Accessories

Susol

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* Non UL Listed.
** Separate purchase unavailable. Each item must be purchased with the main body.

Accessories

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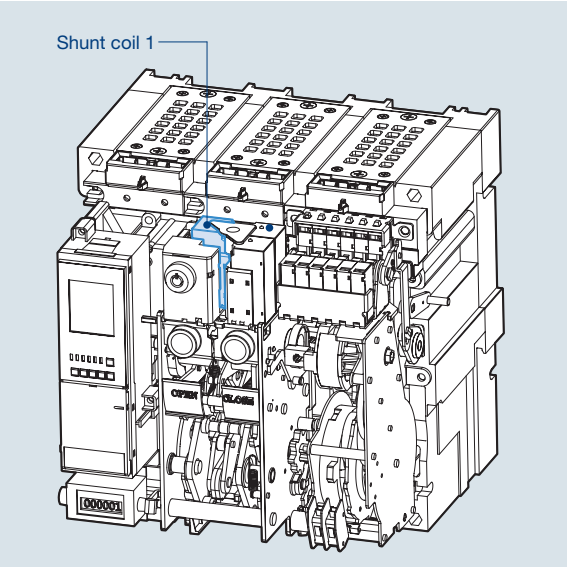
* Non UL Listed.
** separate purchase unavailable. Each item must be purchased with the main body.
*** Voltage module should be purchased with P/S type trip relay.
**** Available only when the control block is in auto-connection mode.
***** Trip unit P type & S type are under development, coming soon.

Shunt Coil [SHT1]

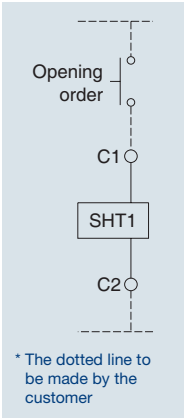
- SHT1 is a control device that remotely trips a circuit breaker when voltage is applied to coil terminals (C1, C2) continuously or instantaneously for a minimum of 200ms.
- When UVT coil is installed, the location of the shunt coil changes.



1. Rated voltage and characteristics of Trip coil

Rated voltage [Vn]		Operating voltage range [V]	Power consumption (VA or W)		Trip time [ms]
DC [V]	AC [V]		Inrush	Steady-state	
24~30	-	14 ~ 33	200	5	Less than 40ms
48~60	48	28 ~ 66			
100~125	100~125	70 ~ 140			
200~250	200~250	140 ~ 280			
-	380~480 *	266 ~ 528			

Note) Operating voltage range is the min. rated voltage standard for each rated voltage(Vn).
* Non UL Listed.



Wiring Diagram

2. Specification of the wire

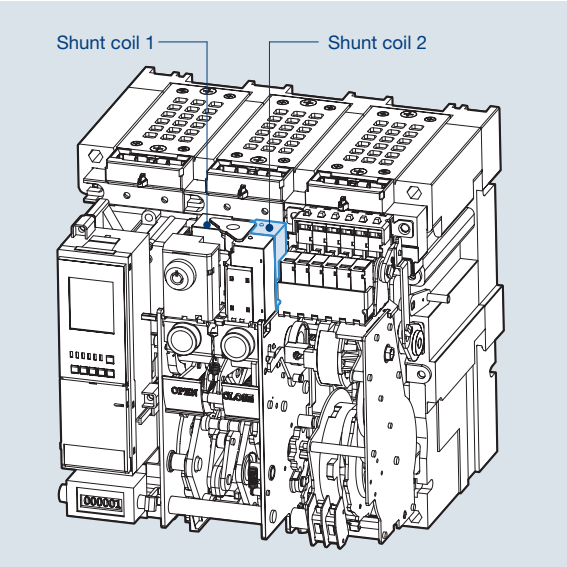
- Refer to the below table regarding the length and specification of wire when using trip coil with DC 24~30[V] or DC/AC 48~60[V] of rated voltage.

The maximum wire length

Wire type		Rated voltage [Vn]			
		DC 24~30 [V]		DC/AC 48 [V]	
		#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)	#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)
Operating voltage	100%	95.7m	61m	457.8m	287.7m
	85%	62.5m	38.4m	291.7m	183.2m

Double Shunt Coil [SHT2]

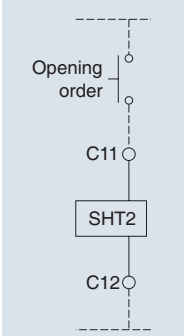
- SHT2 is a control device that remotely trips a circuit breaker when SHT1 does not operate normally, allowing the circuit breaker to still be tripped safely.
- Shunt coil 1: Install it at existing location.
- Shunt coil 2: Install it on the right side of the Shunt coil 1
- UVT coil is unavailable when installing Double Shunt Coil.



1. Rated voltage and characteristics of Trip coil

Rated voltage [Vn]		Operating voltage range [V]	Power consumption (VA or W)		Trip time [ms]
DC [V]	AC [V]		Inrush	Steady-state	
24~30	-	14 ~ 33	200	5	Less than 40ms
48~60	48	28 ~ 66			
100~125	100~125	70 ~ 140			
200~250	200~250	140 ~ 280			
-	380~480 *	266 ~ 528			

Note) Operating voltage range is the min. rated voltage standard for each rated voltage(Vn).
* Non UL Listed.



Wiring Diagram

2. Specification of the wire

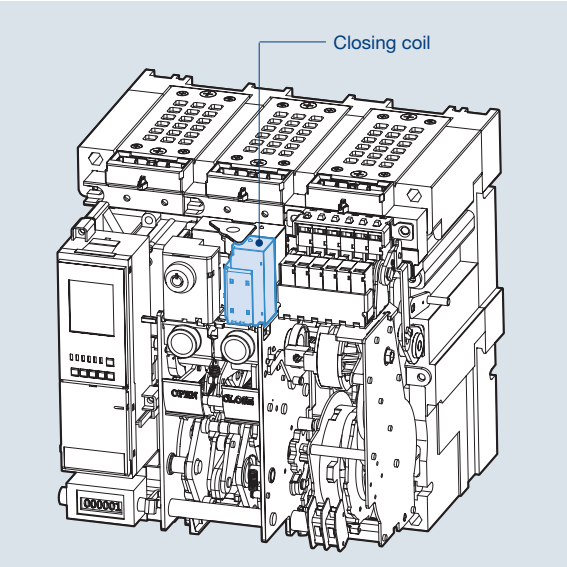
- Refer to the below table regarding the length and specification of wire when using trip coil with DC 24~30[V] or DC/AC 48~60[V] of rated voltage.

The maximum wire length

Wire type		Rated voltage [Vn]			
		DC 24~30 [V]		DC/AC 48 [V]	
		#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)	#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)
Operating voltage	100%	95.7m	61m	457.8m	287.7m
	85%	62.5m	38.4m	291.7m	183.2m

Closing Coil [CC]

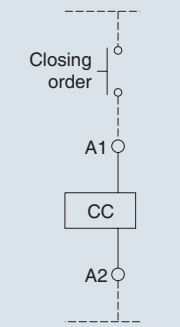
- It is a control device that remotely trips a circuit breaker when voltage is applied to coil terminals (A1, A2) continuously or instantaneously for a minimum of 200ms.



1. Rated voltage and characteristics of Closing coil

Rated voltage [Vn]		Operating voltage range [V]	Power consumption (VA or W)		Close time [ms]
DC [V]	AC [V]		Inrush	Steady-state	
24~30	-	14 ~ 33	200	5	Less than 80ms **
48~60	48	28 ~ 66			
100~125	100~125	70 ~ 140			
200~250	200~250	140 ~ 280			
-	380~480 *	266 ~ 528			

Note) Operating voltage range is the min. rated standard for each rated voltage (Vh).
* Non UL Listed.
** Close time of G frame (3200~5000A) is less than 95ms.



Wiring Diagram

2. Specification of the wire

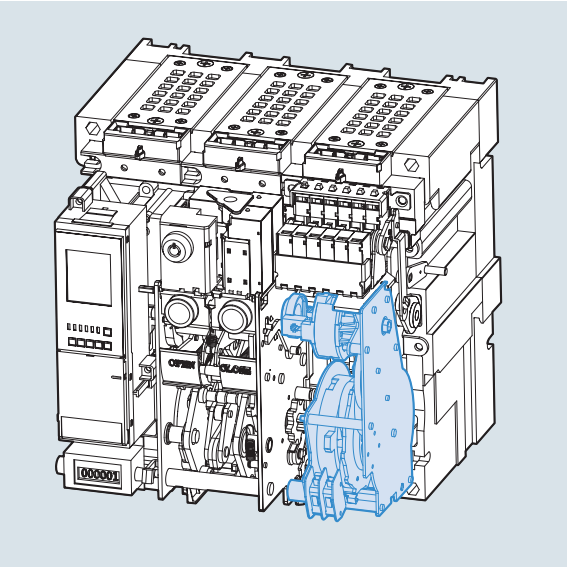
- Refer to the below table regarding the length and specification of wire when using trip coil with DC 24~30[V] or DC/AC 48~60[V] of rated voltage.

