8 | Non-differential(2H) | 1296001000 |
| | Screw | 7.5A | 6~9 | Non-differential(2H) | 1296001100 |
| | Screw | 8.5A | 7~10 | Non-differential(2H) | 1296001200 |
| | Screw | 11A | 9~13 | Non-differential(2H) | 1296001300 |
| | Screw | 15A | 12~18 | Non-differential(2H) | 1296001400 |
| | Screw | 19A | 16~22 | Non-differential(2H) | 1296001500 |
| | Screw | 21.5A | 18~25 | Non-differential(2H) | 1296001600 |
| | Screw | 27A | 22~32 | Non-differential(2H) | 1296001700 |
| | Screw | 34A | 28~40 | Non-differential(2H) | 1296001800 |
| | Screw | 0.14A | 0.1~0.16 | Non-differential(3H) | 1297000100 |
| | Screw | 0.21A | 0.16~0.25 | Non-differential(3H) | 1297000200 |
| | Screw | 0.33A | 0.25~0.4 | Non-differential(3H) | 1297000300 |
| | Screw | 0.52A | 0.4~0.63 | Non-differential(3H) | 1297000400 |
| | Screw | 0.82A | 0.63~1 | Non-differential(3H) | 1297000500 |
| | Screw | 1.3A | 1~1.6 | Non-differential(3H) | 1297000600 |
| | Screw | 2.1A | 1.6~2.5 | Non-differential(3H) | 1297000700 |
| | Screw | 3.3A | 2.5~4 | Non-differential(3H) | 1297000800 |
| | Screw | 5A | 4~6 | Non-differential(3H) | 1297000900 |
| | Screw | 6.5A | 5~8 | Non-differential(3H) | 1297001000 |
| | Screw | 7.5A | 6~9 | Non-differential(3H) | 1297001100 |
| | Screw | 8.5A | 7~10 | Non-differential(3H) | 1297001200 |
| | Screw | 11A | 9~13 | Non-differential(3H) | 1297001300 |
| | Screw | 15A | 12~18 | Non-differential(3H) | 1297001400 |
| | Screw | 19A | 16~22 | Non-differential(3H) | 1297001500 |
| | Screw | 21.5A | 18~25 | Non-differential(3H) | 1297001600 |
| | Screw | 27A | 22~32 | Non-differential(3H) | 1297001700 |
| | Screw | 34A | 28~40 | Non-differential(3H) | 1297001800 |
| | Screw | 0.14A | 0.1~0.16 | Differential(3K) | 1298000100 |
| | Screw | 0.21A | 0.16~0.25 | Differential(3K) | 1298000200 |
| | Screw | 0.33A | 0.25~0.4 | Differential(3K) | 1298000300 |
| | Screw | 0.52A | 0.4~0.63 | Differential(3K) | 1298000400 |
| Screw | 0.82A | 0.63~1 | Differential(3K) | 1298000500 | |
| Screw | 1.3A | 1~1.6 | Differential(3K) | 1298000600 | |
| Screw | 2.1A | 1.6~2.5 | Differential(3K) | 1298000700 | |
| Screw | 3.3A | 2.5~4 | Differential(3K) | 1298000800 | |
| Screw | 5A | 4~6 | Differential(3K) | 1298000900 | |
| Screw | 6.5A | 5~8 | Differential(3K) | 1298001000 | |
| Screw | 7.5A | 6~9 | Differential(3K) | 1298001100 | |
| Screw | 8.5A | 7~10 | Differential(3K) | 1298001200 | |
| Screw | 11A | 9~13 | Differential(3K) | 1298001300 | |
| Screw | 15A | 12~18 | Differential(3K) | 1298001400 | |
| Screw | 19A | 16~22 | Differential(3K) | 1298001500 | |
| Screw | 21.5A | 18~25 | Differential(3K) | 1298001600 | |
| Screw | 27A | 22~32 | Differential(3K) | 1298001700 | |
| Screw | 34A | 28~40 | Differential(3K) | 1298002000 | |
| Screw | 1.3 | 1~1.6 | Class 20(3D) | 1299000100 | |
| Screw | 2.1 | 1.6~2.5 | Class 20(3D) | 1299000200 | |
| Screw | 3.3 | 2.5~4 | Class 20(3D) | 1299000300 | |
| Screw | 5 | 4~6 | Class 20(3D) | 1299000400 | |
| Screw | 6.5 | 5~8 | Class 20(3D) | 1299000500 | |
| Screw | 7.5 | 6~9 | Class 20(3D) | 1299000600 | |
| Screw | 8.5 | 7~10 | Class 20(3D) | 1299000700 | |
| Screw | 11 | 9~13 | Class 20(3D) | 1299000800 | |
| Screw | 15 | 12~18 | Class 20(3D) | 1299000900 | |
| Screw | 19 | 16~22 | Class 20(3D) | 1299001000 | |
| Screw | 21.5 | 18~25 | Class 20(3D) | 1299001100 | |
| Screw | 27 | 22~32 | Class 20(3D) | 1299001200 | |
| Screw | 34 | 28~40 | Class 20(3D) | 1299001300 | |

Contactors

MT-63 Screw type



65AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|--------------|----------------------|------------|
| MT-63 | Screw | 5 | 4-6 | Non-differential(2H) | 1308000100 |
| | Screw | 6.5 | 5-8 | Non-differential(2H) | 1308000200 |
| | Screw | 7.5 | 6-9 | Non-differential(2H) | 1308000300 |
| | Screw | 8.5 | 7-10 | Non-differential(2H) | 1308000400 |
| | Screw | 11 | 9-13 | Non-differential(2H) | 1308000500 |
| | Screw | 15 | 12-18 | Non-differential(2H) | 1308000600 |
| | Screw | 19 | 16-22 | Non-differential(2H) | 1308000700 |
| | Screw | 21.5 | 18-25 | Non-differential(2H) | 1308000800 |
| | Screw | 30 | 24-36 | Non-differential(2H) | 1308000900 |
| | Screw | 34 | 28-40 | Non-differential(2H) | 1308001000 |
| | Screw | 42 | 34-50 | Non-differential(2H) | 1308001100 |
| | Screw | 54 | 45-65 | Non-differential(2H) | 1308001200 |
| | Screw | 5 | 4-6 | Non-differential(3H) | 1309000100 |
| | Screw | 6.5 | 5-8 | Non-differential(3H) | 1309000200 |
| | Screw | 7.5 | 6-9 | Non-differential(3H) | 1309000300 |
| | Screw | 8.5 | 7-10 | Non-differential(3H) | 1309000400 |
| | Screw | 11 | 9-13 | Non-differential(3H) | 1309000500 |
| | Screw | 15 | 12-18 | Non-differential(3H) | 1309000600 |
| | Screw | 19 | 16-22 | Non-differential(3H) | 1309000700 |
| | Screw | 21.5 | 18-25 | Non-differential(3H) | 1309000800 |
| | Screw | 30 | 24-36 | Non-differential(3H) | 1309000900 |
| | Screw | 34 | 28-40 | Non-differential(3H) | 1309001000 |
| | Screw | 42 | 34-50 | Non-differential(3H) | 1309001100 |
| | Screw | 54 | 45-65 | Non-differential(3H) | 1309001200 |
| | Screw | 5 | 4-6 | Differential(3K) | 1310000100 |
| | Screw | 6.5 | 5-8 | Differential(3K) | 1310000200 |
| | Screw | 7.5 | 6-9 | Differential(3K) | 1310000300 |
| | Screw | 8.5 | 7-10 | Differential(3K) | 1310000400 |
| | Screw | 11 | 9-13 | Differential(3K) | 1310000500 |
| | Screw | 15 | 12-18 | Differential(3K) | 1310000600 |
| | Screw | 19 | 16-22 | Differential(3K) | 1310000700 |
| | Screw | 21.5 | 18-25 | Differential(3K) | 1310000800 |
| | Screw | 30 | 24-36 | Differential(3K) | 1310000900 |
| | Screw | 34 | 28-40 | Differential(3K) | 1310001000 |
| | Screw | 42 | 34-50 | Differential(3K) | 1310001100 |
| | Screw | 54 | 45-65 | Differential(3K) | 1310001200 |
| Screw | 5 | 4-6 | Class 20(3D) | 1311000100 | |
| Screw | 6.5 | 5-8 | Class 20(3D) | 1311000200 | |
| Screw | 7.5 | 6-9 | Class 20(3D) | 1311000300 | |
| Screw | 8.5 | 7-10 | Class 20(3D) | 1311000400 | |
| Screw | 11 | 9-13 | Class 20(3D) | 1311000500 | |
| Screw | 15 | 12-18 | Class 20(3D) | 1311000600 | |
| Screw | 19 | 16-22 | Class 20(3D) | 1311000700 | |
| Screw | 21.5 | 18-25 | Class 20(3D) | 1311000800 | |
| Screw | 30 | 24-36 | Class 20(3D) | 1311000900 | |
| Screw | 34 | 28-40 | Class 20(3D) | 1311001000 | |
| Screw | 42 | 34-50 | Class 20(3D) | 1311001100 | |
| Screw | 54 | 45-65 | Class 20(3D) | 1311001200 | |

Contactors

MT-63 Lug type



65AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|--------------|----------------------|----------|
| MT-63 | Lug | 5 | 4~6 | Non-differential(2H) | 13000001 |
| | Lug | 6.5 | 5~8 | Non-differential(2H) | 13000002 |
| | Lug | 7.5 | 6~9 | Non-differential(2H) | 13000003 |
| | Lug | 8.5 | 7~10 | Non-differential(2H) | 13000004 |
| | Lug | 11 | 9~13 | Non-differential(2H) | 13000005 |
| | Lug | 15 | 12~18 | Non-differential(2H) | 13000006 |
| | Lug | 19 | 16~22 | Non-differential(2H) | 13000007 |
| | Lug | 21.5 | 18~25 | Non-differential(2H) | 13000008 |
| | Lug | 30 | 24~36 | Non-differential(2H) | 13000009 |
| | Lug | 34 | 28~40 | Non-differential(2H) | 13000010 |
| | Lug | 42 | 34~50 | Non-differential(2H) | 13000011 |
| | Lug | 55 | 45~65 | Non-differential(2H) | 13000012 |
| | Lug | 5 | 4~6 | Non-differential(3H) | 13010001 |
| | Lug | 6.5 | 5~8 | Non-differential(3H) | 13010002 |
| | Lug | 7.5 | 6~9 | Non-differential(3H) | 13010003 |
| | Lug | 8.5 | 7~10 | Non-differential(3H) | 13010004 |
| | Lug | 11 | 9~13 | Non-differential(3H) | 13010005 |
| | Lug | 15 | 12~18 | Non-differential(3H) | 13010006 |
| | Lug | 19 | 16~22 | Non-differential(3H) | 13010007 |
| | Lug | 21.5 | 18~25 | Non-differential(3H) | 13010008 |
| | Lug | 30 | 24~36 | Non-differential(3H) | 13010009 |
| | Lug | 34 | 28~40 | Non-differential(3H) | 13010010 |
| | Lug | 42 | 34~50 | Non-differential(3H) | 13010011 |
| | Lug | 55 | 45~65 | Non-differential(3H) | 13010012 |
| | Lug | 5 | 4~6 | Differential(3K) | 13020001 |
| | Lug | 6.5 | 5~8 | Differential(3K) | 13020002 |
| | Lug | 7.5 | 6~9 | Differential(3K) | 13020003 |
| | Lug | 8.5 | 7~10 | Differential(3K) | 13020004 |
| | Lug | 11 | 9~13 | Differential(3K) | 13020005 |
| | Lug | 15 | 12~18 | Differential(3K) | 13020006 |
| | Lug | 19 | 16~22 | Differential(3K) | 13020007 |
| | Lug | 21.5 | 18~25 | Differential(3K) | 13020008 |
| | Lug | 30 | 24~36 | Differential(3K) | 13020009 |
| | Lug | 34 | 28~40 | Differential(3K) | 13020010 |
| | Lug | 42 | 34~50 | Differential(3K) | 13020011 |
| | Lug | 55 | 45~65 | Differential(3K) | 13020012 |
| | Lug | 5 | 4~6 | Class 20(3D) | 13030001 |
| | Lug | 6.5 | 5~8 | Class 20(3D) | 13030002 |
| | Lug | 7.5 | 6~9 | Class 20(3D) | 13030003 |
| | Lug | 8.5 | 7~10 | Class 20(3D) | 13030004 |
| | Lug | 11 | 9~13 | Class 20(3D) | 13030005 |
| | Lug | 15 | 12~18 | Class 20(3D) | 13030006 |
| Lug | 19 | 16~22 | Class 20(3D) | 13030007 | |
| Lug | 21.5 | 18~25 | Class 20(3D) | 13030008 | |
| Lug | 30 | 24~36 | Class 20(3D) | 13030009 | |
| Lug | 34 | 28~40 | Class 20(3D) | 13030010 | |
| Lug | 42 | 34~50 | Class 20(3D) | 13030011 | |
| Lug | 55 | 45~65 | Class 20(3D) | 13030012 | |

