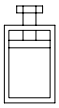
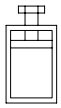
Installation and use environment

Terminals

Contents			MMS-32S	MMS-32H	MMS-63S, 63H	MMS-100S, 100H
Conformity to standards			IEC60947-2, IEC60947-4-1 UL508, UL508 Type E (except MMS-32S)			
Approvals			CE, UL			
Terminal parts						
Wire						
Single-core	1 conductor	[㎟] / [AWG]	1...10 / 18...8	1...10 / 18...8	0.75...35 / 18...2	2.5...70 / 12...2/0
	2 conductor	[㎟] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Stranded	1 conductor	[㎟] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...35 / 18...2	2.5...70 / 12...2/0
	2 conductor	[㎟] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Flexible	1 conductor	[㎟] / [AWG]	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
	2 conductor	[㎟] / [AWG]	0.75...4 / 18...10	0.75...4 / 18...10	0.75...16 / 18...6	2.5...35 / 10...2
Tightening torque		[Nm] / [lb-in]	0.8...2 / 7...22	0.8...2 / 7...22	3...4 / 26...39	4...6 / 35...53

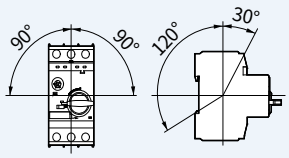
Power consumption

Contents	MMS-32S	MMS-32H	MMS-63S, 63H	MMS-100S, 100H
Total power loss pv circuit breaker at rated load operating temperature [W]	In = 0.16~1.6A : 4.4 In = 2.5~26A : 7.4 In = 32A : 4.0 In = 40A : 7.4	In = 0.16~1.6A : 4.4 In = 2.5~26A : 7.4 In = 32A : 4.0 In = 40A : 7.4	In = 10~22A : 10.2 In = 26~65A : 9.7	In = 17~32A : 15 In = 40~63A : 21.8 In = 75~100A : 17.8

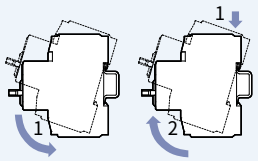
installation and use method

Mounting

- 35mm DIN rail for MMS32~63
- 35mm or 75mm DIN rail for MMS100
  - Use 15mm depth for 35mm DIN rail



Operating positions



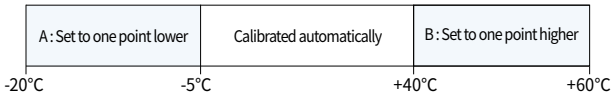
DIN rail mounting

Environment

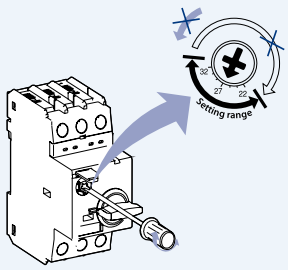
- Ambient air temperature
  - Storage : - 50 ~ 80°C
  - Operation : - 20 ~ 60°C
- Ambient temperature compensation : - 5···+ 40 °C
- Maximum operating altitude : 2000m
- Protection degree : IP20
- Shock resistance : 25g
- Vibration resistance : 5~150Hz

Caution for thermal adjustments

1. Keep the setting range as shown below.
2. Moving counterclockwise out of the setting range may cause the damage of the device.
3. Calibration by ambient air temperature



* In case of using out of the standard air temperature range(-5°C~+40°C) it needs to be calibrated by one point