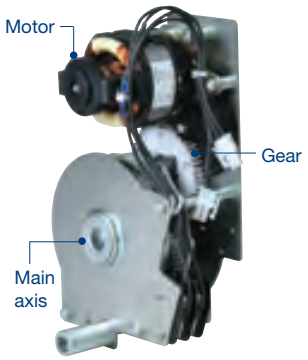
The maximum wire length

Wire type		Rated voltage [Vn]			
		DC 24~30 [V]		DC/AC 48 [V]	
		#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)	#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)
Operating voltage	100%	95.7m	61m	457.8m	287.7m
	85%	62.5m	38.4m	291.7m	183.2m

Motor [M]

- Charges the closing spring of a circuit breaker using an external power source. Without an external power source, the closing spring should be charged manually.
- Operating voltage range 85%~110%Vn





Input voltage(V)	DC 24~30V	AC/DC 48~60V	AC/DC 100~130V	AC/DC 200~250V	AC 380V *	AC 440~480V *
Load current(max.)	5A	3A	1A	0.5A	0.3A	0.3A
Starting current(Max.)	5 times of load current					
Load rpm(Motor)	15000 ~ 19000 rpm					
Charge time	Less than 5sec.					
Dielectric strength	2kV/min					
Using temperature range	-20°~ 60°					
Using humidity range	Max. RH 80% (No dew condensation)					
Endurance	15,000 cycle (Load connection, 2 times/min)					
Charge switch	10A at 250VAC					

* Non UL Listed.

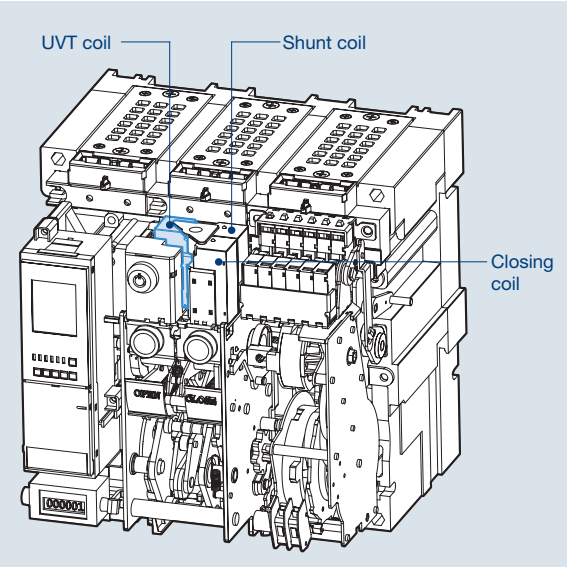
Charge Switch [CS1]
Charge Switch Communication [CS2]

- Built-in contact that sends a signal to an external device when motor charging is complete. (2a)
- Has a “1a” contact for communication and another “1a” contact for complete charging.
- When using an extra communication module (Remote I/O), the state of contacts can be displayed through the network.

Classification	Standard		Remark
Contactor Capacity	250/125 Vac	10 A	
	250 Vdc	0.3 A	
	125 Vdc	0.6 A	
	48 Vdc	3 A	
	24 Vdc	5 A	

Under Voltage Trip device [UVT]

- If the voltage of the main or the control power is under voltage, the UVT installed inside of the breaker breaks the circuit automatically.
  UVT time-delay controller (UDC) should be connected in order to present the time-delay function because UVT operates instantaneously.
- The closing of a circuit breaker is mechanically and electrically impossible if control power is not supplied to UVT.
  To close the circuit breaker, 65~85% of rated voltage should be applied to both terminals of UVT coil (D1, D2).
- When using UVT coil, the double trip coil can not be used, and the location of trip coil is changed.



1. Rated voltage and characteristics of UVT coil

Rated voltage [Vn]		Operating voltage range [V]		Power consumption (VA or W)		Trip time [ms]
DC [V]	AC [V]	Pick up	Drop out	Inrush	Steady-state	
24~30	-	0.65~0.85 Vn	0.3~0.6 Vn	200	5	Less than 50ms
48~60	48					
100~130	100~130					
200~250	200~250					
-	380~480					

Note) Operating voltage range is the min. rated standard for each rated voltage (Vh).

2. Specification of the wire

- Refer to the below table regarding the length and specification of wire when using trip coil with DC 24~30[V] or DC/AC 48~60[V] of rated voltage.

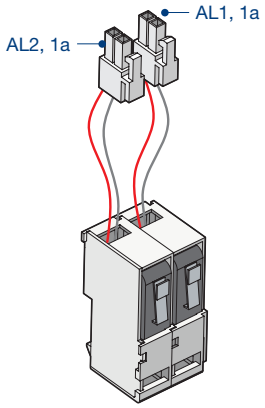
The maximum wire length

Wire type		Rated voltage [Vn]			
		DC 24~30 [V]		DC/AC 48 [V]	
		#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)	#14 AWG ($2.08mm^2$)	#16 AWG ($1.31mm^2$)
Operating voltage	100%	48.5m	30.5m	233.2m	143.9m
	85%	13.4m	8.8m	62.5m	39.3m

Note) In case of using UVT coil, the location of Shunt coil is changed.

Trip Alarm Contact [AL]

- When a circuit breaker is tripped by OCR (Over Current Relay), which operates against the fault current, Trip Alarm switch sends a signal to an external device that the circuit breaker has tripped. (Installed inside circuit breaker)
- When a circuit breaker is tripped by fault current, a mechanical trip indicator (MRB, Manual Reset Button) pops out from the front cover and closes the alarm switch (AL) which then sends a signal to an external device that the breaker has been tripped by fault current.
- MRB and AL will be triggered only when the breaker is tripped by OCR; they will not be triggered by the OFF operation of the trip coil or by the Off button. of trip coil.
- To re-close a circuit breaker after a trip, press MRB to reset it for closing.
- 2pcs of electrical trip switch (AL1, AL2, 1a) are provided (Option)
- Trip alarm contact and MRB(Manual reset bottom) need to be purchased together.

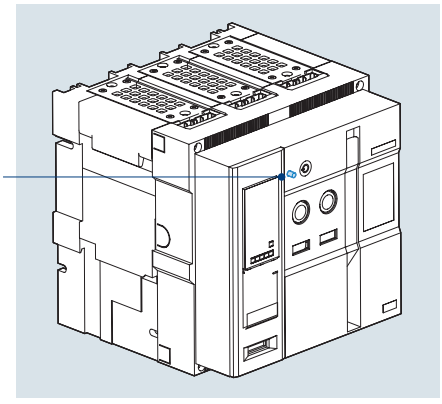


1. Electrical characteristics of trip alarm contact

Classification	Standard		Remark
Contactor Capacity	250/125 Vac	10 A	
	250 Vdc	0.3 A	
	125 Vdc	0.6 A	
	48 Vdc	3 A	
	24 Vdc	5 A	

Manual Reset Button [MRB]

- Function that manually resets a circuit breaker when it is tripped by OCR.
- When a circuit breaker is tripped by fault current, a mechanical trip indicator (MRB, Manual Reset Button) pops out from the front cover and closes the alarm switch (AL) which then sends a signal to an external device that the breaker has been tripped by fault current.
- MRB will only be triggered when the circuit breaker is tripped by OCR but not by OFF operation of circuit breaker. To re-close a circuit breaker after a trip, press MRB to reset it for closing.



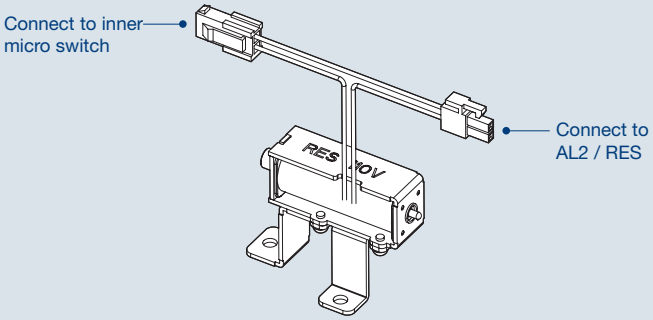
Note) The manual reset button is protruded in the event of trip.

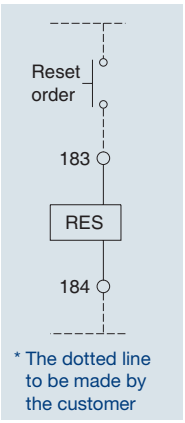
Remote Reset Switch [RES]

- Following tripping, this function resets the "fault trip" alarm contacts(AL) and the mechanical indicator(MRB) and enables circuit breaker closing.
  Push button switch : AC 125V 10A, AC 250V 6A, DC 110V 2.2A, DC 220V 1.1A Resistive load
- In case of auto reset type circuit breaker:
  Following tripping, a reset of Manual Reset Button(MRB) or Remote Reset Switch(RES) is no longer required to enable circuit breaker closing.
  The mechanical indicator(MRB) and electrical indicator(AL) remain in fault position until the reset button is pressed.
- AL2 and RES are alternative.

1. Rated voltage and rated current of RES

Rated voltage	Operating current(Max.)		Operating time	Wire spec.
AC/DC 100~130V	AC	6A	Less 40ms	#14 AWG (2.08 mm²)
	DC	5A		
AC/DC 200~250V	AC	3A		#16 AWG (1.31 mm²)
	DC	2.5A		



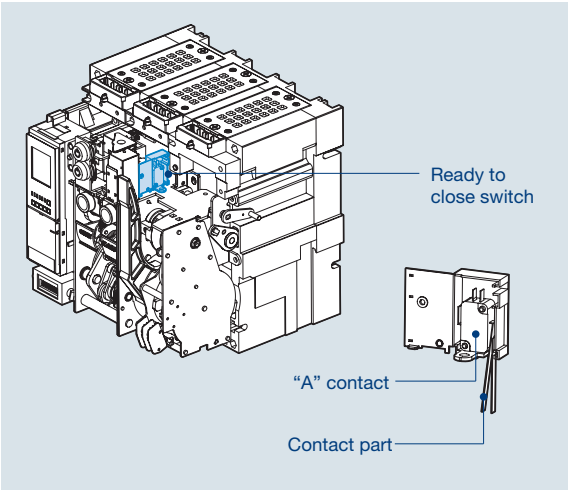


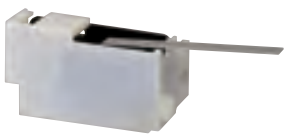
Wiring Diagram

Ready to Close Switch [RCS]

- Interlocks with mechanism of the circuit breaker.
- Indicates if the circuit breaker is ready for closing operation.
- When mechanism is in OFF position or in Charge, contact is output with “ON” and it indicates that mechanism can be closed.