Contactors

MT-95 Screw type



65AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|--------------|----------------------|------------|
| MT-95 | Screw | 8.5 | 7~10 | Non-differential(2H) | 1312000100 |
| | Screw | 11 | 9~13 | Non-differential(2H) | 1312000200 |
| | Screw | 15 | 12~18 | Non-differential(2H) | 1312000300 |
| | Screw | 19 | 16~22 | Non-differential(2H) | 1312000400 |
| | Screw | 21.5 | 18~25 | Non-differential(2H) | 1312000500 |
| | Screw | 30 | 24~36 | Non-differential(2H) | 1312000600 |
| | Screw | 34 | 28~40 | Non-differential(2H) | 1312000700 |
| | Screw | 42 | 34~50 | Non-differential(2H) | 1312000800 |
| | Screw | 54 | 45~65 | Non-differential(2H) | 1312000900 |
| | Screw | 65 | 54~75 | Non-differential(2H) | 1312001000 |
| | Screw | 74 | 63~85 | Non-differential(2H) | 1312001100 |
| | Screw | 83 | 70~95 | Non-differential(2H) | 1312001200 |
| | Screw | 90 | 80~100 | Non-differential(2H) | 1312001300 |
| | Screw | 8.5 | 7~10 | Non-differential(3H) | 1313000100 |
| | Screw | 11 | 9~13 | Non-differential(3H) | 1313000200 |
| | Screw | 15 | 12~18 | Non-differential(3H) | 1313000300 |
| | Screw | 19 | 16~22 | Non-differential(3H) | 1313000400 |
| | Screw | 21.5 | 18~25 | Non-differential(3H) | 1313000500 |
| | Screw | 30 | 24~36 | Non-differential(3H) | 1313000600 |
| | Screw | 34 | 28~40 | Non-differential(3H) | 1313000700 |
| | Screw | 42 | 34~50 | Non-differential(3H) | 1313000800 |
| | Screw | 54 | 45~65 | Non-differential(3H) | 1313000900 |
| | Screw | 65 | 54~75 | Non-differential(3H) | 1313001000 |
| | Screw | 74 | 63~85 | Non-differential(3H) | 1313001100 |
| | Screw | 83 | 70~95 | Non-differential(3H) | 1313001200 |
| | Screw | 90 | 80~100 | Non-differential(3H) | 1313001300 |
| | Screw | 8.5 | 7~10 | Differential(3K) | 1314000100 |
| | Screw | 11 | 9~13 | Differential(3K) | 1314000200 |
| | Screw | 15 | 12~18 | Differential(3K) | 1314000300 |
| | Screw | 19 | 16~22 | Differential(3K) | 1314000400 |
| | Screw | 21.5 | 18~25 | Differential(3K) | 1314000500 |
| | Screw | 30 | 24~36 | Differential(3K) | 1314000600 |
| | Screw | 34 | 28~40 | Differential(3K) | 1314000700 |
| | Screw | 42 | 34~50 | Differential(3K) | 1314000800 |
| | Screw | 54 | 45~65 | Differential(3K) | 1314000900 |
| | Screw | 65 | 54~75 | Differential(3K) | 1314001000 |
| | Screw | 74 | 63~85 | Differential(3K) | 1314001100 |
| | Screw | 83 | 70~95 | Differential(3K) | 1314001200 |
| | Screw | 90 | 80~100 | Differential(3K) | 1314001300 |
| | Screw | 8.5 | 7~10 | Class 20(3D) | 1315000100 |
| | Screw | 11 | 9~13 | Class 20(3D) | 1315000200 |
| | Screw | 15 | 12~18 | Class 20(3D) | 1315000300 |
| Screw | 19 | 16~22 | Class 20(3D) | 1315000400 | |
| Screw | 21.5 | 18~25 | Class 20(3D) | 1315000500 | |
| Screw | 30 | 24~36 | Class 20(3D) | 1315000600 | |
| Screw | 34 | 28~40 | Class 20(3D) | 1315000700 | |
| Screw | 42 | 34~50 | Class 20(3D) | 1315000800 | |
| Screw | 54 | 45~65 | Class 20(3D) | 1315000900 | |
| Screw | 65 | 54~75 | Class 20(3D) | 1315001000 | |
| Screw | 74 | 63~85 | Class 20(3D) | 1315001100 | |
| Screw | 83 | 70~95 | Class 20(3D) | 1315001200 | |
| Screw | 90 | 80~100 | Class 20(3D) | 1315001300 | |

Contactors

MT-95 Lug type



65AF

| Model | Terminal type | Rated current | Range | Type | Code |
|-------|---------------|---------------|--------------|----------------------|----------|
| MT-95 | Lug | 8.5 | 7~10 | Non-differential(2H) | 13040001 |
| | Lug | 11 | 9~13 | Non-differential(2H) | 13040002 |
| | Lug | 15 | 12~18 | Non-differential(2H) | 13040003 |
| | Lug | 19 | 16~22 | Non-differential(2H) | 13040004 |
| | Lug | 21.5 | 18~25 | Non-differential(2H) | 13040005 |
| | Lug | 30 | 24~36 | Non-differential(2H) | 13040006 |
| | Lug | 34 | 28~40 | Non-differential(2H) | 13040007 |
| | Lug | 42 | 34~50 | Non-differential(2H) | 13040008 |
| | Lug | 54 | 45~65 | Non-differential(2H) | 13040009 |
| | Lug | 65 | 54~75 | Non-differential(2H) | 13040010 |
| | Lug | 74 | 63~85 | Non-differential(2H) | 13040011 |
| | Lug | 83 | 70~95 | Non-differential(2H) | 13040012 |
| | Lug | 90 | 80~100 | Non-differential(2H) | 13040013 |
| | Lug | 8.5 | 7~10 | Non-differential(3H) | 13050001 |
| | Lug | 11 | 9~13 | Non-differential(3H) | 13050002 |
| | Lug | 15 | 12~18 | Non-differential(3H) | 13050003 |
| | Lug | 19 | 16~22 | Non-differential(3H) | 13050004 |
| | Lug | 21.5 | 18~25 | Non-differential(3H) | 13050005 |
| | Lug | 30 | 24~36 | Non-differential(3H) | 13050006 |
| | Lug | 34 | 28~40 | Non-differential(3H) | 13050007 |
| | Lug | 42 | 34~50 | Non-differential(3H) | 13050008 |
| | Lug | 54 | 45~65 | Non-differential(3H) | 13050009 |
| | Lug | 65 | 54~75 | Non-differential(3H) | 13050010 |
| | Lug | 74 | 63~85 | Non-differential(3H) | 13050011 |
| | Lug | 83 | 70~95 | Non-differential(3H) | 13050012 |
| | Lug | 90 | 80~100 | Non-differential(3H) | 13050013 |
| | Lug | 8.5 | 7~10 | Differential(3K) | 13060001 |
| | Lug | 11 | 9~13 | Differential(3K) | 13060002 |
| | Lug | 15 | 12~18 | Differential(3K) | 13060003 |
| | Lug | 19 | 16~22 | Differential(3K) | 13060004 |
| | Lug | 21.5 | 18~25 | Differential(3K) | 13060005 |
| | Lug | 30 | 24~36 | Differential(3K) | 13060006 |
| | Lug | 34 | 28~40 | Differential(3K) | 13060007 |
| | Lug | 42 | 34~50 | Differential(3K) | 13060008 |
| | Lug | 54 | 45~65 | Differential(3K) | 13060009 |
| | Lug | 65 | 54~75 | Differential(3K) | 13060010 |
| | Lug | 74 | 63~85 | Differential(3K) | 13060011 |
| | Lug | 83 | 70~95 | Differential(3K) | 13060012 |
| | Lug | 90 | 80~100 | Differential(3K) | 13060013 |
| | Lug | 8.5 | 7~10 | Class 20(3D) | 13070001 |
| | Lug | 11 | 9~13 | Class 20(3D) | 13070002 |
| | Lug | 15 | 12~18 | Class 20(3D) | 13070003 |
| Lug | 19 | 16~22 | Class 20(3D) | 13070004 | |
| Lug | 21.5 | 18~25 | Class 20(3D) | 13070005 | |
| Lug | 30 | 24~36 | Class 20(3D) | 13070006 | |
| Lug | 34 | 28~40 | Class 20(3D) | 13070007 | |
| Lug | 42 | 34~50 | Class 20(3D) | 13070008 | |
| Lug | 54 | 45~65 | Class 20(3D) | 13070009 | |
| Lug | 65 | 54~75 | Class 20(3D) | 13070010 | |
| Lug | 74 | 63~85 | Class 20(3D) | 13070011 | |
| Lug | 83 | 70~95 | Class 20(3D) | 13070012 | |
| Lug | 90 | 80~100 | Class 20(3D) | 13070013 | |

Contactors

MT-150 Screw / Lug type

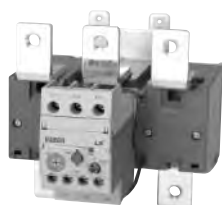


65AF

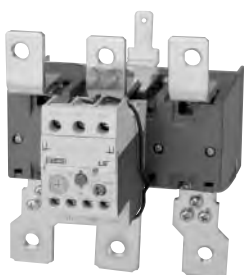
| Model | Terminal type | Rated current | Range | Type | Code |
|--------|---------------|---------------|------------------|----------------------|------------|
| MT-150 | Screw | 42A | 34-50 | Non-differential(2H) | 1375000100 |
| | Screw | 55A | 45-65 | Non-differential(2H) | 1375000200 |
| | Screw | 65A | 54-75 | Non-differential(2H) | 1375000300 |
| | Screw | 74A | 63-85 | Non-differential(2H) | 1375000400 |
| | Screw | 93A | 80-105 | Non-differential(2H) | 1375000500 |
| | Screw | 113A | 95-130 | Non-differential(2H) | 1375000600 |
| | Screw | 130A | 110-150 | Non-differential(2H) | 1375000700 |
| | Screw | 42A | 34-50 | Non-differential(3H) | 1375000800 |
| | Screw | 55A | 45-65 | Non-differential(3H) | 1375000900 |
| | Screw | 65A | 54-75 | Non-differential(3H) | 1375001000 |
| | Screw | 74A | 63-85 | Non-differential(3H) | 1375001100 |
| | Screw | 93A | 80-105 | Non-differential(3H) | 1375001200 |
| | Screw | 113A | 95-130 | Non-differential(3H) | 1375001300 |
| | Screw | 130A | 110-150 | Non-differential(3H) | 1375001400 |
| | Screw | 42A | 34-50 | Differential(3K) | 1375001500 |
| | Screw | 55A | 45-65 | Differential(3K) | 1375001600 |
| | Screw | 65A | 54-75 | Differential(3K) | 1375001700 |
| | Screw | 74A | 63-85 | Differential(3K) | 1375001800 |
| | Screw | 93A | 80-105 | Differential(3K) | 1375001900 |
| | Screw | 113A | 95-130 | Differential(3K) | 1375002000 |
| | Screw | 130A | 110-150 | Differential(3K) | 1375002100 |
| | Screw | 42A | 34-50 | Class 20(3D) | 1375002200 |
| | Screw | 55A | 45-65 | Class 20(3D) | 1375002300 |
| | Screw | 65A | 54-75 | Class 20(3D) | 1375002400 |
| | Screw | 74A | 63-85 | Class 20(3D) | 1375002500 |
| | Screw | 93A | 80-105 | Class 20(3D) | 1375002600 |
| | Screw | 113A | 95-130 | Class 20(3D) | 1375002700 |
| | Screw | 130A | 110-150 | Class 20(3D) | 1375002800 |
| | Lug | 42A | 34-50 | Non-differential(2H) | 1375002900 |
| | Lug | 55A | 45-65 | Non-differential(2H) | 1375003000 |
| | Lug | 65A | 54-75 | Non-differential(2H) | 1375003100 |
| | Lug | 74A | 63-85 | Non-differential(2H) | 1375003200 |
| | Lug | 93A | 80-105 | Non-differential(2H) | 1375003300 |
| | Lug | 113A | 95-130 | Non-differential(2H) | 1375003400 |
| | Lug | 130A | 110-150 | Non-differential(2H) | 1375003500 |
| | Lug | 42A | 34-50 | Non-differential(3H) | 1375003600 |
| | Lug | 55A | 45-65 | Non-differential(3H) | 1375003700 |
| | Lug | 65A | 54-75 | Non-differential(3H) | 1375003800 |
| | Lug | 74A | 63-85 | Non-differential(3H) | 1375003900 |
| | Lug | 93A | 80-105 | Non-differential(3H) | 1375004000 |
| | Lug | 113A | 95-130 | Non-differential(3H) | 1375004100 |
| | Lug | 130A | 110-150 | Non-differential(3H) | 1375004200 |
| | Lug | 42A | 34-50 | Differential(3K) | 1375004300 |
| | Lug | 55A | 45-65 | Differential(3K) | 1375004400 |
| | Lug | 65A | 54-75 | Differential(3K) | 1375004500 |
| | Lug | 74A | 63-85 | Differential(3K) | 1375004600 |
| | Lug | 93A | 80-105 | Differential(3K) | 1375004700 |
| | Lug | 113A | 95-130 | Differential(3K) | 1375004800 |
| Lug | 130A | 110-150 | Differential(3K) | 1375004900 | |
| Lug | 42A | 34-50 | Class 20(3D) | 1375005000 | |
| Lug | 55A | 45-65 | Class 20(3D) | 1375005100 | |
| Lug | 65A | 54-75 | Class 20(3D) | 1375005200 | |
| Lug | 74A | 63-85 | Class 20(3D) | 1375005300 | |
| Lug | 93A | 80-105 | Class 20(3D) | 1375005400 | |
| Lug | 113A | 95-130 | Class 20(3D) | 1375005500 | |
| Lug | 130A | 110-150 | Class 20(3D) | 1375005600 | |

