



 PRODUCT-DETAILS

AF190-30-00-33

AF190-30-00-33 Contactor



General Information

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|-----------------------|--------------------------|
| Extended Product Type | AF190-30-00-33 |
| Product ID | 1SFL487002R3300 |
| EAN | 7320500480625 |
| Catalog Description | AF190-30-00-33 Contactor |

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| Long Description | <p>The AF190-30-00-33 is a 3 pole - 1000 V IEC or 600 V UL contactor with Main Circuit Bars, controlling motors up to 90 kW / 400 V AC (AC-3) or 125 hp / 480 V UL and switching power circuits up to 275 A (AC-1) or 250 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device.</p> |
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Ordering

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| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |

Popular Downloads

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| EPLAN Data | 9AAC174541_EPLAN |
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Data Sheet, Technical Information (Part 2) | 1SAC200017M0002 |
| Instructions and Manuals | 1SFC100008M0201 |
| CAD Dimensional Drawing | 2CDC001079B0201 |

Dimensions

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| Product Net Width | 105 mm |
| Product Net Depth / Length | 169.5 mm |
| Product Net Height | 196 mm |
| Product Net Weight | 2.4 kg |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Auxiliary Contacts NC | 0 |
| Number of Poles | 3P |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Frequency (f) | Main Circuit 50 Hz |
| Conventional Free-air Thermal Current (I _{th}) | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 275 A |
| Rated Operational Current AC-1 (I _e) | (1000 V) 40 °C 250 A (1000 V) 55 °C 225 A (1000 V) 60 °C 225 A (1000 V) 70 °C 185 A (690 V) 40 °C 275 A (690 V) 55 °C 250 A (690 V) 60 °C 250 A (690 V) 70 °C 200 A |
| Rated Operational Current AC-3 (I _e) | (415 V) 55 °C 190 A (440 V) 55 °C 190 A (500 V) 55 °C 156 A (690 V) 55 °C 135 A (1000 V) 55 °C 85 A (380 / 400 V) 55 °C 190 A (220 / 230 / 240 V) 55 °C 190 A |
| Rated Operational Current AC-3e (I _e) | (415 V) 60 °C 190 A (440 V) 60 °C 190 A (500 V) 60 °C 135 A (690 V) 60 °C 135 A (1000 V) 60 °C 85 A (380 / 400 V) 60 °C 190 A (220 / 230 / 240 V) 60 °C 190 A |
| Rated Operational Power AC-3 (P _e) | (415 V) 90 kW (440 V) 110 kW (500 V) 110 kW |

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| | (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW |
| Rated Operational Power AC-3e (P _e) | (415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW |
| Rated Breaking Capacity AC-3 | 8 x I _e AC-3 |
| Rated Breaking Capacity AC-3e | 8.5 x I _e AC-3e |
| Rated Making Capacity AC-3 | 10 x I _e AC-3 |
| Rated Making Capacity AC-3e | 12 x I _e AC-3e |
| Short-Circuit Protective Devices | gG Type Fuses 355 A |
| Rated Short-time Withstand Current Low Voltage (I _{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 621 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 878 A |
| Rated Insulation Voltage (U _i) | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 1000 V |
| Rated Impulse Withstand Voltage (U _{imp}) | 8 kV |
| Maximum Electrical Switching Frequency | (AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour |
| Mechanical Durability | 5 million |
| Maximum Mechanical Switching Frequency | 300 cycles per hour |
| Coil Operating Limits | (acc. to IEC 60947-4-1) U _c (at θ ≤ 70 °C) |
| Rated Control Circuit Voltage (U _c) | 50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V |
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage 50 Hz 26.8 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 26.8 V·A Holding at Max. Rated Control Circuit Voltage DC 3.5 V·A Holding at Max. Rated Control Circuit Voltage DC 3.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 285 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 285 V·A Pull-in at Max. Rated Control Circuit Voltage DC 360 V·A Pull-in at Max. Rated Control Circuit Voltage DC 360 W |
| Power Loss | at Rated Operating Conditions per Pole 7 W |
| Operate Time | Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 |
| Terminal Type | Main Circuit: Bars |
| Product Name | Block Contactor |

Technical UL/CSA

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| Maximum Operating Voltage UL/CSA | Main Circuit 1000 V |
| General Use Rating UL/CSA | (1000 V AC) 250 A |

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| Horsepower Rating UL/CSA | (200 ... 208 V AC) Three Phase 20 Hp (200 V AC) Three Phase 50 hp (208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 25 Hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 60 Hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 150 hp |
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Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 55 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C |
| Maximum Operating Altitude Permissible | Without Derating 3000 m |