Classification	Standard		Remark
Contactor Capacity	250/125 Vac	10 A	
	250 Vdc	0.3 A	
	125 Vdc	0.6 A	
	48 Vdc	3 A	
	24 Vdc	5 A	

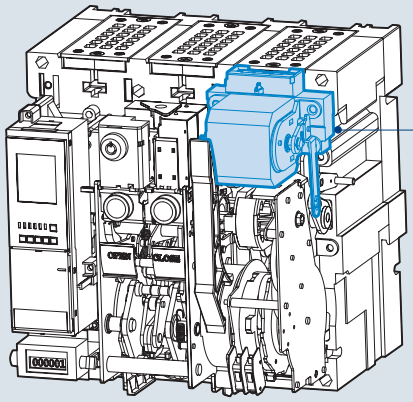


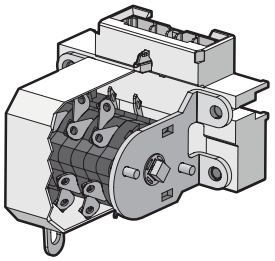


Auxiliary switch [AX]

- Contact used to remotely monitor ON/OFF position of the ACB.

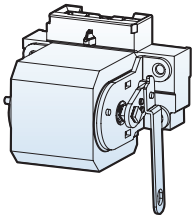
AUX. contact & charging types	
HX	High capacity OFF charge 5a5b
HC	High capacity ON charge 5a5b
GX	High capacity OFF charge 3a3b
GC	High capacity ON charge 3a3b
JC	High capacity ON charge 6a6b





Standard classification

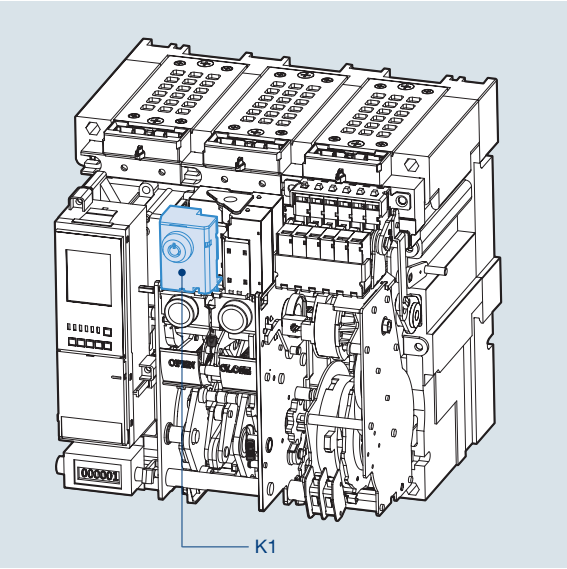
High capacity	
2000, 5000AF	4000, 6300AF

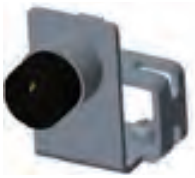


Classification			Resistive load	Inductive load	Remark
Minimum current			DC5V, 1mA		
Contactor Capacity	AC	460V	5A	2.5A	
		250V	10A	10A	
		125V	10A	10A	
	DC	250V	3A	1.5A	
		125V	10A	6A	
		30V	10A	10A	
No. of Contact that can be used		GX	3a3b		Standard charging type
		HX	5a5b		
		GC	3a3b		Rapid auto-reclosing charging type
		HC	5a5b		
		JC	6a6b		

Key Lock

- Device that prevents unauthorized users from operating the circuit breaker when two or more circuit breakers are in use at the same time.
- K1, K5, K6, K7 : Preventing mechanical closing
  - K5 : PROFALUX LOCK (CAMLOCK type)
  - K6 : KIRKKEY LOCK (CAMLOCK type)
  - K7 : KIRKKEY LOCK (CN22 type)





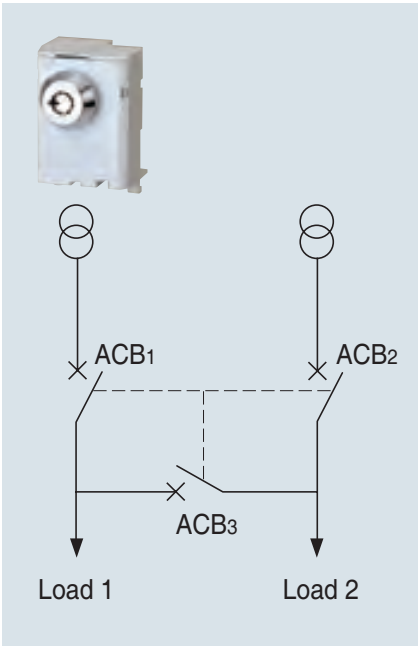
Key Interlock Set [K2]

- 3 circuit breakers can be arranged for continuous power supply to the load side and interlocked mutually by using key locks embedded in each circuit breaker.

ACB-1	ACB-2	ACB-3	Status	
			LOAD1	LOAD2
●	●	●	OFF	OFF
●	○	○	ON	ON
○	●	○	ON	ON
○	○	●	ON	ON
●	●	○	OFF	OFF
●	○	●	OFF	ON
○	●	●	ON	OFF

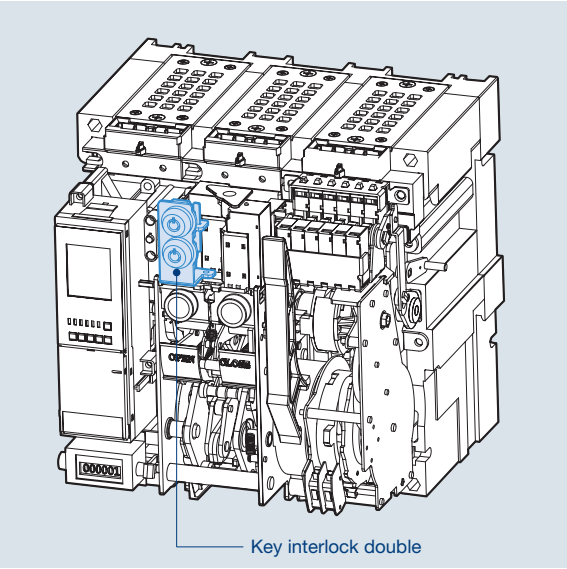
○ : Release ● : Lock

Wiring



Double Key Lock [K3]

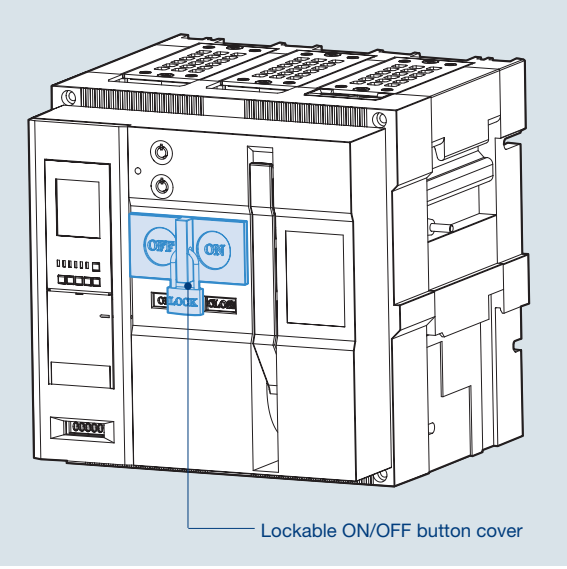
- When only two keys are released at the same time, circuit breakers operate. Handling method is same as K1.



Lockable ON/OFF Button Cover [B]

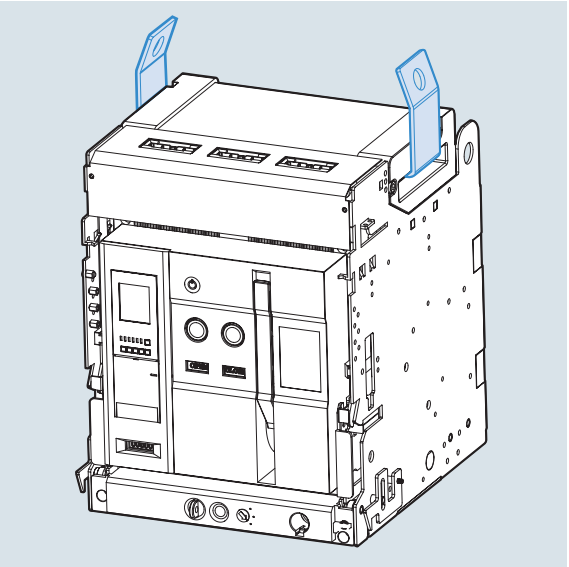
- Prevents mishandling of or accidents with the ACB's manual closing/trip buttons.
- It is not possible to handle ON/OFF operation under the "Button lock" status.

Note) Padlocks(Ø5 ~ Ø6) are not supplied.



Lifting Hook [LH]

- Device that makes an ACB easy to shift.
- Please hang it to both handles of the arc cover.



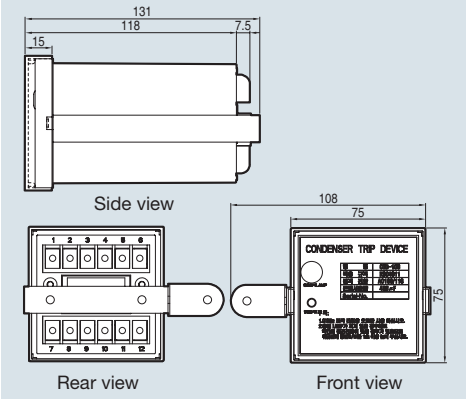
Condenser Trip Device [CTD]

- Allows for a circuit breaker to trip during a certain amount of time (see chart) when the breaker loses control power supply.
- Used in combination with the Trip Coil (Shunt coil, SHT)
- In instances without DC power, it can be used as a rectifier that supplies DC power to a circuit breaker by rectifying AC power.