Contactors

MT-225 ~ MT-800 Screw type



225AF



400AF



80AF

| Model | Terminal type | Rated current | Range | Type | Code | |
|--------|---------------|---------------|--------------|----------------------|------------------|------------|
| MT-225 | Screw | 80A | 65~100 | Non-differential(2H) | 1377000100 | |
| | Screw | 107A | 85~125 | Non-differential(2H) | 1377000200 | |
| | Screw | 130A | 100~160 | Non-differential(2H) | 1377000300 | |
| | Screw | 153A | 120~185 | Non-differential(2H) | 1377000400 | |
| | Screw | 200A | 160~240 | Non-differential(2H) | 1377000500 | |
| | Screw | 80A | 65~100 | Non-differential(3H) | 1377000600 | |
| | Screw | 107A | 85~125 | Non-differential(3H) | 1377000700 | |
| | Screw | 130A | 100~160 | Non-differential(3H) | 1377000800 | |
| | Screw | 153A | 120~185 | Non-differential(3H) | 1377000900 | |
| | Screw | 200A | 160~240 | Non-differential(3H) | 1377001000 | |
| | Screw | 80A | 65~100 | Differential(3K) | 1377001100 | |
| | Screw | 107A | 85~125 | Differential(3K) | 1377001200 | |
| | Screw | 130A | 100~160 | Differential(3K) | 1377001300 | |
| | Screw | 153A | 120~185 | Differential(3K) | 1377001400 | |
| | Screw | 200A | 160~240 | Differential(3K) | 1377001500 | |
| | Screw | 80A | 65~100 | Class 20(3D) | 1377001600 | |
| | Screw | 107A | 85~125 | Class 20(3D) | 1377001700 | |
| | Screw | 130A | 100~160 | Class 20(3D) | 1377001800 | |
| | Screw | 153A | 120~185 | Class 20(3D) | 1377001900 | |
| | MT-400 | Screw | 200A | 160~240 | Class 20(3D) | 1377002000 |
| Screw | | 107A | 85~125 | Non-differential(2H) | 1378000100 | |
| Screw | | 130A | 100~160 | Non-differential(2H) | 1378000200 | |
| Screw | | 153A | 120~185 | Non-differential(2H) | 1378000300 | |
| Screw | | 200A | 160~240 | Non-differential(2H) | 1378000400 | |
| Screw | | 265A | 200~330 | Non-differential(2H) | 1378000500 | |
| Screw | | 350A | 260~400 | Non-differential(2H) | 1378000600 | |
| Screw | | 107A | 85~125 | Non-differential(3H) | 1378000700 | |
| Screw | | 130A | 100~160 | Non-differential(3H) | 1378000800 | |
| Screw | | 153A | 120~185 | Non-differential(3H) | 1378000900 | |
| Screw | | 200A | 160~240 | Non-differential(3H) | 1378001000 | |
| Screw | | 265A | 200~330 | Non-differential(3H) | 1378001100 | |
| Screw | | 350A | 260~400 | Non-differential(3H) | 1378001200 | |
| Screw | | 107A | 85~125 | Differential(3K) | 1378001300 | |
| Screw | | 130A | 100~160 | Differential(3K) | 1378001400 | |
| Screw | | 153A | 120~185 | Differential(3K) | 1378001500 | |
| Screw | | 200A | 160~240 | Differential(3K) | 1378001600 | |
| Screw | | 265A | 200~330 | Differential(3K) | 1378001700 | |
| MT-800 | | Screw | 350A | 260~400 | Differential(3K) | 1378001800 |
| | | Screw | 107A | 85~125 | Class 20(3D) | 1378001900 |
| | Screw | 130A | 100~160 | Class 20(3D) | 1378002000 | |
| | Screw | 153A | 120~185 | Class 20(3D) | 1378002100 | |
| | Screw | 200A | 160~240 | Class 20(3D) | 1378002200 | |
| | Screw | 265A | 200~330 | Class 20(3D) | 1378002300 | |
| | Screw | 350A | 260~400 | Class 20(3D) | 1378002400 | |
| | Screw | 265A | 200~330 | Non-differential(2H) | 1379000100 | |
| | Screw | 350A | 260~400 | Non-differential(2H) | 1379000200 | |
| | Screw | 515A | 400~630 | Non-differential(2H) | 1379000300 | |
| | Screw | 660A | 520~800 | Non-differential(2H) | 1379000400 | |
| | Screw | 265A | 200~330 | Non-differential(3H) | 1379000500 | |
| | Screw | 350A | 260~400 | Non-differential(3H) | 1379000600 | |
| | Screw | 515A | 400~630 | Non-differential(3H) | 1379000700 | |
| | Screw | 660A | 520~800 | Non-differential(3H) | 1379000800 | |
| | Screw | 265A | 200~330 | Differential(3K) | 1379000900 | |
| | Screw | 350A | 260~400 | Differential(3K) | 1379001000 | |
| | Screw | 515A | 400~630 | Differential(3K) | 1379001100 | |
| | Screw | 660A | 520~800 | Differential(3K) | 1379001200 | |
| | Screw | 265A | 200~330 | Class 20(3D) | 1379001300 | |
| Screw | 350A | 260~400 | Class 20(3D) | 1379001400 | | |
| Screw | 515A | 400~630 | Class 20(3D) | 1379001500 | | |
| Screw | 660A | 520~800 | Class 20(3D) | 1379001600 | | |

Direct adapter

| Type | Model | Description | Applied products | Code |
|----------------|---------------------|----------------------------|-------------------|-------------|
| Direct adapter | DA-16SA | Adapter, MINI, AC, DA-16SA | GMC-6M~16M | 73311941001 |
| | DA-16SD | Adapter, MINI, DC, DA-16SD | GMD-6M~16M | 73311941002 |
| | DA-16HA | Adapter, MINI, AC, DA-16HA | GMC-6M~16M | 73311941003 |
| | DA-16HD | Adapter, MINI, DC, DA-16HD | GMD-6M~16M | 73311941004 |
| | DA-18SA | Adapter, AC, DA-18SA, EXP | MC-6a~18a AC | 73311634051 |
| | DA-18SD | Adapter, DC, DA-18SD, EXP | MC-6a~18a DC | 73311634053 |
| | DA-18HA | Adapter, AC, DA-18HA, EXP | MC-6a~18a AC | 73311634052 |
| | DA-18HD | Adapter, DC, DA-18HD, EXP | MC-6a~18a DC | 73311634054 |
| | DA-22SA | Adapter, AC, DA-22SA | MC-9b~22b AC | 73311634055 |
| | DA-22SD | Adapter, AC, DA-22SD | MC-9b~22b DC | 73311634057 |
| | DA-22HA | Adapter, AC, DA-22HA | MC-9b~22b AC | 73311634056 |
| | DA-22HD | Adapter, AC, DA-22HD | MC-9b~22b DC | 73311634058 |
| | DA-32SA | Adapter, AC, DA-32SA | MC-32a~40a AC | 73311634001 |
| | DA-32SD | Adapter, DC, DA-32SD | MC-32a~40a DC | 73311634003 |
| | DA-32HA | Adapter, AC, DA-32HA | MC-32a~40a AC | 73311634002 |
| | DA-32HD | Adapter, DC, DA-32HD | MC-32a~40a DC | 73311634004 |
| | DA-63A | Adapter, AC, DA-63A | MC-50a~65a AC Lug | 73311634005 |
| | DA-63D | Adapter, DC, DA-63D | MC-50a~65a DC Lug | 73311634006 |
| DA-95A | Adapter, AC, DA-95A | MC-75a~100a AC Lug | 73311634007 | |
| DA-95D | Adapter, DC, DA-95D | MC-75a~100a DC Lug | 73311634008 | |

Surge unit



| Model | Terminal type | Rated current | Type | Code |
|------------|---------------|---------------|------------|-------------|
| Surge Unit | US-1 | AC24~48V | MC-6a~150a | 83611634001 |
| | US-2 | AC100~125V | MC-6a~150a | 83611634002 |
| | US-3 | AC200~240V | MC-6a~150a | 83611634003 |
| | US-4 | DC24~48V | MC-6a~150a | 83611634004 |
| | US-5 | DC100~125V | MC-6a~150a | 83611634005 |
| | US-6 | DC200~220V | MC-6a~150a | 83611634006 |
| | US-11 | AC/DC24~48V | MC-6a~150a | 83611634007 |
| | US-12 | AC/DC100~125V | MC-6a~150a | 83611634008 |
| | US-13 | AC/DC200~240V | MC-6a~150a | 83611634009 |
| | US-14 | AC380~440V | MC-6a~150a | 83611634010 |
| | US-22 | AC100~125V | MC-6a~150a | 83611634011 |

Aux. Contact unit

| Type | Model | Discription | | Applied products | Code |
|-------------------|---------|-------------|---------|------------------|-------------|
| Aux. Contact Unit | UA-1 | 1A1B | 1NO 1NC | MC-6a~150a | 83361634001 |
| | AU-2 | 2A | 2NO | MC-6a~150a | 83361611028 |
| | | 1A1B | 1NO 1NC | MC-6a~150a | 83361611030 |
| | AU-4 | 2B | 2NC | MC-6a~150a | 83361611032 |
| | | 4A | 4NO | MC-6a~150a | 83361611054 |
| | | 3A1B | 3NO 1NC | MC-6a~150a | 83361611056 |
| | | 2A2B | 2NO 2NC | MC-6a~150a | 83361611058 |
| | | 1A3B | 1NO 3NC | MC-6a~150a | 83361611060 |
| | | 4B | 4NC | MC-6a~150a | 83361611062 |
| | AU-100 | 1A1B | 1NO 1NC | MC-185a~800a | 83361614009 |
| | AU-100E | 1A1B | 1NO 1NC | MC-185a~800a | 83361614016 |

Wire Ass'y

| Type | Model | Description | Applied product | Code |
|------------|-------|-------------|-----------------|-------------|
| Wire Ass'y | UW-18 | - | MC-6aR~18aR | 76671635003 |
| | UW-22 | - | MC-9bR~22bR | 76671636003 |
| | UW-32 | - | MC-32aR, 40aR | 76671631003 |
| | UW-63 | - | MC-50aR, 65aR | 76671632003 |
| | UW-95 | - | MC-75aR~100aR | 76671633003 |

Delay open device

| Type | Model | Description | Applied product | Code |
|-------------------|--------|-------------|-----------------|-------------|
| Delay open device | AD-9 | AC220V | MC-6a~40a | 83391611001 |
| | AD-9 | AC110V | MC-6a~40a | 83391611002 |
| | AD-50 | AC220V | MC-50a~100a | 83391613030 |
| | AD-50 | AC110V | MC-50a~100a | 83391613031 |
| | AD-100 | AC100~240V | MC-130a~225a | 83391614002 |
| | AD-300 | AC100~240V | MC-265a~400a | 83391617001 |
| | AD-600 | AC100~127V | MC-500a~800a | 83391618001 |
| | AD-600 | AC200~240V | MC-500a~800a | 83391618002 |

Catalogue numbers

Interlok unit



| Type | Model | Description | Applied product | Code |
|---------------|--------|-------------|-----------------|-------------|
| Interlok Unit | UR-02 | 2NC | MC-6a~150a | 83411634001 |
| | AR-180 | HORIZONTAL | MC-185a~400a | 83411616001 |
| | AR-600 | HORIZONTAL | MC-500a~800a | 56121618001 |
| | AR-600 | VERTICAL | MC-500a~800a | 56121618002 |



Capacitor unit

| Type | Model | Description | Applied product | Code |
|----------------|-------|-------------|-----------------|-------------|
| Capacitor Unit | AC-9 | - | MC-6a~40a | 83631611001 |
| | AC-50 | - | MC-50a~100a | 83631613001 |

Remote reset



| Type | Model | Description | Applied product | Code |
|--------------|-------|-------------|-----------------|-------------|
| Remote reset | UM-4R | 400mm | MT-32~150 | 84581831001 |
| | UM-5R | 500mm | MT-32~150 | 84581831002 |
| | UM-6R | 600mm | MT-32~150 | 84581831003 |

Separate mounting adapter



| Type | Model | Description | Applied product | Code |
|---------------------------|----------|-------------|-----------------|-------------|
| Separate mounting adapter | AZ-12MH | - | GTH(K)-12M | 83661821001 |
| | UZ-32 | - | MT-32 | 83661831001 |
| | UZ-63/S | - | MT-63 | 83661832002 |
| | UZ-95/S | - | MT-95 | 83661833002 |
| | UZ-150/S | - | MT-150 | 83661835002 |

Lug Ass'y terminal

| Type | Model | Description | Applied product | Code |
|--------------------|--------|-------------|-----------------|-------------|
| Lug Ass'y Terminal | AJ-220 | - | MC-185a, 225a | 70821616008 |
| | AJ-400 | - | MC-265a~400a | 70821617008 |
| | AJ-800 | - | MC-500a~800a | 70821618008 |

Capacitor unit



| Type | Model | Description | Applied product | Code |
|--------------|-------|-------------|-----------------|-------------|
| Safety Cover | - | - | MC-6a~150a | 64611611205 |
| | - | - | MC-185a~800a | 64611642002 |