Dial setting method

Installation of auxiliaries

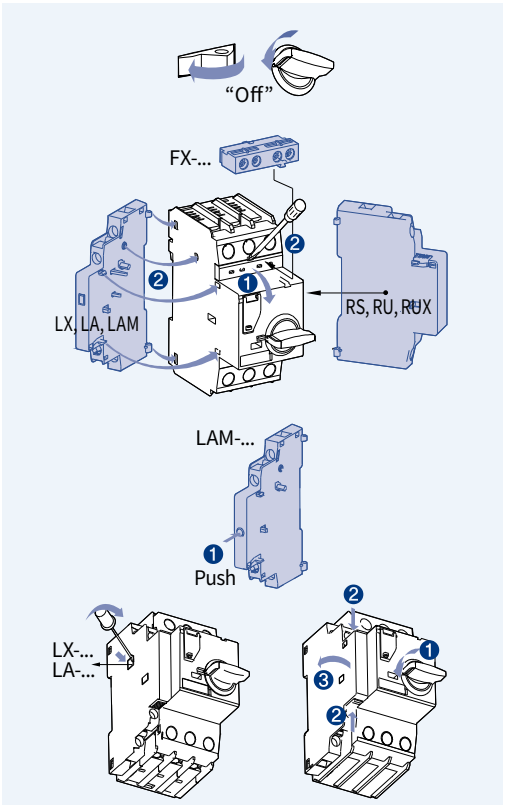
MMS-32S/H/HI

Note) Refer to page 17 for MMS-32D Installation of auxiliaries.

Be sure to turn off the main switch of MMS before any other action.

- To install FX remove the cover ❶ first.
- 2 each of LX can be installed together.
- Only one of auxiliaries among RU, RS and RUX can be mounted on the right side of MMS.
- Do not give trip signal to RS longer than 10 sec.
- Refer to the possible combination chart for the mounting of LX, LA and LAM on left side of MMS.
- Push the trip button before installation of LAM
- Do not operate the alarm contact point (LA) when the operation switch is in the trip position.
- Remove the indicated part in the fig. before the additional installation of LX
- Be sure to turn off the main switch of MMS before the separation.
- Push softly the separation button on the side of the auxiliary and pull it.

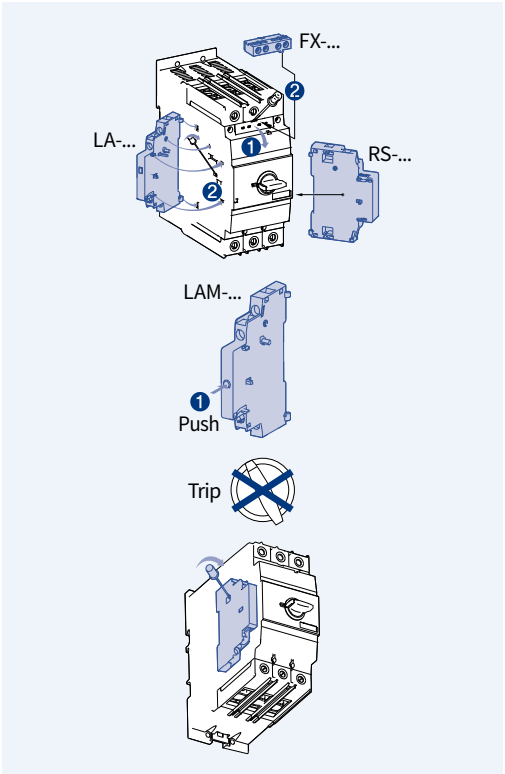
- Please make sure to choose proper LA before use because LA for MMS-32 and MMS-63/100 is different.



MMS-63, 100S/H/HI

- To install FX remove the cover ❶ first.
- 2 each of LX can be installed together. (only 1 each for MMS-63)
- Only one of auxiliaries among RU, RS and RUX can be mounted on the right side of MMS.
- Do not give trip signal to RS longer than 10 sec.
- Refer to the possible combination chart for the mounting of LX, LA and LAM on left side of MMS.
- Do not use with LA-... (32) It is only for MMS-32.
- Push the trip button before installation of LAM
- Do not install LA in the status of TRIP of MMS-100
- Remove the indicated part as shown in the above fig. before the additional installation of LX
- Be sure to turn off the main switch of MMS before the separation.
- Push softly the separation button on the side of the auxiliary and pull it.

- Please make sure to choose proper LA before use because LA for MMS-32 and MMS-63/100 is different.



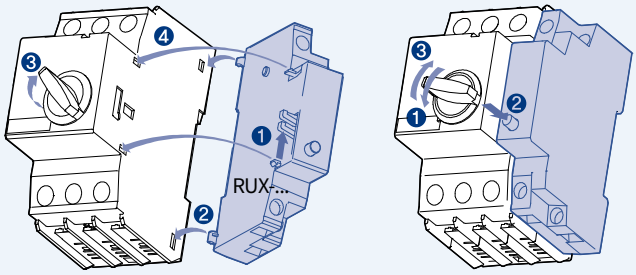
How to Install and reset RUX

Installing

(1) Check if the trip button of RUX is "UP" . If not, push the side lever ❶ to come it up.
(2) Fit the both lower hooks ❷ into the MMS.
(3) Rotate the handle of MMS to the 20 to 30 degree ❸to on direction and keep it.
(4) Fit the both upper hooks ❹into the MMS.
(5) Input power to the RUX.
(6) Turn on the handle of MMS.