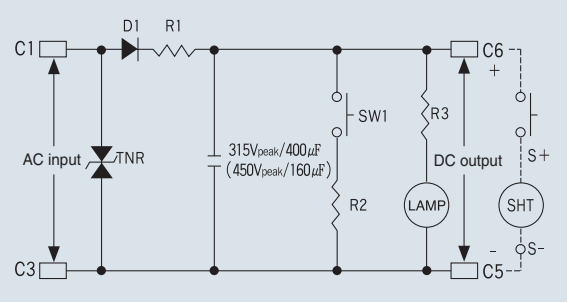
Ratings

Ratings	Specification	
Model	CTD-100	CTD-200
Rated input voltage (V)	AC 100/110	AC 200/220
Frequency (Hz)	50/60	50/60
Rated charge voltage (V)	140/155	280/310
Charging time	Within 5S	Within 5S
Trip-able time	Max. 3 min.	Max. 2 min.
Range of Input voltage (%)	85~110	85~111
Condenser capacity	400㎌	160㎌

External dimension



Circuit diagram

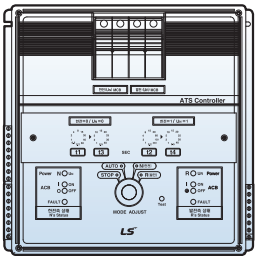


* Non UL Listed.

Automatic Transfer Switch Controller [ATS]

Ratings

Model type	ATSC-110	ATSC-220
Rated voltage	AC 110V	AC 220V
Voltage range	AC 93.5(±5%) ~126.5V(±5%)	AC 187(±5%) ~ 253V(±5%)
Frequency	50Hz/60Hz	
Power consumption (apparent power)	15.4W	
4-location switch (stop, N, R, Auto)	■	■
Time setting (t1~t4)	■	■
Fault function (OCR/Circuit breaker trouble)	■	■
Output contact (Auto, Load burden)	■	■



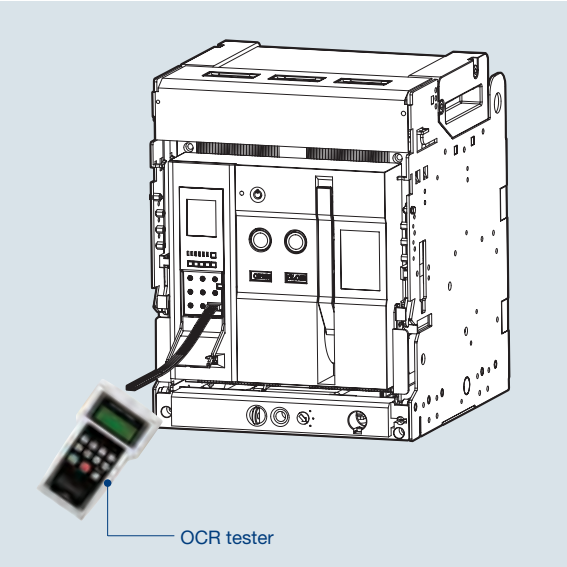
- t1: The delayed time from when UN (power supply of electric company) is tripped to when generator start-up signal contact is closed. (t_1: 0.2, 0.5, 1, 2, 4, 8, 15, 30, 40, 50secs)
- t2: The delayed time from when UN is closed to when ACB_2 is tripped. (t_2: 0.2, 1, 2, 4, 8, 15, 30, 60, 120, 240secs)
- t3: The delayed time from when ACB_1 is tripped to when ACB_2 is closed. (t_3: 0.5, 1, 2, 5, 10, 15, 20, 25, 30, 40secs)
- t4: The delayed time from when ACB_2 is tripped to when ACB_1 is closed. (t_4: 0.5, 1, 2, 5, 10, 15, 20, 25, 30, 40secs)
- Stop-mode: This mode is for compulsory trip of ACB_1(electric power company) or ACB_2 (power station) when UN (power supply of electric power company) or UR (power supply of power station) is available
  *UN or UR should be kept in ON position
- N-mode: This mode is for compulsory closing of ACB_1 when UN is available.
  * ON or OFF position of UR is irrelevant. If converting to N-mode while UR is in use, generator start-up signal contact will be opened.
- R-mode: This mode is for compulsory closing of ACB_2 during the use of UR regardless of if UN is available or not.
- Auto-mode: This mode is for transferring a circuit breaker automatically to available power supply of UN or UR. In short, it trips the circuit breaker when power supply is not available and it close the circuit breaker when power supply is available.

* Non UL Listed.

OCR Tester [OT]

- It is a device which can test for the operation of Trip Relay under no power condition.

1. Maximum 17 times the rated current can be inputted.
2. It is possible to enter the current value and phase on each of R/S/T/N
3. Frequency is adjustable.
4. It is able to test for long time delay/ short time delay/instantaneous/ground fault.



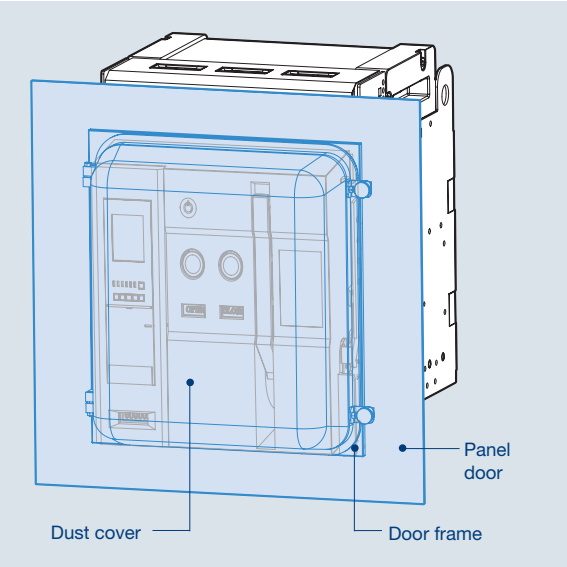
Configuration

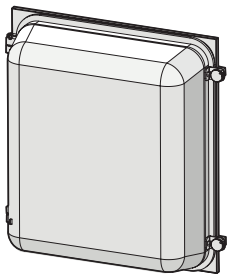
R S T N	R, S, T, N phase signal input
▲ ▼	Increase/Decrease signal input
ENT. ESC	Signal setting/Delete
START STOP	Waveform generation/Stop
50Hz 60Hz Hz	Select frequency

* Non UL Listed.

Dust Cover [DC]

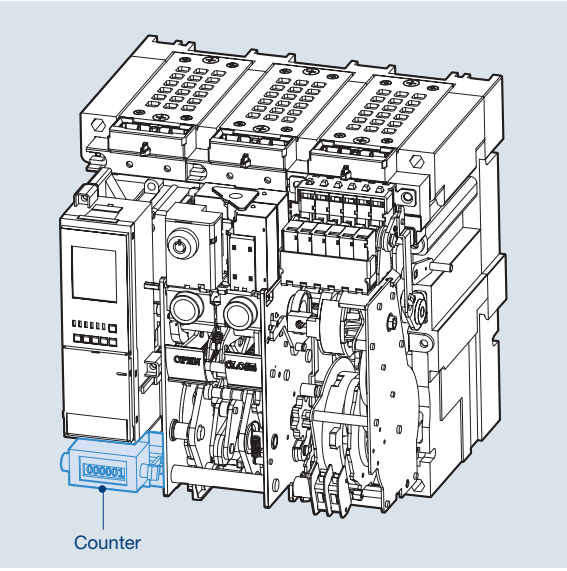
- Attach it to the door frame.
- Improves the seal and protects the product from dust and moisture that may interfere with the regular operation of the circuit breaker (IP5X).
- Transparent to allow the front of the ACB to be visible. Cover can be opened/closed until ACB is drawn out past TEST position.