Catalogue numbers

Latch unit

| Type | Model | Rated current | Applied product | Description | Code |
|------------|--------|---------------|------------------------------------|------------------------------------|-------------|
| Latch unit | AL-9 | AC24V | MC-6a~40a | - | 83461611007 |
| | AL-9 | AC100V | MC-6a~40a | - | 83461611004 |
| | AL-9 | AC200V | MC-6a~40a | - | 83461611006 |
| | AL-9 | AC300V | MC-6a~40a | - | 83461611009 |
| | AL-9 | AC400V | MC-6a~40a | - | 83461611011 |
| | AL-9 | AC500V | MC-6a~40a | - | 83461611013 |
| | AL-9 | DC24V | MC-6a~40a | - | 83461611024 |
| | AL-9 | DC48V | MC-6a~40a | - | 83461611026 |
| | AL-9 | DC100V | MC-6a~40a | - | 83461611016 |
| | AL-9 | DC125V | MC-6a~40a | - | 83461611018 |
| | AL-9 | DC12V | MC-6a~40a | - | 83461611020 |
| | AL-9 | DC200V | MC-6a~40a | - | 83461611022 |
| | AL-50 | AC24V | MC-50a, 65a | - | 83461613006 |
| | AL-50 | AC48V | MC-50a, 65a | - | 83461613014 |
| | AL-50 | AC100V | MC-50a, 65a | - | 83461613003 |
| | AL-50 | AC200V | MC-50a, 65a | - | 83461613004 |
| | AL-50 | AC300V | MC-50a, 65a | - | 83461613008 |
| | AL-50 | AC400V | MC-50a, 65a | - | 83461613010 |
| | AL-50 | AC500V | MC-50a, 65a | - | 83461613012 |
| | AL-50 | DC24V | MC-50a, 65a | - | 83461613074 |
| | AL-50 | DC100V | MC-50a, 65a | - | 83461613016 |
| | AL-95 | AC24V | MC-75a~150a | - | 83461634001 |
| | AL-95 | AC48V | MC-75a~150a | - | 83461634002 |
| | AL-95 | AC100V | MC-75a~150a | - | 83461634003 |
| | AL-95 | AC200V | MC-75a~150a | - | 83461634004 |
| | AL-95 | AC300V | MC-75a~150a | - | 83461634005 |
| | AL-95 | AC400V | MC-75a~150a | - | 83461634006 |
| | AL-95 | AC500V | MC-75a~150a | - | 83461634007 |
| | AL-95 | DC12V | MC-75a~150a | - | 83461634008 |
| | AL-95 | DC24V | MC-75a~150a | - | 83461634009 |
| | AL-95 | DC48V | MC-75a~150a | - | 83461634010 |
| | AL-95 | DC100V | MC-75a~150a | - | 83461634011 |
| | AL-95 | DC125V | MC-75a~150a | - | 83461634012 |
| | AL-95 | DC200V | MC-75a~150a | - | 83461634013 |
| | AL-200 | AC100V | MC-185a, 225a | Base, Latch, GMC-180L/220L | 64261616001 |
| | | | | Guide, Latch, GMC-180L/220L | 55111616002 |
| | | | | Spacer, Latch, GMC-100L~400L | 61461614001 |
| | | | | Latch Ass'Y, AC100V, GMC-180L/220L | 65221616001 |
| | AL-200 | AC200V | MC-185a, 225a | Base, Latch, GMC-180L/220L | 64261616001 |
| | | | | Guide, Latch, GMC-180L/220L | 55111616002 |
| | | | | Spacer, Latch, GMC-100L~400L | 61461614001 |
| | | | | Latch Ass'Y, AC200V, GMC-180L/220L | 65221616003 |
| AL-400 | AC100V | MC-265a~400a | Base, Latch, GMC-300L/400L | 64261617001 | |
| | | | Guide, Latch, GMC-300L/400L | 55111617002 | |
| | | | Spacer, Latch, GMC-100L~400L | 61461614001 | |
| | | | Latch Ass'Y, AC100V, GMC-300L/400L | 65221617001 | |
| AL-400 | AC200V | MC-265a~400a | Base, Latch, GMC-300L/400L | 64261617001 | |
| | | | Guide, Latch, GMC-300L/400L | 55111617002 | |
| | | | Spacer, Latch, GMC-100L~400L | 61461614001 | |
| | | | Latch Ass'Y, AC200V, GMC-300L/400L | 65221617003 | |

Timer

| Type | Model | Rated voltage | Applied product | Code |
|-------|-------|---------------|-----------------|-------------|
| Timer | UT-1N | AC/DC24~48V | MC-9a~150a | 83391634001 |
| | UT-2N | AC110~220V | | 83391634002 |
| | UT-1F | AC/DC24~48V | | 83391634003 |
| | UT-2F | AC110~220V | | 83391634004 |

Cover



| Type | Model | Applied product | Code |
|-----------------------------------|--------|-----------------|-------------|
| Terminal cover unit for contactor | AP-220 | MC-185a, 225a | 64611614006 |
| | AP-400 | MC-265a~400a | 64611614007 |
| | AP-800 | MC-500a~800a | 64611614008 |



| Type | Model | Applied product | Code |
|-----------------------------|---------|-----------------|-------------|
| Terminal cover unit for TOR | APT-220 | MT-225 | 64611816005 |
| | APT-400 | MT-400 | 64611817015 |



| Type | Model | Applied product | Code |
|--------------------------|--------|-----------------|-------------|
| Insulation barrier units | AI-180 | MC-185a~400a | 83511616001 |
| | AI-800 | MC-500a~800a | 83511618001 |

3-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | No. of Auxiliary Contact | Catalogue No. |
|--------|------------------|---------|--------------------------|---------------|
| GMC-6M | AC24V | 50/60Hz | 1a | 1269022800 |
| | AC36V | 50/60Hz | 1a | 1269022900 |
| | AC42V | 50/60Hz | 1a | 1269023000 |
| | AC48V | 50/60Hz | 1a | 1269023100 |
| | AC110V | 50/60Hz | 1a | 1269023200 |
| | AC115V | 50/60Hz | 1a | 1269023300 |
| | AC120V | 50/60Hz | 1a | 1269023400 |
| | AC127V | 50/60Hz | 1a | 1269023500 |
| | AC200V | 50/60Hz | 1a | 1269034400 |
| | AC220V | 50/60Hz | 1a | 1269023700 |
| | AC240V | 50/60Hz | 1a | 1269037500 |
| | AC256V | 50/60Hz | 1a | 1269024000 |
| | AC277V | 50/60Hz | 1a | 1269024100 |
| | AC380V | 50/60Hz | 1a | 1269032900 |
| | AC400V | 50/60Hz | 1a | 1269024300 |
| | AC440V | 50/60Hz | 1a | 1269024400 |
| | AC480V | 50/60Hz | 1a | 1269024500 |
| | AC500V | 50/60Hz | 1a | 1269024600 |
| | AC550V | 50/60Hz | 1a | 1269024700 |
| | AC24V | 50/60Hz | 1b | 1269002100 |
| | AC36V | 50/60Hz | 1b | 1269002200 |
| | AC42V | 50/60Hz | 1b | 1269002300 |
| | AC48V | 50/60Hz | 1b | 1269002400 |
| | AC110V | 50/60Hz | 1b | 1269002500 |
| | AC115V | 50/60Hz | 1b | 1269002600 |
| | AC120V | 50/60Hz | 1b | 1269002700 |
| | AC127V | 50/60Hz | 1b | 1269002800 |
| | AC200V | 50/60Hz | 1b | 1269037600 |
| | AC220V | 50/60Hz | 1b | 1269003000 |
| | AC240V | 50/60Hz | 1b | 1269037700 |
| | AC256V | 50/60Hz | 1b | 1269003300 |
| | AC277V | 50/60Hz | 1b | 1269003400 |
| | AC380V | 50/60Hz | 1b | 1269033000 |
| | AC400V | 50/60Hz | 1b | 1269003600 |
| AC440V | 50/60Hz | 1b | 1269003700 | |
| AC480V | 50/60Hz | 1b | 1269003800 | |
| AC500V | 50/60Hz | 1b | 1269003900 | |
| AC550V | 50/60Hz | 1b | 1269004000 | |
| GMC-9M | AC24V | 50/60Hz | 1a | 1269008100 |
| | AC36V | 50/60Hz | 1a | 1269008200 |
| | AC42V | 50/60Hz | 1a | 1269008300 |
| | AC48V | 50/60Hz | 1a | 1269008400 |
| | AC110V | 50/60Hz | 1a | 1269008500 |
| | AC115V | 50/60Hz | 1a | 1269008600 |
| | AC120V | 50/60Hz | 1a | 1269008700 |
| | AC127V | 50/60Hz | 1a | 1269008800 |
| | AC200V | 50/60Hz | 1a | 1269034500 |
| | AC220V | 50/60Hz | 1a | 1269009000 |
| | AC240V | 50/60Hz | 1a | 1269038200 |
| | AC256V | 50/60Hz | 1a | 1269009300 |
| | AC277V | 50/60Hz | 1a | 1269009400 |
| | AC380V | 50/60Hz | 1a | 1269033300 |
| | AC400V | 50/60Hz | 1a | 1269009600 |
| | AC440V | 50/60Hz | 1a | 1269009700 |
| AC480V | 50/60Hz | 1a | 1269009800 | |
| AC500V | 50/60Hz | 1a | 1269009900 | |

3-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | No. of Auxiliary Contact | Catalogue No. |
|---------|------------------|---------|--------------------------|---------------|
| GMC-9M | AC550V | 50/60Hz | 1a | 1269010000 |
| | AC24V | 50/60Hz | 1b | 1269010100 |
| | AC36V | 50/60Hz | 1b | 1269010200 |
| | AC42V | 50/60Hz | 1b | 1269010300 |
| | AC48V | 50/60Hz | 1b | 1269010400 |
| | AC110V | 50/60Hz | 1b | 1269010500 |
| | AC115V | 50/60Hz | 1b | 1269010600 |
| | AC120V | 50/60Hz | 1b | 1269010700 |
| | AC127V | 50/60Hz | 1b | 1269010800 |
| | AC200V | 50/60Hz | 1b | 1269038300 |
| | AC220V | 50/60Hz | 1b | 1269011000 |
| | AC240V | 50/60Hz | 1b | 1269038400 |
| | AC256V | 50/60Hz | 1b | 1269011300 |
| | AC277V | 50/60Hz | 1b | 1269011400 |
| | AC380V | 50/60Hz | 1b | 1269033400 |
| | AC400V | 50/60Hz | 1b | 1269011600 |
| | AC440V | 50/60Hz | 1b | 1269011700 |
| | AC480V | 50/60Hz | 1b | 1269011800 |
| | AC500V | 50/60Hz | 1b | 1269011900 |
| AC550V | 50/60Hz | 1b | 1269012000 | |
| GMC-9MF | AC120V | 50/60Hz | 1a | 1269040100 |
| GMC-12M | AC24V | 50/60Hz | 1a | 1269016700 |
| | AC36V | 50/60Hz | 1a | 1269016800 |
| | AC42V | 50/60Hz | 1a | 1269016900 |
| | AC48V | 50/60Hz | 1a | 1269017000 |
| | AC110V | 50/60Hz | 1a | 1269017100 |
| | AC115V | 50/60Hz | 1a | 1269017200 |
| | AC120V | 50/60Hz | 1a | 1269017300 |
| | AC127V | 50/60Hz | 1a | 1269017400 |
| | AC200V | 50/60Hz | 1a | 1269034600 |
| | AC220V | 50/60Hz | 1a | 1269017600 |
| | AC240V | 50/60Hz | 1a | 1269038900 |
| | AC256V | 50/60Hz | 1a | 1269017900 |
| | AC277V | 50/60Hz | 1a | 1269018000 |
| | AC380V | 50/60Hz | 1a | 1269033700 |
| | AC400V | 50/60Hz | 1a | 1269018200 |
| | AC440V | 50/60Hz | 1a | 1269018300 |
| | AC480V | 50/60Hz | 1a | 1269018400 |
| | AC500V | 50/60Hz | 1a | 1269018500 |
| | AC550V | 50/60Hz | 1a | 1269018600 |
| | AC24V | 50/60Hz | 1b | 1269018800 |
| | AC36V | 50/60Hz | 1b | 1269018900 |
| | AC42V | 50/60Hz | 1b | 1269019000 |
| | AC48V | 50/60Hz | 1b | 1269019100 |
| | AC110V | 50/60Hz | 1b | 1269019200 |
| | AC115V | 50/60Hz | 1b | 1269019300 |
| | AC120V | 50/60Hz | 1b | 1269019400 |
| | AC127V | 50/60Hz | 1b | 1269019500 |
| | AC200V | 50/60Hz | 1b | 1269039000 |
| | AC220V | 50/60Hz | 1b | 1269019700 |
| | AC240V | 50/60Hz | 1b | 1269039100 |
| | AC256V | 50/60Hz | 1b | 1269020000 |
| | AC277V | 50/60Hz | 1b | 1269020100 |
| | AC380V | 50/60Hz | 1b | 1269033800 |
| AC400V | 50/60Hz | 1b | 1269020300 | |
| AC440V | 50/60Hz | 1b | 1269020400 | |

3-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | No. of Auxiliary Contact | Catalogue No. |
|----------|------------------|---------|--------------------------|---------------|
| GMC-12M | AC480V | 50/60Hz | 1b | 1269020500 |
| | AC500V | 50/60Hz | 1b | 1269020600 |
| | AC550V | 50/60Hz | 1b | 1269020700 |
| GMC-16M | AC24V | 50/60Hz | 1a | 1269026800 |
| | AC36V | 50/60Hz | 1a | 1269026900 |
| | AC42V | 50/60Hz | 1a | 1269027000 |
| | AC48V | 50/60Hz | 1a | 1269027100 |
| | AC110V | 50/60Hz | 1a | 1269027200 |
| | AC115V | 50/60Hz | 1a | 1269027300 |
| | AC120V | 50/60Hz | 1a | 1269027400 |
| | AC127V | 50/60Hz | 1a | 1269027500 |
| | AC200V | 50/60Hz | 1a | 1269034700 |
| | AC220V | 50/60Hz | 1a | 1269027700 |
| | AC230V | 50/60Hz | 1a | 1269047600 |
| | AC240V | 50/60Hz | 1a | 1269039600 |
| | AC256V | 50/60Hz | 1a | 1269028000 |
| | AC277V | 50/60Hz | 1a | 1269028100 |
| | AC380V | 50/60Hz | 1a | 1269034100 |
| | AC400V | 50/60Hz | 1a | 1269028300 |
| | AC440V | 50/60Hz | 1a | 1269028400 |
| | AC480V | 50/60Hz | 1a | 1269028500 |
| | AC500V | 50/60Hz | 1a | 1269028600 |
| | AC550V | 50/60Hz | 1a | 1269028700 |
| | AC24V | 50/60Hz | 1b | 1269028800 |
| | AC36V | 50/60Hz | 1b | 1269028900 |
| | AC42V | 50/60Hz | 1b | 1269029000 |
| | AC48V | 50/60Hz | 1b | 1269029100 |
| | AC110V | 50/60Hz | 1b | 1269029200 |
| | AC115V | 50/60Hz | 1b | 1269029300 |
| | AC120V | 50/60Hz | 1b | 1269029400 |
| | AC127V | 50/60Hz | 1b | 1269029500 |
| | AC200V | 50/60Hz | 1b | 1269039700 |
| | AC220V | 50/60Hz | 1b | 1269029700 |
| | AC240V | 50/60Hz | 1b | 1269039800 |
| | AC256V | 50/60Hz | 1b | 1269030000 |
| | AC277V | 50/60Hz | 1b | 1269030100 |
| AC380V | 50/60Hz | 1b | 1269034200 | |
| AC400V | 50/60Hz | 1b | 1269030300 | |
| AC440V | 50/60Hz | 1b | 1269030400 | |
| AC480V | 50/60Hz | 1b | 1269030500 | |
| AC500V | 50/60Hz | 1b | 1269030600 | |
| AC550V | 50/60Hz | 1b | 1269030700 | |
| GMC-9MP | AC230V | 50/60Hz | 1a | 1269047800 |
| GMC-12MP | AC230V | 50/60Hz | 1a | 1269047500 |
| GMC-16MP | AC120V | 50/60Hz | 1a | 1269043700 |
| | AC120V | 50/60Hz | 1b | 1269045000 |
| GMC-12MF | AC230V | 50/60Hz | 1a | 1269047700 |
| GMC-16MF | AC120V | 50/60Hz | 1a | 1269040200 |
| | AC24V | 50/60Hz | 1b | 1269048400 |
| | AC120V | 50/60Hz | 1b | 1269048500 |
| GMC-16MC | AC120V | 50/60Hz | 1a | 1269040400 |
| | AC230V | 50/60Hz | 1a | 1269047900 |