Material Compliance

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| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658 |
| REACH Declaration | 2CMT2021-006202 |
| RoHS Declaration | 2CMT2021-006277 |
| RoHS Information | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances Control Act - TSCA | 2CMT2023-006525 |
| WEEE B2C / B2B | Business To Business |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

ABB EcoSolutions

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| ABB EcoSolutions | Yes |
| ABB Site Meeting Group Waste To Landfill Target | Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility UL 2799 Zero Waste To Landfill Validation available |
| End Of Life Disassembling Instructions | 1SFC100112M0001 |
| Environmental Product Declaration - EPD | 1SFC100095D0201 |
| Extended Product Lifetime | Product Durability |
| Improved Energy Efficiency for Customers | Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line |
| Recyclability Rate of the Product acc. to EN45555 | Design for Closing Resource Loops - Standard EN45555 - 79.1 % |

Certificates and Declarations

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|----------------------|------------------|
| A2L Certificate – UL | 9AKK108468A6695 |
| ABS Certificate | 14-LD1092198-PDA |
| BV Certificate | BV_36353_A0BV |
| CB Certificate | SE-82315 |

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|----------------------------------|--|
| CCS Certificate | GB14T00030 |
| CQC Certificate | CQC2014010304676685 CQC2014010304724672 |
| Declaration of Conformity - CCC | 2020980304001306 2020980304001071 |
| Declaration of Conformity - CE | 2CMT2015-005439 |
| Declaration of Conformity - UKCA | 2CMT2020-006118 |
| DNV Certificate | DNV_E-14043 |
| GL Certificate | GL_95072-14HH |
| KC Certificate | 9AKK107046A9912 |
| LR Certificate | 16-20064 |
| PRS Certificate | TE_2092_880423_16 |
| RINA Certificate | ELE060313XG_002 |
| RMRS Certificate | 9AKK107045A6978 |
| UL Certificate | 20121023-E36588 |
| UL Listing Card | UL_E36588 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 160 mm |
| Package Level 1 Depth / Length | 258 mm |
| Package Level 1 Height | 235 mm |
| Package Level 1 Gross Weight | 3 kg |
| Package Level 1 EAN | 7320500480625 |

External Classifications and Standards

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| Object Classification Code | Q |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| ETIM 9 | EC000066 - Power contactor, AC switching |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4758 >> lec Contactors |
| E-Number (Finland) | 3707496 |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|-------------------------------------|------------|----------|-----------------|
| 1SFN074703R1000 | LY185 Connecting Strip | LY185 | 1 | piece |
| 1SFN074807R1000 | LW205 Terminal Enlargement | LW205 | 1 | piece |
| 1SFN074810R1000 | LX205 Terminal Extension | LX205 | 1 | piece |
| 1SFN074807R2000 | LW205-40 Terminal Enlargement | LW205-40 | 1 | piece |
| 1SFN010820R1011 | CAL19-11 Auxiliary Contact Block | CAL19-11 | 1 | piece |
| 1SFN010820R3311 | CAL19-11B Auxiliary Contact Block | CAL19-11B | 1 | piece |
| 1SFN030300R1000 | VM19 Mechanical Interlock Unit | VM19 | 1 | piece |
| 1SFN034403R1000 | VM140/190 Mechanical Interlock Unit | VM140/190 | 1 | piece |
| 1SFN035203R1000 | VM205/265 Mechanical Interlock Unit | VM205/265 | 1 | piece |
| 1SFN010832R1001 | CEL19-01 Auxiliary Contact Block | CEL19-01 | 1 | piece |
| 1SFN010832R1010 | CEL19-10 Auxiliary Contact Block | CEL19-10 | 1 | piece |
| 1SFN124801R1000 | LT205-30C Terminal Shroud | LT205-30C | 1 | piece |
| 1SFN124803R1000 | LT205-30L Terminal Shroud | LT205-30L | 1 | piece |
| 1SFN124804R1000 | LT205-30Y Terminal Shroud | LT205-30Y | 1 | piece |
| 1SFN084806R1000 | BEA205/XT4 Connection Set | BEA205/XT4 | 1 | piece |
| 1SFN084806R1001 | BEA205/T4 Connection Set | BEA205/T4 | 1 | piece |
| 1SFN084811R1000 | BER205-4 Connection Set | BER205-4 | 1 | piece |
| 1SFN084813R1000 | BEY190-4 Connection Set | BEY190-4 | 1 | piece |
| 1SFN084814R1000 | BEP205-30 Connection Set | BEP205-30 | 1 | piece |
| 1SFN085213R1000 | BEY205-4 Connection Set | BEY205-4 | 1 | piece |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF190



360°