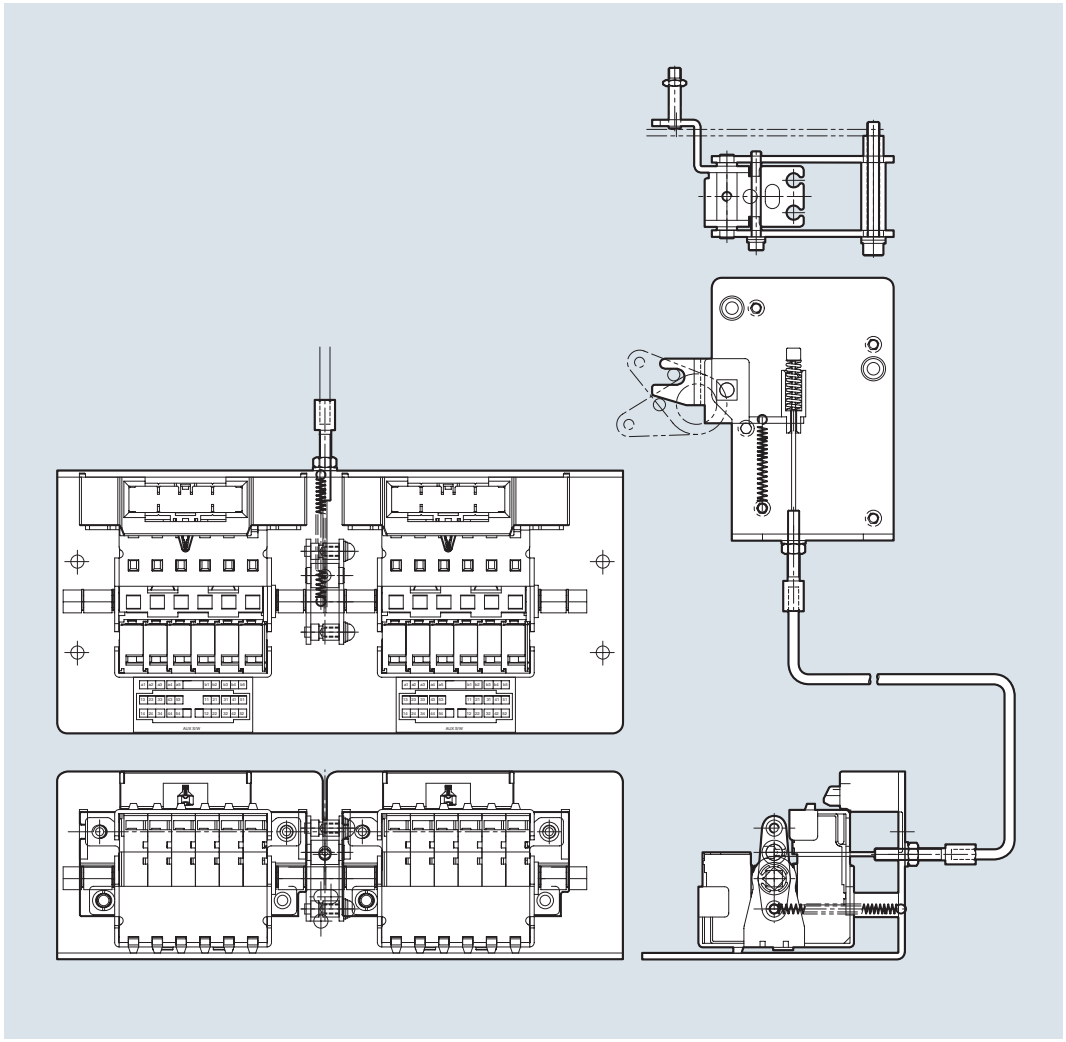


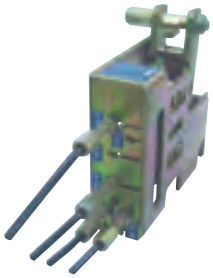
Counter [C]

- It displays the total number of ON/OFF operation of ACB.



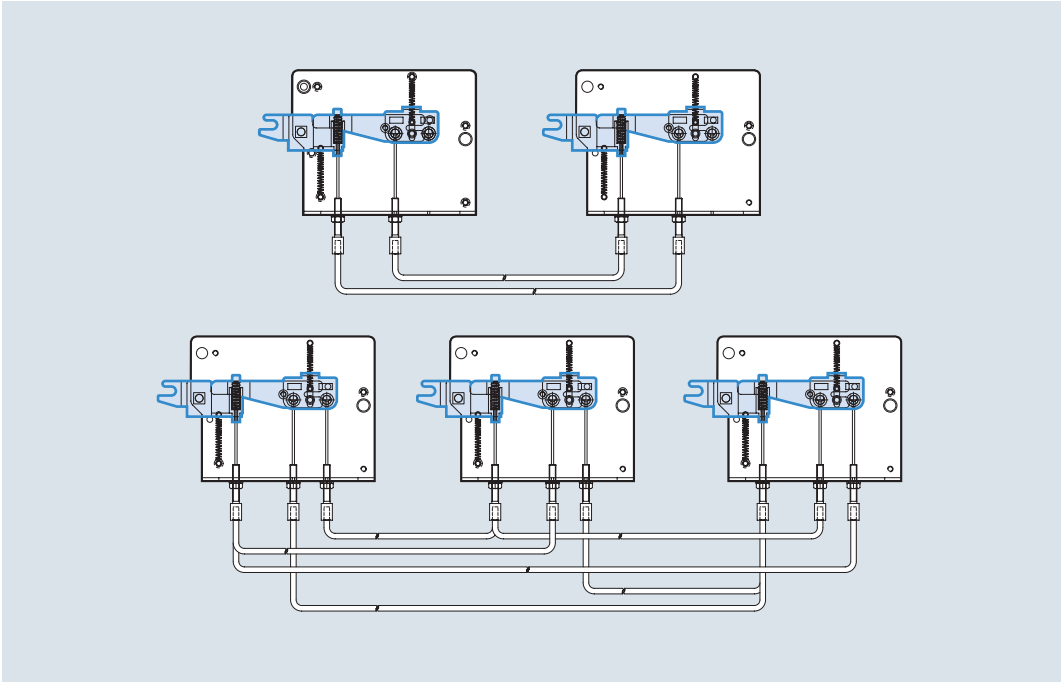
Mechanical Operated Cell Switch [MOC]





- The contact (10a10b) which displays the ON/OFF condition of ACB.
  Mechanically operates only when the breaker is in "CONNECTED" position.
  A standard type and a high capacity type are available.
- The contact capacity is as same as the ratings of aux. contacts.
- When MOC link is installed on cradle, MOC can be equipped inside the panel.

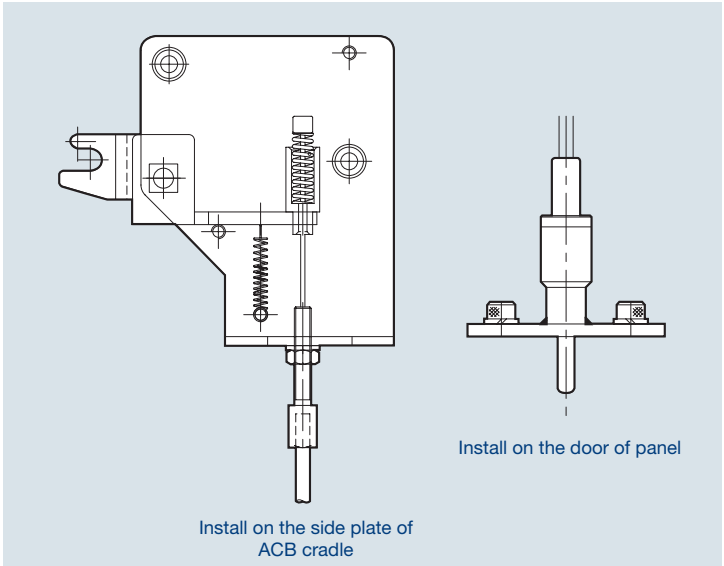
Mechanical Interlock [MI]



- Mechanically interlocks closing and trip between two or three breakers. so as to prevent unintended operation at the same time.
- Wire type interlock can be applied to up to 3 breakers

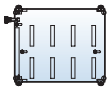
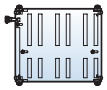
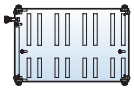
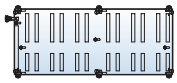
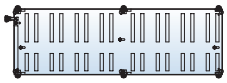
Door Interlock [DI]

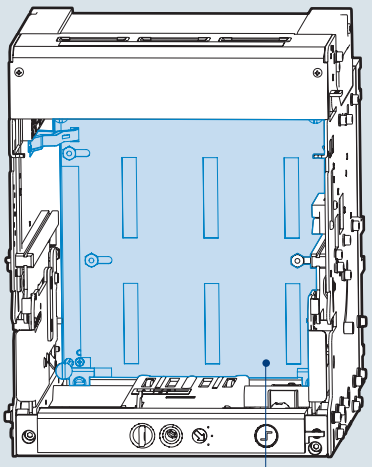
- Safety device that prevents the panel door from being opened when the circuit breaker is in the “ON” position.



Safety Shutter [ST]

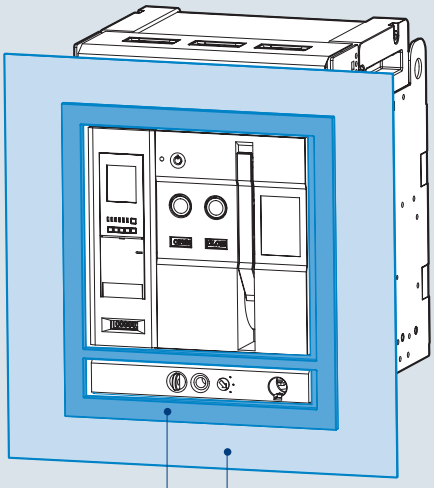
- Automatic safety device that protects the connectors of the main circuit by cutting off dangerous contact from outside while the breaker is drawn out. When the ACB is drawn in, the shutter is automatically opened.
- There are 3 types of Safety Shutter and they are divided as shown in the figure below.

The types of safety shutter plate	
1600AF, 3P	1600AF, 4P
	
3200AF, 3P	3200AF, 4P
	
6000AF, 3P	6000AF, 4P
	



Door Frame [DF]

- When structuring the embedded type of ACB panel, it protects the protrude front of ACB and the cutting side of panel door by attaching it to the panel door.



Fixed type

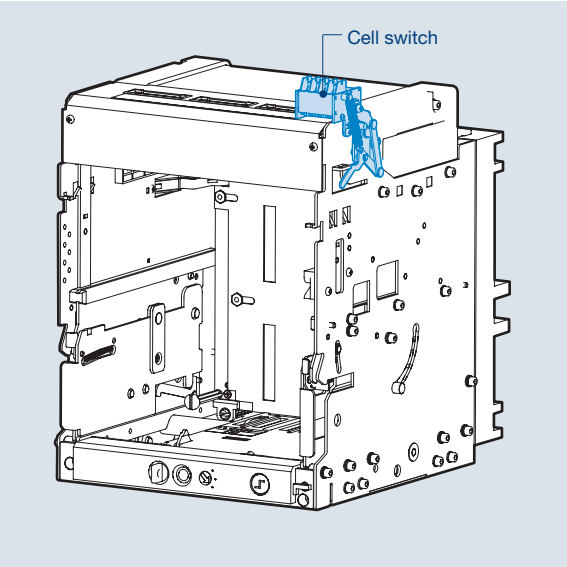
Draw-out type

Cell Switch [CEL]

- Contact that indicates the present position of ACB.(CONNECTED, TEST, DISCONNECTED)

<Contact configuration>
4C: 1Disconnected +1Test +2Connected

※ Contact configuration can be changeable if necessary.