3-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | No. of Auxiliary Contact | Catalogue No. |
|--------|------------------|------------------|--------------------------|---------------|
| GMD-6M | DC12V | 1.2W | 1a | 1270004300 |
| | DC20V | 1.2W | 1a | 1270004400 |
| | DC24V | 1.2W | 1a | 1270004500 |
| | DC48V | 1.2W | 1a | 1270004600 |
| | DC72V | 1.2W | 1a | 1270004700 |
| | DC110V | 1.2W | 1a | 1270004800 |
| | DC120V | 1.2W | 1a | 1270004900 |
| | DC12V | 1.2W | 1b | 1270007100 |
| | DC20V | 1.2W | 1b | 1270007200 |
| | DC24V | 1.2W | 1b | 1270007300 |
| | DC48V | 1.2W | 1b | 1270007400 |
| | DC72V | 1.2W | 1b | 1270007500 |
| | DC110V | 1.2W | 1b | 1270007600 |
| | DC120V | 1.2W | 1b | 1270007700 |
| | DC12V | 2W | 1a | 1270005000 |
| | DC20V | 2W | 1a | 1270005100 |
| | DC24V | 2W | 1a | 1270005200 |
| | DC48V | 2W | 1a | 1270005300 |
| | DC72V | 2W | 1a | 1270005400 |
| | DC110V | 2W | 1a | 1270005500 |
| | DC120V | 2W | 1a | 1270005600 |
| | DC12V | 2W | 1b | 1270007800 |
| | DC20V | 2W | 1b | 1270007900 |
| | DC24V | 2W | 1b | 1270008000 |
| | DC48V | 2W | 1b | 1270008100 |
| | DC72V | 2W | 1b | 1270008200 |
| | DC110V | 2W | 1b | 1270008300 |
| | DC120V | 2W | 1b | 1270008400 |
| | DC12V | 3W | 1a | 1270002900 |
| | DC20V | 3W | 1a | 1270003000 |
| | DC24V | 3W | 1a | 1270003100 |
| | DC36V | 3W | 1a | 1270003200 |
| | DC42V | 3W | 1a | 1270003300 |
| | DC48V | 3W | 1a | 1270003400 |
| | DC60V | 3W | 1a | 1270003500 |
| | DC72V | 3W | 1a | 1270003600 |
| | DC110V | 3W | 1a | 1270003700 |
| | DC120V | 3W | 1a | 1270003800 |
| | DC125V | 3W | 1a | 1270003900 |
| | DC220V | 3W | 1a | 1270004000 |
| | DC240V | 3W | 1a | 1270004100 |
| | DC250V | 3W | 1a | 1270004200 |
| | DC12V | 3W | 1b | 1270005700 |
| | DC20V | 3W | 1b | 1270005800 |
| | DC24V | 3W | 1b | 1270005900 |
| DC36V | 3W | 1b | 1270006000 | |
| DC42V | 3W | 1b | 1270006100 | |
| DC48V | 3W | 1b | 1270006200 | |
| DC60V | 3W | 1b | 1270006300 | |
| DC72V | 3W | 1b | 1270006400 | |
| DC110V | 3W | 1b | 1270006500 | |
| DC120V | 3W | 1b | 1270006600 | |
| DC125V | 3W | 1b | 1270006700 | |
| DC220V | 3W | 1b | 1270006800 | |
| DC240V | 3W | 1b | 1270006900 | |
| DC250V | 3W | 1b | 1270007000 | |
| DC12V | 1.2W | 1a | 1270015500 | |

3-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | No. of Auxiliary Contact | Catalogue No. |
|--------|------------------|------------------|--------------------------|---------------|
| GMD-9M | DC20V | 1.2W | 1a | 1270015600 |
| | DC24V | 1.2W | 1a | 1270015700 |
| | DC48V | 1.2W | 1a | 1270015800 |
| | DC72V | 1.2W | 1a | 1270015900 |
| | DC110V | 1.2W | 1a | 1270016000 |
| | DC120V | 1.2W | 1a | 1270016100 |
| | DC12V | 1.2W | 1b | 1270018600 |
| | DC20V | 1.2W | 1b | 1270018700 |
| | DC24V | 1.2W | 1b | 1270018800 |
| | DC48V | 1.2W | 1b | 1270018900 |
| | DC72V | 1.2W | 1b | 1270019000 |
| | DC110V | 1.2W | 1b | 1270019100 |
| | DC120V | 1.2W | 1b | 1270019200 |
| | DC12V | 2W | 1a | 1270016200 |
| | DC20V | 2W | 1a | 1270016300 |
| | DC24V | 2W | 1a | 1270016400 |
| | DC48V | 2W | 1a | 1270016500 |
| | DC72V | 2W | 1a | 1270016600 |
| | DC110V | 2W | 1a | 1270016700 |
| | DC120V | 2W | 1a | 1270016800 |
| | DC12V | 2W | 1b | 1270019300 |
| | DC20V | 2W | 1b | 1270019400 |
| | DC24V | 2W | 1b | 1270019500 |
| | DC48V | 2W | 1b | 1270019600 |
| | DC72V | 2W | 1b | 1270019700 |
| | DC110V | 2W | 1b | 1270019800 |
| | DC120V | 2W | 1b | 1270019900 |
| | DC12V | 3W | 1a | 1270014100 |
| | DC20V | 3W | 1a | 1270014200 |
| | DC24V | 3W | 1a | 1270014300 |
| | DC36V | 3W | 1a | 1270014400 |
| | DC42V | 3W | 1a | 1270014500 |
| | DC48V | 3W | 1a | 1270014600 |
| | DC60V | 3W | 1a | 1270014700 |
| | DC72V | 3W | 1a | 1270014800 |
| | DC110V | 3W | 1a | 1270014900 |
| | DC120V | 3W | 1a | 1270015000 |
| | DC125V | 3W | 1a | 1270015100 |
| | DC220V | 3W | 1a | 1270015200 |
| | DC240V | 3W | 1a | 1270015300 |
| | DC250V | 3W | 1a | 1270015400 |
| | DC12V | 3W | 1b | 1270017200 |
| DC20V | 3W | 1b | 1270017300 | |
| DC24V | 3W | 1b | 1270017400 | |
| DC36V | 3W | 1b | 1270017500 | |
| DC42V | 3W | 1b | 1270017600 | |
| DC48V | 3W | 1b | 1270017700 | |
| DC60V | 3W | 1b | 1270017800 | |
| DC72V | 3W | 1b | 1270017900 | |
| DC110V | 3W | 1b | 1270018000 | |
| DC120V | 3W | 1b | 1270018100 | |
| DC125V | 3W | 1b | 1270018200 | |
| DC220V | 3W | 1b | 1270018300 | |
| DC240V | 3W | 1b | 1270018400 | |
| DC250V | 3W | 1b | 1270018500 | |

3-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | No. of Auxiliary Contact | Catalogue No. |
|---------|------------------|------------------|--------------------------|---------------|
| GMD-12M | DC12V | 1.2W | 1a | 1270027000 |
| | DC20V | 1.2W | 1a | 1270027100 |
| | DC24V | 1.2W | 1a | 1270027200 |
| | DC48V | 1.2W | 1a | 1270027300 |
| | DC72V | 1.2W | 1a | 1270027400 |
| | DC110V | 1.2W | 1a | 1270027500 |
| | DC120V | 1.2W | 1a | 1270027600 |
| | DC12V | 1.2W | 1b | 1270029800 |
| | DC20V | 1.2W | 1b | 1270029900 |
| | DC24V | 1.2W | 1b | 1270030000 |
| | DC48V | 1.2W | 1b | 1270030100 |
| | DC72V | 1.2W | 1b | 1270030200 |
| | DC110V | 1.2W | 1b | 1270030300 |
| | DC120V | 1.2W | 1b | 1270030400 |
| | DC12V | 2W | 1a | 1270027700 |
| | DC20V | 2W | 1a | 1270027800 |
| | DC24V | 2W | 1a | 1270027900 |
| | DC48V | 2W | 1a | 1270028000 |
| | DC72V | 2W | 1a | 1270028100 |
| | DC110V | 2W | 1a | 1270028200 |
| | DC120V | 2W | 1a | 1270028300 |
| | DC12V | 2W | 1b | 1270030500 |
| | DC20V | 2W | 1b | 1270030600 |
| | DC24V | 2W | 1b | 1270030700 |
| | DC48V | 2W | 1b | 1270030800 |
| | DC72V | 2W | 1b | 1270030900 |
| | DC110V | 2W | 1b | 1270031000 |
| | DC120V | 2W | 1b | 1270031100 |
| | DC12V | 3W | 1a | 1270025600 |
| | DC20V | 3W | 1a | 1270025700 |
| | DC24V | 3W | 1a | 1270025800 |
| | DC36V | 3W | 1a | 1270025900 |
| | DC42V | 3W | 1a | 1270026000 |
| | DC48V | 3W | 1a | 1270026100 |
| | DC60V | 3W | 1a | 1270026200 |
| | DC72V | 3W | 1a | 1270026300 |
| | DC110V | 3W | 1a | 1270026400 |
| | DC120V | 3W | 1a | 1270026500 |
| | DC125V | 3W | 1a | 1270026600 |
| | DC220V | 3W | 1a | 1270026700 |
| | DC240V | 3W | 1a | 1270026800 |
| | DC250V | 3W | 1a | 1270026900 |
| DC12V | 3W | 1b | 1270028400 | |
| DC20V | 3W | 1b | 1270028500 | |
| DC24V | 3W | 1b | 1270028600 | |
| DC36V | 3W | 1b | 1270028700 | |
| DC42V | 3W | 1b | 1270028800 | |
| DC48V | 3W | 1b | 1270028900 | |
| DC60V | 3W | 1b | 1270029000 | |
| DC72V | 3W | 1b | 1270029100 | |
| DC110V | 3W | 1b | 1270029200 | |
| DC120V | 3W | 1b | 1270029300 | |
| DC125V | 3W | 1b | 1270029400 | |
| DC220V | 3W | 1b | 1270029500 | |
| DC240V | 3W | 1b | 1270029600 | |
| DC250V | 3W | 1b | 1270029700 | |

3-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | No. of Auxiliary Contact | Catalogue No. |
|----------|------------------|------------------|--------------------------|---------------|
| GMD-16M | DC12V | 1.2W | 1a | 1270038300 |
| | DC20V | 1.2W | 1a | 1270038400 |
| | DC24V | 1.2W | 1a | 1270038500 |
| | DC48V | 1.2W | 1a | 1270038600 |
| | DC72V | 1.2W | 1a | 1270038700 |
| | DC110V | 1.2W | 1a | 1270038800 |
| | DC120V | 1.2W | 1a | 1270038900 |
| | DC12V | 1.2W | 1b | 1270041100 |
| | DC20V | 1.2W | 1b | 1270041200 |
| | DC24V | 1.2W | 1b | 1270041300 |
| | DC48V | 1.2W | 1b | 1270041400 |
| | DC72V | 1.2W | 1b | 1270041500 |
| | DC110V | 1.2W | 1b | 1270041600 |
| | DC120V | 1.2W | 1b | 1270041700 |
| | DC12V | 2W | 1a | 1270039000 |
| | DC20V | 2W | 1a | 1270039100 |
| | DC24V | 2W | 1a | 1270039200 |
| | DC48V | 2W | 1a | 1270039300 |
| | DC72V | 2W | 1a | 1270039400 |
| | DC110V | 2W | 1a | 1270039500 |
| | DC120V | 2W | 1a | 1270039600 |
| | DC12V | 2W | 1b | 1270041800 |
| | DC20V | 2W | 1b | 1270041900 |
| | DC24V | 2W | 1b | 1270042000 |
| | DC48V | 2W | 1b | 1270042100 |
| | DC72V | 2W | 1b | 1270042200 |
| | DC110V | 2W | 1b | 1270042300 |
| | DC120V | 2W | 1b | 1270042400 |
| | DC12V | 3W | 1a | 1270036900 |
| | DC20V | 3W | 1a | 1270037000 |
| | DC24V | 3W | 1a | 1270037100 |
| | DC36V | 3W | 1a | 1270037200 |
| | DC42V | 3W | 1a | 1270037300 |
| | DC48V | 3W | 1a | 1270037400 |
| | DC60V | 3W | 1a | 1270037500 |
| | DC72V | 3W | 1a | 1270037600 |
| | DC110V | 3W | 1a | 1270037700 |
| | DC120V | 3W | 1a | 1270037800 |
| | DC125V | 3W | 1a | 1270037900 |
| | DC220V | 3W | 1a | 1270038000 |
| | DC240V | 3W | 1a | 1270038100 |
| | DC250V | 3W | 1a | 1270038200 |
| | DC12V | 3W | 1b | 1270039700 |
| | DC20V | 3W | 1b | 1270039800 |
| | DC24V | 3W | 1b | 1270039900 |
| DC36V | 3W | 1b | 1270040000 | |
| DC42V | 3W | 1b | 1270040100 | |
| DC48V | 3W | 1b | 1270040200 | |
| DC60V | 3W | 1b | 1270040300 | |
| DC72V | 3W | 1b | 1270040400 | |
| DC110V | 3W | 1b | 1270040500 | |
| DC120V | 3W | 1b | 1270040600 | |
| DC125V | 3W | 1b | 1270040700 | |
| DC220V | 3W | 1b | 1270040800 | |
| DC240V | 3W | 1b | 1270040900 | |
| DC250V | 3W | 1b | 1270041000 | |
| GMD-6MF | DC220V | 3W | 1a | 1270047300 |
| GMD-9MP | DC24V | 3W | 1a | 1270046200 |
| GMD-12MP | DC24V | 1.2W | 1a | 1270045900 |
| GMD-9MR | DC60V | 3W | 2b | 1270046000 |

4-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | Main Contact | Catalogue No. |
|--------|------------------|---------|--------------|---------------|
| GMC-6M | AC24V | 50/60Hz | 2a2b | 1269004100 |
| | AC36V | 50/60Hz | 2a2b | 1269004200 |
| | AC42V | 50/60Hz | 2a2b | 1269004300 |
| | AC48V | 50/60Hz | 2a2b | 1269004400 |
| | AC110V | 50/60Hz | 2a2b | 1269004500 |
| | AC115V | 50/60Hz | 2a2b | 1269004600 |
| | AC120V | 50/60Hz | 2a2b | 1269004700 |
| | AC127V | 50/60Hz | 2a2b | 1269004800 |
| | AC200V | 50/60Hz | 2a2b | 1269037800 |
| | AC220V | 50/60Hz | 2a2b | 1269005000 |
| | AC240V | 50/60Hz | 2a2b | 1269037900 |
| | AC256V | 50/60Hz | 2a2b | 1269005300 |
| | AC277V | 50/60Hz | 2a2b | 1269005400 |
| | AC380V | 50/60Hz | 2a2b | 1269033100 |
| | AC400V | 50/60Hz | 2a2b | 1269005600 |
| | AC440V | 50/60Hz | 2a2b | 1269005700 |
| | AC480V | 50/60Hz | 2a2b | 1269005800 |
| | AC500V | 50/60Hz | 2a2b | 1269005900 |
| | AC550V | 50/60Hz | 2a2b | 1269006000 |
| | AC24V | 50/60Hz | 4a | 1269000100 |
| | AC36V | 50/60Hz | 4a | 1269000200 |
| | AC42V | 50/60Hz | 4a | 1269000300 |
| | AC48V | 50/60Hz | 4a | 1269000400 |
| | AC110V | 50/60Hz | 4a | 1269000500 |
| | AC115V | 50/60Hz | 4a | 1269000600 |
| | AC120V | 50/60Hz | 4a | 1269000700 |
| | AC127V | 50/60Hz | 4a | 1269000800 |
| | AC200V | 50/60Hz | 4a | 1269037300 |
| | AC220V | 50/60Hz | 4a | 1269001000 |
| | AC240V | 50/60Hz | 4a | 1269037400 |
| | AC256V | 50/60Hz | 4a | 1269001300 |
| | AC277V | 50/60Hz | 4a | 1269001400 |
| | AC380V | 50/60Hz | 4a | 1269032800 |
| | AC400V | 50/60Hz | 4a | 1269001600 |
| AC440V | 50/60Hz | 4a | 1269001700 | |
| AC480V | 50/60Hz | 4a | 1269001800 | |
| AC500V | 50/60Hz | 4a | 1269001900 | |
| AC550V | 50/60Hz | 4a | 1269002000 | |
| GMC-9M | AC24V | 50/60Hz | 2a2b | 1269012100 |
| | AC36V | 50/60Hz | 2a2b | 1269012200 |
| | AC42V | 50/60Hz | 2a2b | 1269012300 |
| | AC48V | 50/60Hz | 2a2b | 1269012400 |
| | AC110V | 50/60Hz | 2a2b | 1269012500 |
| | AC115V | 50/60Hz | 2a2b | 1269012600 |
| | AC120V | 50/60Hz | 2a2b | 1269012700 |
| | AC127V | 50/60Hz | 2a2b | 1269012800 |
| | AC200V | 50/60Hz | 2a2b | 1269038500 |
| | AC220V | 50/60Hz | 2a2b | 1269013000 |
| | AC240V | 50/60Hz | 2a2b | 1269038600 |
| | AC256V | 50/60Hz | 2a2b | 1269013300 |
| | AC277V | 50/60Hz | 2a2b | 1269013400 |
| | AC380V | 50/60Hz | 2a2b | 1269033500 |
| | AC400V | 50/60Hz | 2a2b | 1269013600 |
| | AC440V | 50/60Hz | 2a2b | 1269013700 |
| | AC480V | 50/60Hz | 2a2b | 1269013800 |
| | AC500V | 50/60Hz | 2a2b | 1269013900 |

4-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | Main Contact | Catalogue No. |
|---------|------------------|---------|--------------|---------------|
| GMC-9M | AC550V | 50/60Hz | 2a2b | 1269014000 |
| | AC24V | 50/60Hz | 4a | 1269006100 |
| | AC36V | 50/60Hz | 4a | 1269006200 |
| | AC42V | 50/60Hz | 4a | 1269006300 |
| | AC48V | 50/60Hz | 4a | 1269006400 |
| | AC110V | 50/60Hz | 4a | 1269006500 |
| | AC115V | 50/60Hz | 4a | 1269006600 |
| | AC120V | 50/60Hz | 4a | 1269006700 |
| | AC127V | 50/60Hz | 4a | 1269006800 |
| | AC200V | 50/60Hz | 4a | 1269038000 |
| | AC220V | 50/60Hz | 4a | 1269007000 |
| | AC240V | 50/60Hz | 4a | 1269038100 |
| | AC256V | 50/60Hz | 4a | 1269007300 |
| | AC277V | 50/60Hz | 4a | 1269007400 |
| | AC380V | 50/60Hz | 4a | 1269033200 |
| | AC400V | 50/60Hz | 4a | 1269007600 |
| | AC440V | 50/60Hz | 4a | 1269007700 |
| AC480V | 50/60Hz | 4a | 1269007800 | |
| AC500V | 50/60Hz | 4a | 1269007900 | |
| AC550V | 50/60Hz | 4a | 1269008000 | |
| GMC-12M | AC24V | 50/60Hz | 2a2b | 1269020800 |
| | AC36V | 50/60Hz | 2a2b | 1269020900 |
| | AC42V | 50/60Hz | 2a2b | 1269021000 |
| | AC48V | 50/60Hz | 2a2b | 1269021100 |
| | AC110V | 50/60Hz | 2a2b | 1269021200 |
| | AC115V | 50/60Hz | 2a2b | 1269021300 |
| | AC120V | 50/60Hz | 2a2b | 1269021400 |
| | AC127V | 50/60Hz | 2a2b | 1269021500 |
| | AC200V | 50/60Hz | 2a2b | 1269039200 |
| | AC220V | 50/60Hz | 2a2b | 1269021700 |
| | AC240V | 50/60Hz | 2a2b | 1269039300 |
| | AC256V | 50/60Hz | 2a2b | 1269022000 |
| | AC277V | 50/60Hz | 2a2b | 1269022100 |
| | AC380V | 50/60Hz | 2a2b | 1269033900 |
| | AC400V | 50/60Hz | 2a2b | 1269022300 |
| | AC440V | 50/60Hz | 2a2b | 1269022400 |
| | AC480V | 50/60Hz | 2a2b | 1269022500 |
| | AC500V | 50/60Hz | 2a2b | 1269022600 |
| | AC550V | 50/60Hz | 2a2b | 1269022700 |
| | AC24V | 50/60Hz | 4a | 1269014100 |
| | AC36V | 50/60Hz | 4a | 1269014200 |
| | AC42V | 50/60Hz | 4a | 1269014300 |
| | AC48V | 50/60Hz | 4a | 1269014400 |
| | AC110V | 50/60Hz | 4a | 1269014500 |
| | AC115V | 50/60Hz | 4a | 1269014600 |
| | AC120V | 50/60Hz | 4a | 1269014700 |
| | AC127V | 50/60Hz | 4a | 1269014800 |
| | AC200V | 50/60Hz | 4a | 1269038700 |
| | AC220V | 50/60Hz | 4a | 1269015000 |
| | AC240V | 50/60Hz | 4a | 1269038800 |
| | AC256V | 50/60Hz | 4a | 1269015300 |
| | AC277V | 50/60Hz | 4a | 1269015400 |
| | AC380V | 50/60Hz | 4a | 1269033600 |
| AC400V | 50/60Hz | 4a | 1269016200 | |
| AC440V | 50/60Hz | 4a | 1269016300 | |
| AC480V | 50/60Hz | 4a | 1269016400 | |
| AC500V | 50/60Hz | 4a | 1269016500 | |

4-pole AC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Hz | Main Contact | Catalogue No. |
|---------|------------------|---------|--------------|---------------|
| GMC-16M | AC24V | 50/60Hz | 2a2b | 1269030800 |
| | AC36V | 50/60Hz | 2a2b | 1269030900 |
| | AC42V | 50/60Hz | 2a2b | 1269031000 |
| | AC48V | 50/60Hz | 2a2b | 1269031100 |
| | AC110V | 50/60Hz | 2a2b | 1269031200 |
| | AC115V | 50/60Hz | 2a2b | 1269031300 |
| | AC120V | 50/60Hz | 2a2b | 1269031400 |
| | AC127V | 50/60Hz | 2a2b | 1269031500 |
| | AC200V | 50/60Hz | 2a2b | 1269039900 |
| | AC220V | 50/60Hz | 2a2b | 1269031700 |
| | AC240V | 50/60Hz | 2a2b | 1269040000 |
| | AC256V | 50/60Hz | 2a2b | 1269032000 |
| | AC277V | 50/60Hz | 2a2b | 1269032100 |
| | AC380V | 50/60Hz | 2a2b | 1269034300 |
| | AC400V | 50/60Hz | 2a2b | 1269032300 |
| | AC440V | 50/60Hz | 2a2b | 1269032400 |
| | AC480V | 50/60Hz | 2a2b | 1269032500 |
| | AC500V | 50/60Hz | 2a2b | 1269032600 |
| | AC550V | 50/60Hz | 2a2b | 1269032700 |
| | AC24V | 50/60Hz | 4a | 1269024800 |
| | AC36V | 50/60Hz | 4a | 1269024900 |
| | AC42V | 50/60Hz | 4a | 1269025000 |
| | AC48V | 50/60Hz | 4a | 1269025100 |
| | AC110V | 50/60Hz | 4a | 1269025200 |
| | AC115V | 50/60Hz | 4a | 1269025300 |
| | AC120V | 50/60Hz | 4a | 1269025400 |
| | AC127V | 50/60Hz | 4a | 1269025500 |
| | AC200V | 50/60Hz | 4a | 1269039400 |
| | AC220V | 50/60Hz | 4a | 1269025700 |
| | AC240V | 50/60Hz | 4a | 1269039500 |
| | AC256V | 50/60Hz | 4a | 1269026000 |
| | AC277V | 50/60Hz | 4a | 1269026100 |
| | AC380V | 50/60Hz | 4a | 1269034000 |
| | AC400V | 50/60Hz | 4a | 1269026300 |
| AC440V | 50/60Hz | 4a | 1269026400 | |
| AC480V | 50/60Hz | 4a | 1269026500 | |
| AC500V | 50/60Hz | 4a | 1269026600 | |
| AC550V | 50/60Hz | 4a | 1269026700 | |

4-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | Main contact | Catalogue No. |
|--------|------------------|------------------|--------------|---------------|
| GMD-6M | DC12V | 1.2W | 2a2b | 1270009900 |
| | DC20V | 1.2W | 2a2b | 1270010000 |
| | DC24V | 1.2W | 2a2b | 1270010100 |
| | DC48V | 1.2W | 2a2b | 1270010200 |
| | DC72V | 1.2W | 2a2b | 1270010300 |
| | DC110V | 1.2W | 2a2b | 1270010400 |
| | DC120V | 1.2W | 2a2b | 1270010500 |
| | DC12V | 1.2W | 4a | 1270001500 |
| | DC20V | 1.2W | 4a | 1270001600 |
| | DC24V | 1.2W | 4a | 1270001700 |
| | DC48V | 1.2W | 4a | 1270001800 |
| | DC72V | 1.2W | 4a | 1270001900 |
| | DC110V | 1.2W | 4a | 1270002000 |
| | DC120V | 1.2W | 4a | 1270002100 |
| | DC12V | 2W | 2a2b | 1270010600 |
| | DC20V | 2W | 2a2b | 1270010700 |
| | DC24V | 2W | 2a2b | 1270010800 |
| | DC48V | 2W | 2a2b | 1270010900 |
| | DC72V | 2W | 2a2b | 1270011000 |
| | DC110V | 2W | 2a2b | 1270011100 |
| | DC120V | 2W | 2a2b | 1270011200 |
| | DC12V | 2W | 4a | 1270002200 |
| | DC20V | 2W | 4a | 1270002300 |
| | DC24V | 2W | 4a | 1270002400 |
| | DC48V | 2W | 4a | 1270002500 |
| | DC72V | 2W | 4a | 1270002600 |
| | DC110V | 2W | 4a | 1270002700 |
| | DC120V | 2W | 4a | 1270002800 |
| | DC12V | 3W | 4a | 1270000100 |
| | DC20V | 3W | 4a | 1270000200 |
| | DC24V | 3W | 4a | 1270000300 |
| | DC36V | 3W | 4a | 1270000400 |
| | DC42V | 3W | 4a | 1270000500 |
| | DC48V | 3W | 4a | 1270000600 |
| | DC60V | 3W | 4a | 1270000700 |
| | DC72V | 3W | 4a | 1270000800 |
| | DC110V | 3W | 4a | 1270000900 |
| | DC120V | 3W | 4a | 1270001000 |
| | DC125V | 3W | 4a | 1270001100 |
| | DC220V | 3W | 4a | 1270001200 |
| | DC240V | 3W | 4a | 1270001300 |
| | DC250V | 3W | 4a | 1270001400 |
| | DC12V | 3W | 2a2b | 1270008500 |
| | DC20V | 3W | 2a2b | 1270008600 |
| | DC24V | 3W | 2a2b | 1270008700 |
| DC36V | 3W | 2a2b | 1270008800 | |
| DC42V | 3W | 2a2b | 1270008900 | |
| DC48V | 3W | 2a2b | 1270009000 | |
| DC60V | 3W | 2a2b | 1270009100 | |
| DC72V | 3W | 2a2b | 1270009200 | |
| DC110V | 3W | 2a2b | 1270009300 | |
| DC120V | 3W | 2a2b | 1270009400 | |
| DC125V | 3W | 2a2b | 1270009500 | |
| DC220V | 3W | 2a2b | 1270009600 | |
| DC240V | 3W | 2a2b | 1270009700 | |
| DC250V | 3W | 2a2b | 1270009800 | |