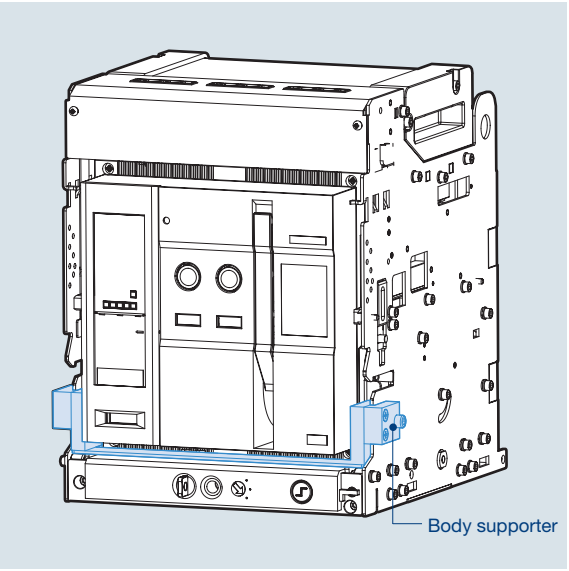


ACB position		DISCONNECTED		CONNECTED
Draw-in and draw-out position		DISCONNECTED	TEST	CONNECTED
Contact operation	CL-C (Connected)	OFF		ON
	CL-T (Test)	OFF	ON	
	CL-D (Disconnected)	ON	OFF	

Classification	Standard	
Contact capacity	250/125 Vac	10 A
	250 Vdc	0.3 A
	125 Vdc	0.6 A
	48 Vdc	3 A
	24 Vdc	5 A
Contact number	4C	

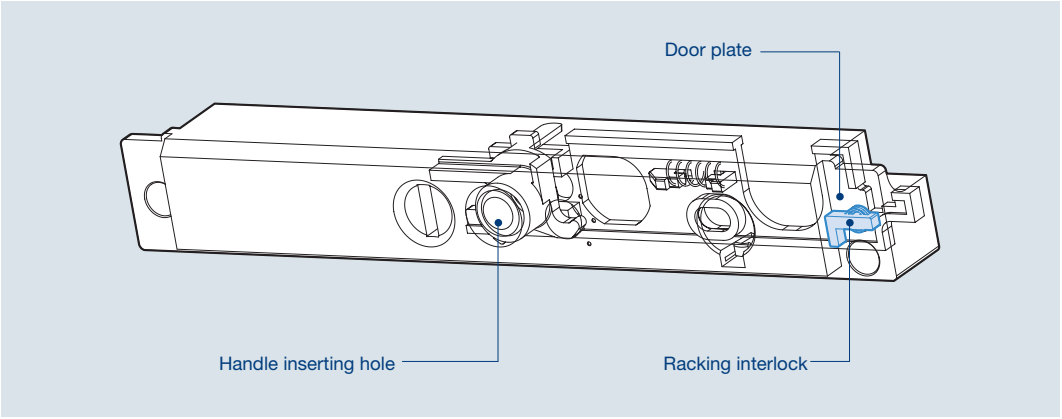
Body Supporter [BSP]

- Interlocks the main body of the circuit breaker and the cradle mechanically to fix the former in connected position. Therefore, all draw-in/outs are not available.



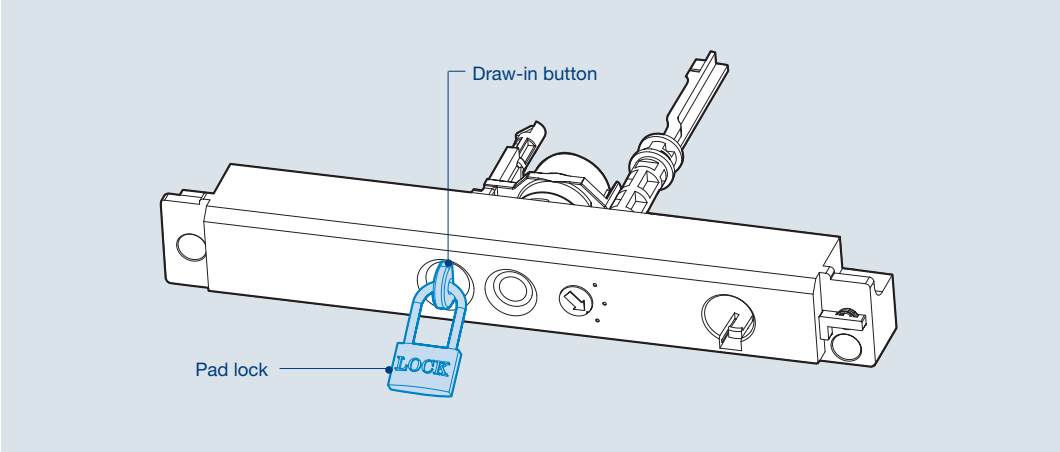
* Non UL Listed.

Racking Interlock [RI]



- When panel door is opened, Draw in/out handle cannot be inserted. Thus, panel handle can be inserted only when panel door is closed.

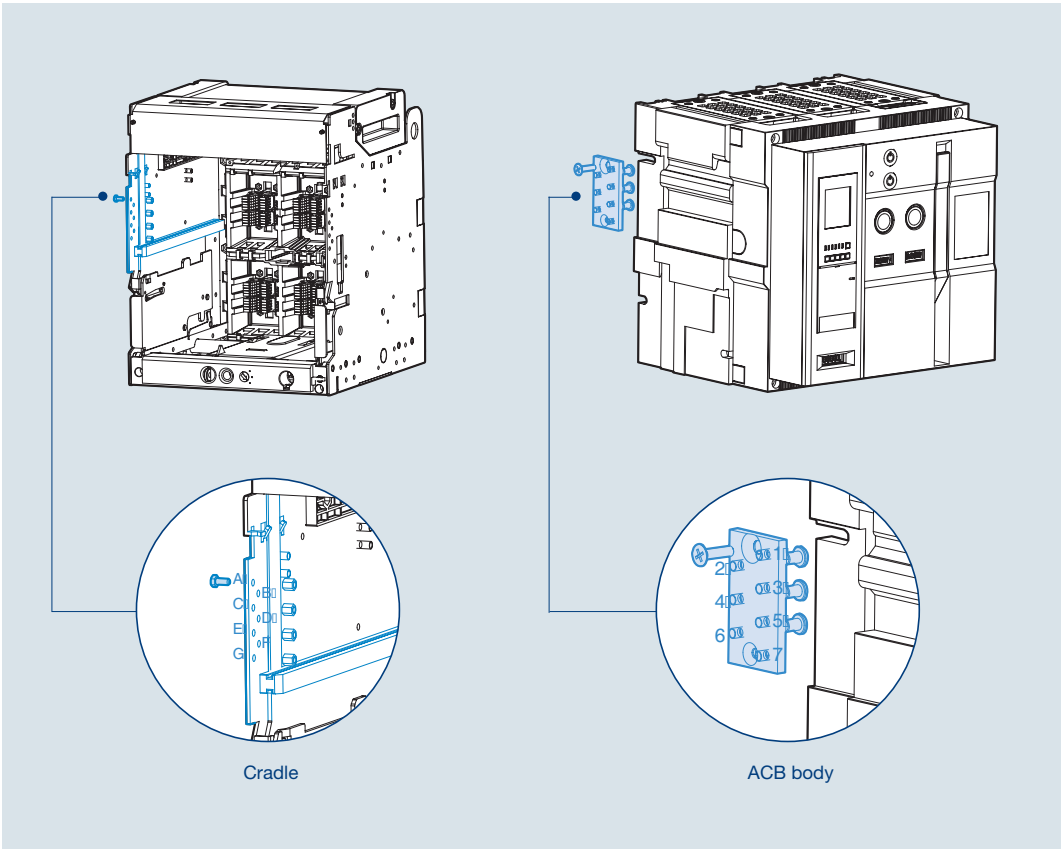
Lockable Position Lock [PL]



ACB is subject to restriction regarding moving in connected, test, disconnected when drawing in or out. If main body of ACB is placed in 3 positions, it is locked and stopped when drawing in or out.

- As shown in the figure, if draw-in/out button pops out, it means locking is operating.
- To continue Draw-in/out operation, release lock by pushing Draw-in/out button
- When locked as shown in the figure above, the main body of ACB can not be drawn in or out into the cradle.
- User must provide padlock. (Ø5 ~ Ø6)

Mis-Insertion Prevention Device [MIP]



Cradle

ACB body

- Mechanically prevents the ACB from being inserted into the cradle if the rating of the ACB does not match that of the cradle.
- The installation method is variable according to ratings.