4-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | Main contact | Catalogue No. |
|--------|------------------|------------------|--------------|---------------|
| GMD-9M | DC12V | 1.2W | 2a2b | 1270021400 |
| | DC20V | 1.2W | 2a2b | 1270021500 |
| | DC24V | 1.2W | 2a2b | 1270021600 |
| | DC48V | 1.2W | 2a2b | 1270021700 |
| | DC72V | 1.2W | 2a2b | 1270021800 |
| | DC110V | 1.2W | 2a2b | 1270021900 |
| | DC120V | 1.2W | 2a2b | 1270022000 |
| | DC12V | 1.2W | 4a | 1270012700 |
| | DC20V | 1.2W | 4a | 1270012800 |
| | DC24V | 1.2W | 4a | 1270012900 |
| | DC48V | 1.2W | 4a | 1270013000 |
| | DC72V | 1.2W | 4a | 1270013100 |
| | DC110V | 1.2W | 4a | 1270013200 |
| | DC120V | 1.2W | 4a | 1270013300 |
| | DC12V | 2W | 2a2b | 1270022100 |
| | DC20V | 2W | 2a2b | 1270022200 |
| | DC24V | 2W | 2a2b | 1270022300 |
| | DC48V | 2W | 2a2b | 1270022400 |
| | DC72V | 2W | 2a2b | 1270022500 |
| | DC110V | 2W | 2a2b | 1270022600 |
| | DC120V | 2W | 2a2b | 1270022700 |
| | DC12V | 2W | 4a | 1270013400 |
| | DC20V | 2W | 4a | 1270013500 |
| | DC24V | 2W | 4a | 1270013600 |
| | DC48V | 2W | 4a | 1270013700 |
| | DC72V | 2W | 4a | 1270013800 |
| | DC110V | 2W | 4a | 1270013900 |
| | DC120V | 2W | 4a | 1270014000 |
| | DC12V | 3W | 4a | 1270011300 |
| | DC20V | 3W | 4a | 1270011400 |
| | DC24V | 3W | 4a | 1270011500 |
| | DC36V | 3W | 4a | 1270011600 |
| | DC42V | 3W | 4a | 1270011700 |
| | DC48V | 3W | 4a | 1270011800 |
| | DC60V | 3W | 4a | 1270011900 |
| | DC72V | 3W | 4a | 1270012000 |
| | DC110V | 3W | 4a | 1270012100 |
| | DC120V | 3W | 4a | 1270012200 |
| | DC125V | 3W | 4a | 1270012300 |
| | DC220V | 3W | 4a | 1270012400 |
| | DC240V | 3W | 4a | 1270012500 |
| | DC250V | 3W | 4a | 1270012600 |
| DC12V | 3W | 2a2b | 1270020000 | |
| DC20V | 3W | 2a2b | 1270020100 | |
| DC24V | 3W | 2a2b | 1270020200 | |
| DC36V | 3W | 2a2b | 1270020300 | |
| DC42V | 3W | 2a2b | 1270020400 | |
| DC48V | 3W | 2a2b | 1270020500 | |
| DC60V | 3W | 2a2b | 1270020600 | |
| DC72V | 3W | 2a2b | 1270020700 | |
| DC110V | 3W | 2a2b | 1270020800 | |
| DC120V | 3W | 2a2b | 1270020900 | |
| DC125V | 3W | 2a2b | 1270021000 | |
| DC220V | 3W | 2a2b | 1270021100 | |
| DC240V | 3W | 2a2b | 1270021200 | |
| DC250V | 3W | 2a2b | 1270021300 | |

4-pole DC operating Mini Contactors (6~16A)



| Model | Coil Voltage (V) | Coil consumption | Main contact | Catalogue No. |
|---------|------------------|------------------|--------------|---------------|
| GMD-12M | DC12V | 1.2W | 2a2b | 1270032600 |
| | DC20V | 1.2W | 2a2b | 1270032700 |
| | DC24V | 1.2W | 2a2b | 1270032800 |
| | DC48V | 1.2W | 2a2b | 1270032900 |
| | DC72V | 1.2W | 2a2b | 1270033000 |
| | DC110V | 1.2W | 2a2b | 1270033100 |
| | DC120V | 1.2W | 2a2b | 1270033200 |
| | DC12V | 1.2W | 4a | 1270024200 |
| | DC20V | 1.2W | 4a | 1270024300 |
| | DC24V | 1.2W | 4a | 1270024400 |
| | DC48V | 1.2W | 4a | 1270024500 |
| | DC72V | 1.2W | 4a | 1270024600 |
| | DC110V | 1.2W | 4a | 1270024700 |
| | DC120V | 1.2W | 4a | 1270024800 |
| | DC12V | 2W | 2a2b | 1270033300 |
| | DC20V | 2W | 2a2b | 1270033400 |
| | DC24V | 2W | 2a2b | 1270033500 |
| | DC48V | 2W | 2a2b | 1270033600 |
| | DC72V | 2W | 2a2b | 1270033700 |
| | DC110V | 2W | 2a2b | 1270033800 |
| | DC120V | 2W | 2a2b | 1270033900 |
| | DC12V | 2W | 4a | 1270024900 |
| | DC20V | 2W | 4a | 1270025000 |
| | DC24V | 2W | 4a | 1270025100 |
| | DC48V | 2W | 4a | 1270025200 |
| | DC72V | 2W | 4a | 1270025300 |
| | DC110V | 2W | 4a | 1270025400 |
| | DC120V | 2W | 4a | 1270025500 |
| | DC12V | 3W | 2a2b | 1270031200 |
| | DC20V | 3W | 2a2b | 1270031300 |
| | DC24V | 3W | 2a2b | 1270031400 |
| | DC36V | 3W | 2a2b | 1270031500 |
| | DC42V | 3W | 2a2b | 1270031600 |
| | DC48V | 3W | 2a2b | 1270031700 |
| | DC60V | 3W | 2a2b | 1270031800 |
| | DC72V | 3W | 2a2b | 1270031900 |
| | DC110V | 3W | 2a2b | 1270032000 |
| | DC120V | 3W | 2a2b | 1270032100 |
| | DC125V | 3W | 2a2b | 1270032200 |
| | DC220V | 3W | 2a2b | 1270032300 |
| | DC240V | 3W | 2a2b | 1270032400 |
| | DC250V | 3W | 2a2b | 1270032500 |
| DC12V | 3W | 4a | 1270022800 | |
| DC20V | 3W | 4a | 1270022900 | |
| DC24V | 3W | 4a | 1270023000 | |
| DC36V | 3W | 4a | 1270023100 | |
| DC42V | 3W | 4a | 1270023200 | |
| DC48V | 3W | 4a | 1270023300 | |
| DC60V | 3W | 4a | 1270023400 | |
| DC72V | 3W | 4a | 1270023500 | |
| DC110V | 3W | 4a | 1270023600 | |
| DC120V | 3W | 4a | 1270023700 | |
| DC125V | 3W | 4a | 1270023800 | |
| DC220V | 3W | 4a | 1270023900 | |
| DC240V | 3W | 4a | 1270024000 | |
| DC250V | 3W | 4a | 1270024100 | |

4-pole DC operating Mini Contactors (6~16A)



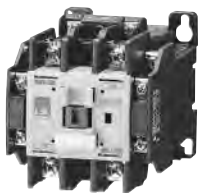
| Model | Coil Voltage (V) | Coil consumption | Main contact | Catalogue No. |
|---------|------------------|------------------|--------------|---------------|
| GMD-16M | DC12V | 1.2W | 2a2b | 1270043900 |
| | DC20V | 1.2W | 2a2b | 1270044000 |
| | DC24V | 1.2W | 2a2b | 1270044100 |
| | DC48V | 1.2W | 2a2b | 1270044200 |
| | DC72V | 1.2W | 2a2b | 1270044300 |
| | DC110V | 1.2W | 2a2b | 1270044400 |
| | DC120V | 1.2W | 2a2b | 1270044500 |
| | DC12V | 1.2W | 4a | 1270035500 |
| | DC20V | 1.2W | 4a | 1270035600 |
| | DC24V | 1.2W | 4a | 1270035700 |
| | DC48V | 1.2W | 4a | 1270035800 |
| | DC72V | 1.2W | 4a | 1270035900 |
| | DC110V | 1.2W | 4a | 1270036000 |
| | DC120V | 1.2W | 4a | 1270036100 |
| | DC12V | 2W | 2a2b | 1270044600 |
| | DC20V | 2W | 2a2b | 1270044700 |
| | DC24V | 2W | 2a2b | 1270044800 |
| | DC48V | 2W | 2a2b | 1270044900 |
| | DC72V | 2W | 2a2b | 1270045000 |
| | DC110V | 2W | 2a2b | 1270045100 |
| | DC120V | 2W | 2a2b | 1270045200 |
| | DC12V | 2W | 4a | 1270036200 |
| | DC20V | 2W | 4a | 1270036300 |
| | DC24V | 2W | 4a | 1270036400 |
| | DC48V | 2W | 4a | 1270036500 |
| | DC72V | 2W | 4a | 1270036600 |
| | DC110V | 2W | 4a | 1270036700 |
| | DC120V | 2W | 4a | 1270036800 |
| | DC12V | 3W | 2a2b | 1270042500 |
| | DC20V | 3W | 2a2b | 1270042600 |
| | DC24V | 3W | 2a2b | 1270042700 |
| | DC36V | 3W | 2a2b | 1270042800 |
| | DC42V | 3W | 2a2b | 1270042900 |
| | DC48V | 3W | 2a2b | 1270043000 |
| | DC60V | 3W | 2a2b | 1270043100 |
| | DC72V | 3W | 2a2b | 1270043200 |
| | DC110V | 3W | 2a2b | 1270043300 |
| | DC120V | 3W | 2a2b | 1270043400 |
| | DC125V | 3W | 2a2b | 1270043500 |
| | DC220V | 3W | 2a2b | 1270043600 |
| | DC240V | 3W | 2a2b | 1270043700 |
| | DC250V | 3W | 2a2b | 1270043800 |
| | DC12V | 3W | 4a | 1270034100 |
| DC20V | 3W | 4a | 1270034200 | |
| DC36V | 3W | 4a | 1270034400 | |
| DC42V | 3W | 4a | 1270034500 | |
| DC48V | 3W | 4a | 1270034600 | |
| DC60V | 3W | 4a | 1270034700 | |
| DC72V | 3W | 4a | 1270034800 | |
| DC110V | 3W | 4a | 1270034900 | |
| DC120V | 3W | 4a | 1270035000 | |
| DC125V | 3W | 4a | 1270035100 | |
| DC220V | 3W | 4a | 1270035200 | |
| DC240V | 3W | 4a | 1270035300 | |
| DC250V | 3W | 4a | 1270035400 | |

3-pole AC Contactors, Definite purpose






| Type | Model | Rated voltage | Frequency | Code |
|----------|----------|---------------|------------|------------|
| GMC-P2 | GMC-10P2 | AC220V | 50/60Hz | 1230006100 |
| | GMC-20P2 | AC220V | 50/60Hz | 1230005500 |
| | GMC-25P2 | AC220V | 50/60Hz | 1230005600 |
| | GMC-30P2 | AC220V | 50/60Hz | 1230005700 |
| | GMC-35P2 | AC220V | 50/60Hz | 1230005800 |
| | GMC-40P2 | AC220V | 50/60Hz | 1230005900 |
| | GMC-10P2 | AC24V | 50/60Hz | 1230006200 |
| | | AC48V | 50/60Hz | 1230006300 |
| | | AC100V | 50/60Hz | 1230006400 |
| | | AC110V | 50/60Hz | 1230006500 |
| | | AC120V | 50/60Hz | 1230006600 |
| | | AC200V | 50/60Hz | 1230006700 |
| | | AC230V | 50/60Hz | 1230006800 |
| | GMC-20P2 | AC240V | 50/60Hz | 1230006900 |
| | | AC24V | 50/60Hz | 1230007000 |
| | | AC48V | 50/60Hz | 1230007100 |
| | | AC100V | 50/60Hz | 1230007200 |
| | | AC110V | 50/60Hz | 1230007300 |
| | | AC120V | 50/60Hz | 1230007400 |
| | | AC200V | 50/60Hz | 1230007500 |
| | GMC-25P2 | AC230V | 50/60Hz | 1230007600 |
| | | AC240V | 50/60Hz | 1230007700 |
| | | AC24V | 50/60Hz | 1230007800 |
| | | AC48V | 50/60Hz | 1230007900 |
| | | AC100V | 50/60Hz | 1230008000 |
| | | AC110V | 50/60Hz | 1230008100 |
| | | AC120V | 50/60Hz | 1230008200 |
| | GMC-30P2 | AC200V | 50/60Hz | 1230008300 |
| | | AC230V | 50/60Hz | 1230008400 |
| | | AC240V | 50/60Hz | 1230008500 |
| | | AC24V | 50/60Hz | 1230008600 |
| | | AC48V | 50/60Hz | 1230008700 |
| | | AC100V | 50/60Hz | 1230008800 |
| | | AC110V | 50/60Hz | 1230008900 |
| | GMC-35P2 | AC120V | 50/60Hz | 1230009000 |
| | | AC200V | 50/60Hz | 1230009100 |
| | | AC230V | 50/60Hz | 1230009200 |
| | | AC240V | 50/60Hz | 1230009300 |
| | | AC24V | 50/60Hz | 1230009400 |
| | | AC48V | 50/60Hz | 1230009500 |
| AC100V | | 50/60Hz | 1230009600 | |
| GMC-40P2 | AC110V | 50/60Hz | 1230009700 | |
| | AC120V | 50/60Hz | 1230009800 | |
| | AC200V | 50/60Hz | 1230009900 | |
| | AC230V | 50/60Hz | 1230010000 | |
| | AC240V | 50/60Hz | 1230010100 | |
| | AC24V | 50/60Hz | 1230010200 | |
| | AC48V | 50/60Hz | 1230010300 | |
| GMC-40P2 | AC100V | 50/60Hz | 1230010400 | |
| | AC110V | 50/60Hz | 1230010500 | |
| | AC120V | 50/60Hz | 1230010600 | |
| | AC200V | 50/60Hz | 1230010700 | |
| | AC230V | 50/60Hz | 1230010800 | |
| | AC240V | 50/60Hz | 1230010900 | |

2-pole DC Contactors



| Type | Rated Voltage | Hz | No. of Contact | Terminal code | Code |
|-----------|---------------|----|----------------|---------------|------------|
| SMM-30P | AC120V | | 2a2b | | 1232000700 |
| SMM-60P | AC100V | | 2a2b | | 1232002500 |
| | AC120V | | 2a2b | | 1232002700 |
| SMM-100P | AC100V | | 2a2b | | 1232004500 |
| | AC120V | | 2a2b | | 1232004700 |
| SMM-30DP | DC24V | | 2a2b | | 1232006100 |
| | DC48V | | 2a2b | | 1232006300 |
| | DC110V | | 2a2b | | 1232006700 |
| | DC220V | | 2a2b | | 1232007300 |
| SMM-60DP | DC24V | | 2a2b | | 1232007500 |
| | DC48V | | 2a2b | | 1232007700 |
| | DC110V | | 2a2b | | 1232008100 |
| | DC220V | | 2a2b | | 1232008700 |
| SMM-100DP | DC24V | | 2a2b | | 1232008900 |
| | DC48V | | 2a2b | | 1232009100 |

Manual Motor Starters

| Model | Setting range of thermal trips (A) | IEC Breaking capacity at 415V (kA) | Handle type | Code |
|--------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|-------------|------------|
| 32AF  | 0.1~0.16 | 100 | Toggle | 0705003300 |
| | 0.16~0.25 | 100 | | 0705003400 |
| | 0.25~0.4 | 100 | | 0705003500 |
| | 0.4~0.63 | 100 | | 0705003600 |
| | 0.63~1 | 100 | | 0705003700 |
| | 1~1.6 | 100 | | 0705003800 |
| | 1.6~2.5 | 100 | | 0705003900 |
| | 2.5~4 | 100 | | 0705004000 |
| | 4~6 | 100 | | 0705004100 |
| | 5~8 | 100 | | 0705004200 |
| | 6~10 | 50 | | 0705004300 |
| | 9~13 | 50 | | 0705004400 |
| | 11~17 | 20 | | 0705004500 |
| | 14~22 | 15 | | 0705004600 |
| | 18~26 | 15 | | 0705004700 |
| 22~32 | 15 | 0705004800 | | |
|  | 0.1~0.16 | 100 | Rotary | 0705000100 |
| | 0.16~0.25 | 100 | | 0705000200 |
| | 0.25~0.4 | 100 | | 0705000300 |
| | 0.4~0.63 | 100 | | 0705000400 |
| | 0.63~1 | 100 | | 0705000500 |
| | 1~1.6 | 100 | | 0705000600 |
| | 1.6~2.5 | 100 | | 0705000700 |
| | 2.5~4 | 100 | | 0705000800 |
| | 4~6 | 100 | | 0705000900 |
| | 5~8 | 100 | | 0705001000 |
| | 6~10 | 100 | | 0705001100 |
| | 9~13 | 100 | | 0705001200 |
| | 11~17 | 50 | | 0705001300 |
| | 14~22 | 50 | | 0705001400 |
| | 18~26 | 50 | | 0705001500 |
| 22~32 | 50 | 0705001600 | | |
|  | 0.16 | 100 | Rotary | 0705001700 |
| | 0.25 | 100 | | 0705001800 |
| | 4 | 100 | | 0705001900 |
| | 0.63 | 100 | | 0705002000 |
| | 1 | 100 | | 0705002100 |
| | 1.6 | 100 | | 0705002200 |
| | 2.5 | 100 | | 0705002300 |
| | 4 | 100 | | 0705002400 |
| | 6 | 100 | | 0705002500 |
| | 8 | 100 | | 0705002600 |
| | 10 | 100 | | 0705002700 |
| | 13 | 100 | | 0705002800 |
| | 17 | 50 | | 0705002900 |
| | 22 | 50 | | 0705003000 |
| | 26 | 50 | | 0705003100 |
| 32 | 50 | 0705003200 | | |

Manual Motor Starters

63AF









100AF

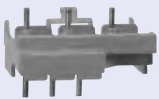



| Model | Setting range of thermal trips (A) | IEC Breaking capacity at 415V (kA) | Handle type | Code |
|-----------|------------------------------------|------------------------------------|-------------|------------|
| MMS-63S | 6~10 | 100 | Rotary | 0706000100 |
| | 9~13 | 50 | | 0706000200 |
| | 11~17 | 25 | | 0706000300 |
| | 14~22 | 25 | | 0706000400 |
| | 18~26 | 25 | | 0706000500 |
| | 22~32 | 25 | | 0706000600 |
| | 28~40 | 25 | | 0706000700 |
| | 34~50 | 25 | | 0706000800 |
| MMS-63H | 45~63 | 25 | Rotary | 0706000900 |
| | 6~10 | 100 | | 0706001000 |
| | 9~13 | 100 | | 0706001100 |
| | 11~17 | 50 | | 0706001200 |
| | 14~22 | 50 | | 0706001300 |
| | 18~26 | 50 | | 0706001400 |
| | 22~32 | 50 | | 0706001500 |
| | 28~40 | 50 | | 0706001600 |
| MMS-63HI | 34~50 | 50 | Rotary | 0706001700 |
| | 45~63 | 50 | | 0706001800 |
| | 10 | 100 | | 0706001900 |
| | 13 | 100 | | 0706002000 |
| | 17 | 50 | | 0706002100 |
| | 22 | 50 | | 0706002200 |
| | 26 | 50 | | 0706002300 |
| | 32 | 50 | | 0706002400 |
| MMS-100S | 40 | 50 | Rotary | 0706002500 |
| | 50 | 50 | | 0706002600 |
| | 63 | 50 | | 0706002700 |
| | 11~17 | 50 | | 0707000100 |
| | 14~22 | 50 | | 0707000200 |
| | 18~26 | 50 | | 0707000300 |
| | 22~32 | 50 | | 0707000400 |
| | 28~40 | 50 | | 0707000500 |
| MMS-100H | 34~50 | 50 | Rotary | 0707000600 |
| | 45~63 | 50 | | 0707000700 |
| | 55~75 | 50 | | 0707000800 |
| | 70~90 | 50 | | 0707000900 |
| | 80~100 | 50 | | 0707001000 |
| | 11~17 | 100 | | 0707001100 |
| | 14~22 | 100 | | 0707001200 |
| | 18~26 | 100 | | 0707001300 |
| MMS-100HI | 22~32 | 100 | Rotary | 0707001400 |
| | 28~40 | 100 | | 0707001500 |
| | 34~50 | 100 | | 0707001600 |
| | 45~63 | 100 | | 0707001700 |
| | 55~75 | 75 | | 0707001800 |
| | 70~90 | 75 | | 0707001900 |
| | 80~100 | 75 | | 0707002000 |
| | 17 | 100 | | 0707002100 |
| MMS-100HI | 22 | 100 | Rotary | 0707002200 |
| | 26 | 100 | | 0707002300 |
| | 32 | 100 | | 0707002400 |
| | 40 | 100 | | 0707002500 |
| | 50 | 100 | | 0707002600 |
| | 63 | 100 | | 0707002700 |
| | 75 | 75 | | 0707002800 |
| | 90 | 75 | | 0707002900 |
| 100 | 75 | 0707003000 | | |

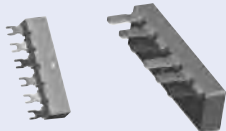
Accessories (For MMS)


| Type | Model | Description | Applied product | Code |
|----------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------|-----------------|-------------|
| Auxiliary switch  | FX | 2NO | MMS-32~100 | 83361941001 |
| | | 1NO 1NC | | 83361941002 |
| | | 2NC | | 83361941003 |
| | LX | 2NO | | 83361941004 |
| | | 1NO 1NC | | 83361941005 |
| | | 2NC | | 83361941006 |
| Any trip alarm switch  | LA | 2NO (Operates in case of trip) | | 83011941001 |
| | | 1NO 1NC (Operates in case of trip) | | 83011941002 |
| | | 2NC (Operates in case of trip) | | 83011941003 |
| Magnetic trip alarm switch  | LAM | 2NO (Operates in case of instantaneous trip) | | 83011941004 |
| | | 1NO 1NC (Operates in case of instantaneous trip) | | 83011941005 |
| | | 2NC (Operates in case of instantaneous trip) | | 83011941006 |
| Shunt release  | RS | AC24V 50Hz/28V 60Hz | 70911941001 | |
| | | AC110V 50Hz/120V 60Hz | 70911941002 | |
| | | AC220~230V 50Hz/240~260V 60Hz | 70911941003 | |
| | | AC240V 50Hz/277V 60Hz | 70911941004 | |
| | | AC380~400V 50Hz/440~460V 60Hz | 70911941005 | |
| | | AC415~440V 50Hz/460~480V 60Hz | 70911941006 | |
| | | AC200V 50Hz/AC200V~220V 60Hz | 70911941020 | |
| Undervoltage release  | RU | AC24V 50Hz/28V 60Hz | 83211941001 | |
| | | AC110V 50Hz/120V 60Hz | 83211941002 | |
| | | AC220~230V 50Hz/240~260V 60Hz | 83211941003 | |
| | | AC240V 50Hz/277V 60Hz | 83211941004 | |
| | | AC380~400V 50Hz/440~460V 60Hz | 83211941005 | |
| | | AC415~440V 50Hz/460~480V 60Hz | 83211941006 | |
| | | AC200V 50Hz/AC200V~220V 60Hz | 83211941007 | |
| Undervoltage release with switch  | RUX | AC24V 50Hz/28V 60Hz | 83211941021 | |
| | | AC110V 50Hz/120V 60Hz | 83211941022 | |
| | | AC220~230V 50Hz/240~260V 60Hz | 83211941023 | |
| | | AC240V 50Hz/277V 60Hz | 83211941024 | |
| | | AC380~400V 50Hz/440~460V 60Hz | 83211941025 | |
| | | AC415~440V 50Hz/460~480V 60Hz | 83211941026 | |
| | | AC200V 50Hz/AC200V~220V 60Hz | 83211941027 | |


Accessories (For MMS)

| Type | Model | Description | Applied product | Code |
|-----------------------------------------------------------------------------------------------------|---------|------------------------|-----------------|-------------|
| Direct Adapter  | DA-16SA | AC type mini contactor | GMC-6M~16M | 73311941001 |
| | DA-16SD | DC type mini contactor | GMD-6M~16M | 73311941002 |
| | DA-16HA | AC type mini contactor | GMC-6M~16M | 73311941003 |
| | DA-16HD | DC type mini contactor | GMD-6M~16M | 73311941004 |
| | DA-32SA | AC type 32AF(Toggle) | MC-9~32 | 73311634001 |
| | DA-32HA | AC type 32AF(Rotary) | MC-9~32 | 73311634002 |
| | DA-32SD | DC type 32AF(Toggle) | MC-9~32 | 73311634003 |
| | DA-32HD | DC type 32AF(Rotary) | MC-9~32 | 73311634004 |
| | DA-63A | AC type 63AF | MC-35~63 | 73311634005 |
| | DA-63D | DC type 63AF | MC-35~63 | 73311634006 |
| | DA-95A | AC type 95AF | MC-65~95 | 73311634007 |
| | DA-95D | DC type 95AF | MC-65~95 | 73311634008 |

| Type | Model | Description | Applied product | Code |
|-----------------------------------------------------------------------------------------------------|-------|-------------|-----------------|-------------|
| Mounting unit  | MU-45 | 45mm width | MMS-32 | 83661941001 |
| | MU-55 | 55mm width | MMS-63 | 83661941011 |
| | MU-70 | 70mm width | MMS-100 | 83661941021 |
| | | | | |

| Type | Model | Description | Applied product | Code |
|--------------------------------------------------------------------------------------------------|--------|---------------------|-----------------|-------------|
| Phase bus  | PB-322 | Use two of 32AF MMS | MMS-32 | 70211941201 |
| | PB-632 | Use two of 63AF MMS | MMS-63 | 70211941202 |
| | | | | |

| Type | Model | Description | Applied product | Code |
|-----------------------------------------------------------------------------------------------------------------|------------|--------------------------------|-----------------|-------------|
| Dial cover UL barrier  | Dial Cover | To protect the setting current | MMS-32~100 | 64621911009 |
| | IB100 | Insulation barrier | MMS-100 | 67221931001 |
| | | | | |

Leading Innovation, Creating Tomorrow 



Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact a qualified service technician when you need maintenance. Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.

LS Industrial Systems Co., Ltd.

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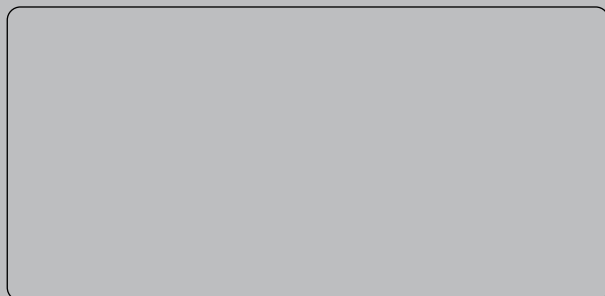
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Specifications in this catalog are subject to change without notice due to continuous product development and improvement.

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