Cradle	ACB
ABCD	567
ABCE	467
ABCF	457
ABCG	456
ABDE	367
ABDF	357
ABDG	356
ABEF	347

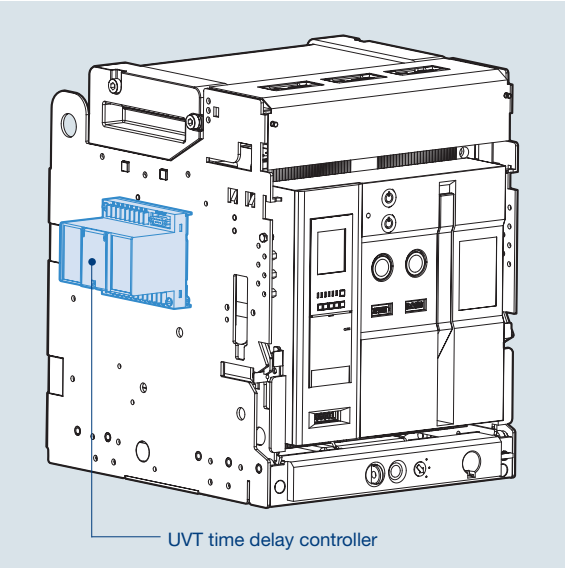
Cradle	ACB
ADEF	237
ADEG	236
ADFG	235
AEFG	234
BCDE	167
BCDF	157
BCDG	156
BCEF	147

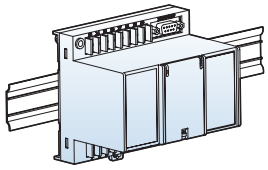
Cradle	ACB
ABEG	346
ABFG	345
ACDE	267
ACDF	257
ACDG	256
ACEF	247
ACEG	246
ACFG	245

Cradle	ACB
BCEG	146
BDEF	137
BDEG	136
BDFG	135
CDEF	127
CDEG	126
CEFG	124
DEFG	123

UVT Time Delay Controller [UDC]

- UVT is a device that trips the ACB automatically to prevent the accident on load side due to under voltage or power breakdown.
  There are two types: Instantaneous type and time delay type.
- Can be installed on the rail or the cradle.
- Instantaneous type: using only UVT coil.
- Time delay type: available by connecting UVT coil and UVT Time Delay Controller (UDC).
- Common use for all ACBs.



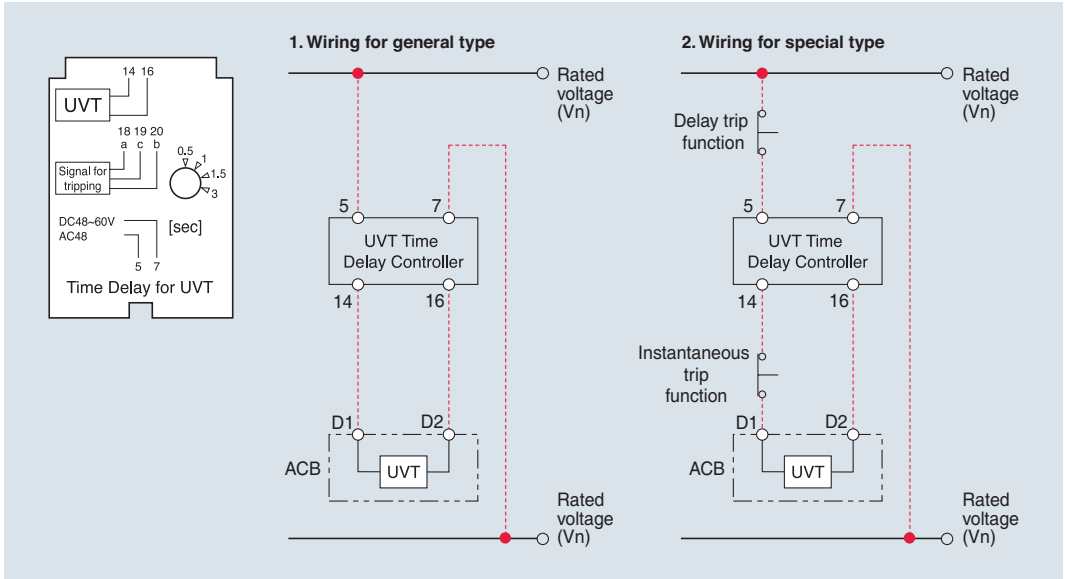


1. The rated voltage and characteristic of UVT time delay controller

Rated voltage [Vn]		Operating voltage range [V]		Power consumption (VA or W)		Trip time[s]
DC [V]	AC [V]	Pick up	Drop out	Inrush	Steady-state	
48~60	48	0.65~0.85 Vn	0.4~0.6 5Vn	200	5	0.5, 1, 1.5, 3
100~130	100~130					
200~250	200~250					
-	380~480					

Note) Operating voltage range is the min. rated standard for each rated voltage (Vh).

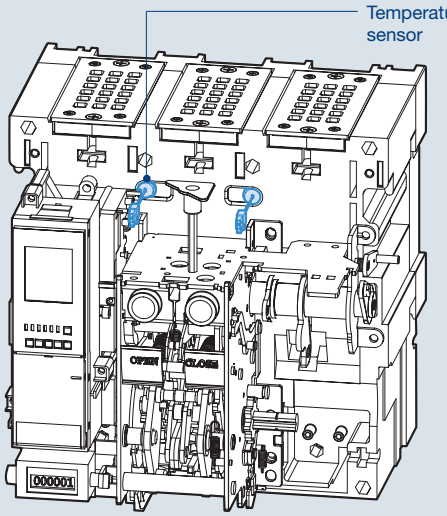
2. Wiring



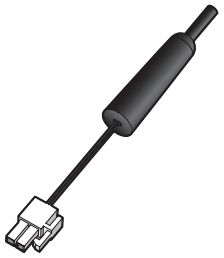
* The wiring presented with red color should be set by users.

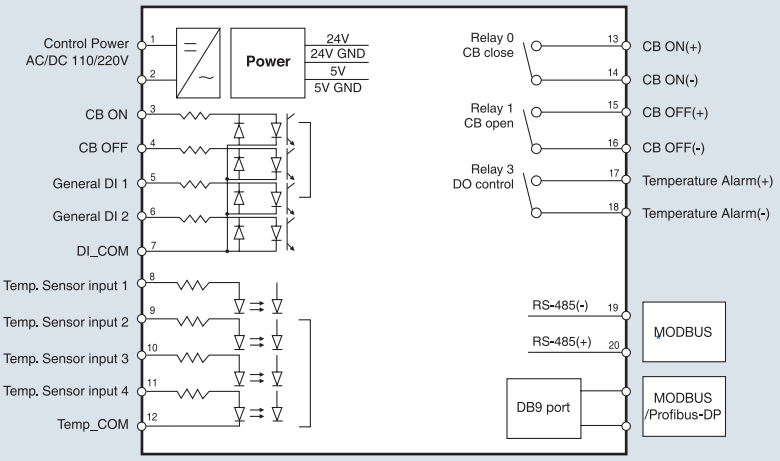
Temperature Remote I/O Unit [TRIO Unit]

Temperature monitoring function

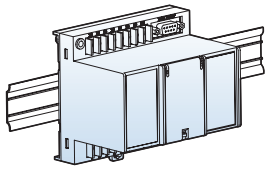


- TRIO unit is a device that indicates the temperature through a sensor inside of the ACB.
- Up to 2 temperature sensors can be installed and the output is connected to control terminal blocks.
- It displays the maximum temperature and transmits the data through a network.
- If the temperature is higher than a set temperature, an alarm will go off.
- TRIO unit communicates with Modbus / RS-485 as a default; Profibus-DP option must be purchased separately.
- TRIO unit is installed on the cradle or the inside of panel.

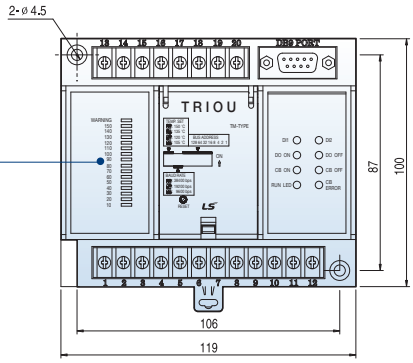




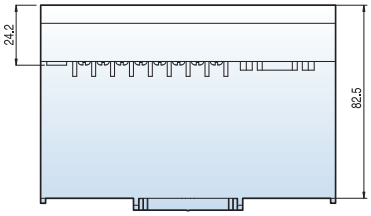
TRIO UNIT



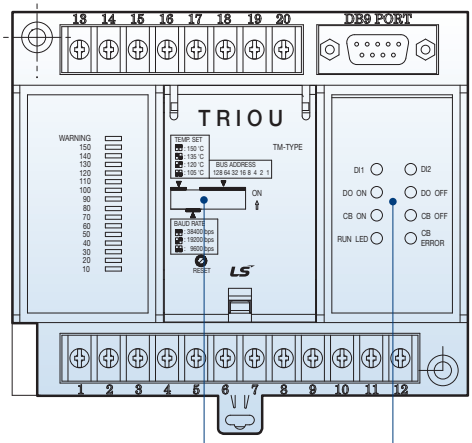
* DB9 Port is connected only when a repeater is used.



Temperature LED(℃): 10 ~150℃, Warning
(Indicates the maximum value)



Remote control function (CB ON/OFF)



- Baud rate setting
- Comm. address setting
- Temperature setting

- TRIO unit has the I/O contact which can trip or close the ACB from the remote site by communication.
- Supports SBO (Select Before Operation) function

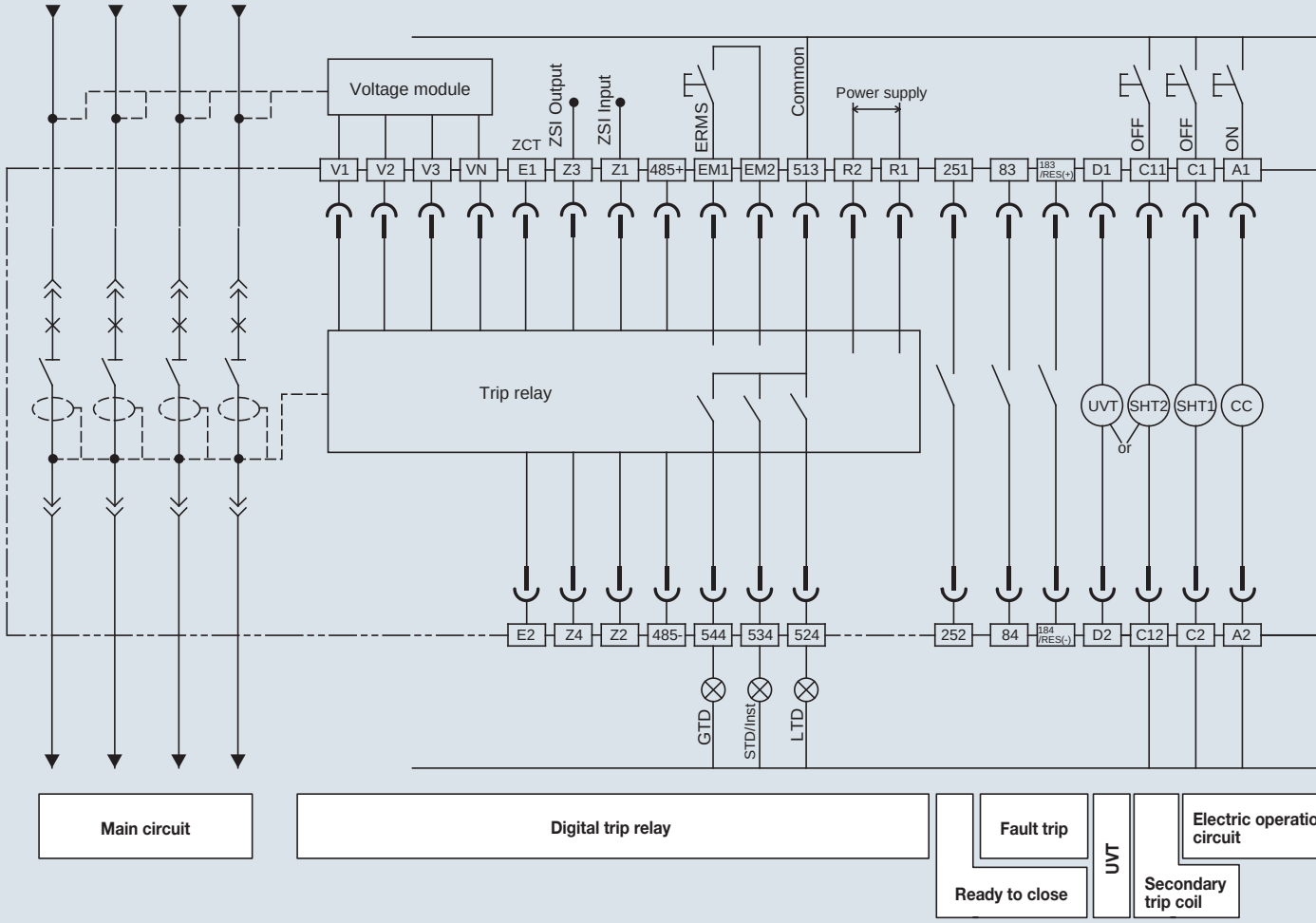
LED		Status
1	DI1	Indicates digital Input #1condition
2	DI2	Indicates digital Input #2condition
3	DO ON	Indicates temperature alarm output is ON
4	DO OFF	Indicates temperature alarm output is OFF
5	CB ON	Indicates circuit break close condition
6	CB OFF	Indicates circuit break open condition
7	RUN LED	Indicates unit run condition
8	CB ERROR	Indicates circuit break terminal Disconnection / control Err condition

Classification		Applied range	Remarks
CB control	Contact switching capacity	AC230V 16A/DC30V 16A	
	Max. switching capacity	3680VA, 480W	
Alarm	Contact switching capacity	AC230V 6A/DC25V 6A	Induction load (cosØ=0.4, L/R=7ms)
	Max. switching capacity	1880VA, 150W	

Electrical diagram

Susol

This diagram is based on “CONNECTED” position of a circuit breaker and Opening, Motor charging, Releasing of locking plate should be normal condition.

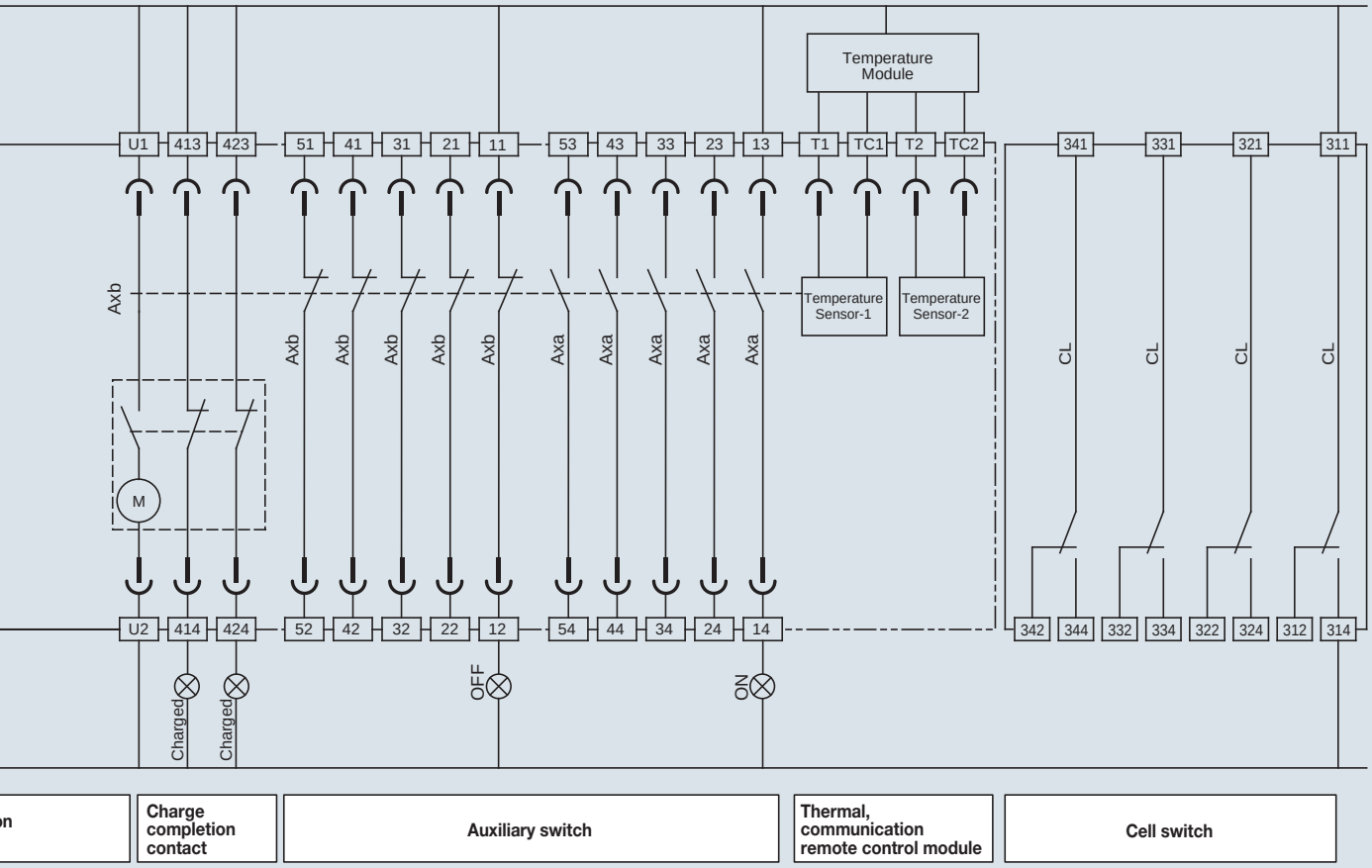


Terminal code description

13 14 ~ 63 64	Auxiliary switch “a”
11 12 ~ 61 62	Auxiliary switch “b”
413 414	Charged signal
423 424	Charged signal communication
U1 U2	Motor charging
A1 A2	Closing coil
C1 C2	Shunt trip
C11 C12	2nd shunt trip

D1 D2	Voltage input terminal of UVT
83 84	Alarm1 “a”
183 184	Alarm2 “a”
251 252	Ready to close switch
R1 R2	Control power
513 ~ 544	Alarm contact
EM1 EM2	ERMS
485+ 485-	RS-485 communication

Note) 1. The diagram is shown with circuits de-energized, all devices open, connected and charged and relays in normal position
2. Relay is normal condition and charging type is "ON-Charging"
3. The standard auxiliary contact is 3a3b. The auxiliary switch in above diagram is composed of 5a5b. See page 59 for more detail on auxiliary switches.
4. Option
- Ready to close contact, Trip alarm contact, UVT coil, Fully charged contact, secondary trip coil
- Cell switch, Temperature module, Voltage module, Remote close-open module, ZCT, ZSI
5. Please consult us for the use of ZSI (Zone selective Interlocking).
6. Refer to the page 24 for the connection of Trip relay and the page 56 for UVT.
7. For connecting RS-485 verify if the polarity is correct



Z1 Z2	ZSI input
Z3 Z4	ZSI output
E1 E2	ZCT
VN ~ V3	Voltage module
TC1 , TC2 ~ T1 , T2	Temperature module
311 ~ 344	Position switch

Accessory code description

Ax	Auxiliary switch
LTD	Long time delay trip indicator
STD/Inst	Short time delay/instantaneous
GTD	Ground fault trip indicator
CL	Cell switch
M	Motor
CC	Closing coil
SHT1	Shunt tripping device 1
SHT2	Shunt tripping device 2
UVT	UVT coil

	Internal wiring
	External wiring (by customer)
	Connector of the control circuit terminal of drawout type