Resetting

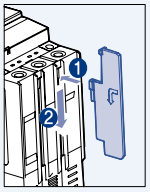
The trip button of RUX does not come "UP" in the event of tripping due to undervoltage.
To turn on the MMS after the tripping ❶turn off the MMS and check if the trip button of RUX comes "UP" .
❷push the trip button ❸turn on the MMS



Insulation

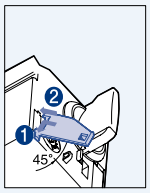
Reset

Insulation barrier

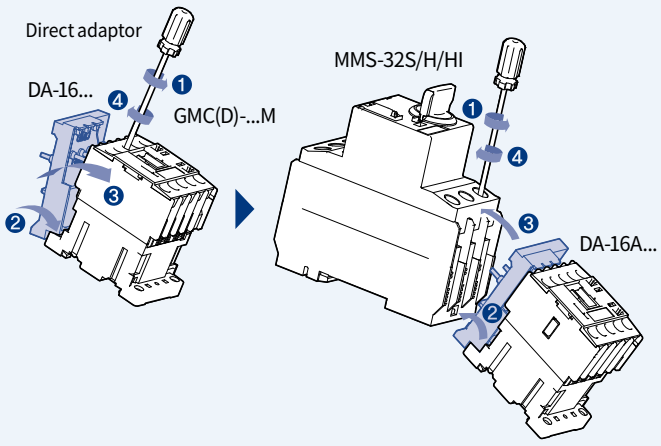


* Only for MMS-100

Dial cover

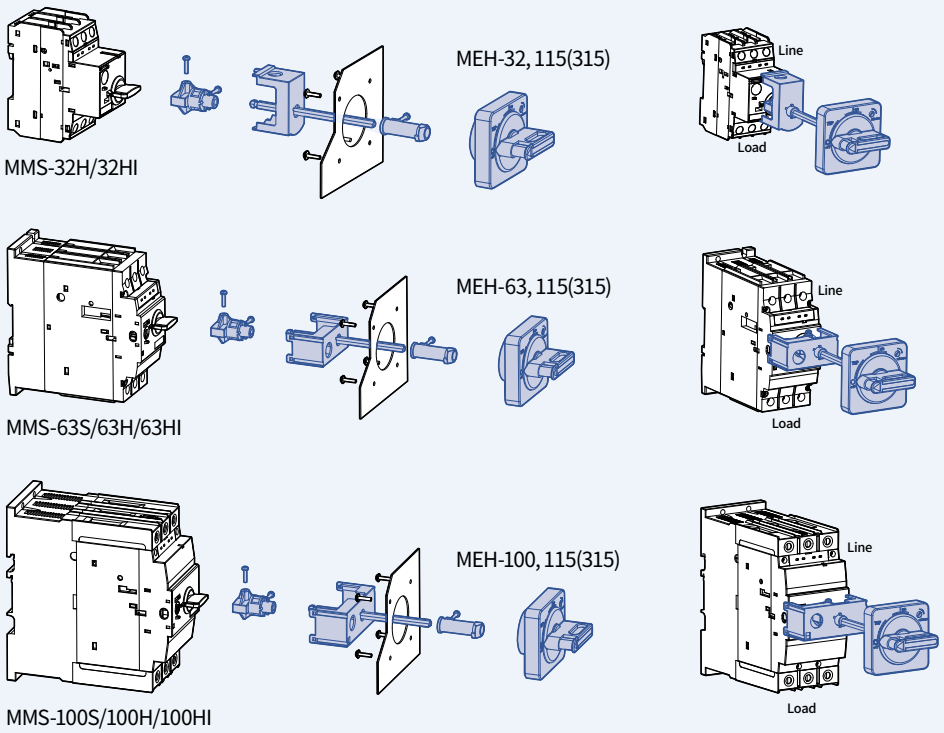


* For all MMS



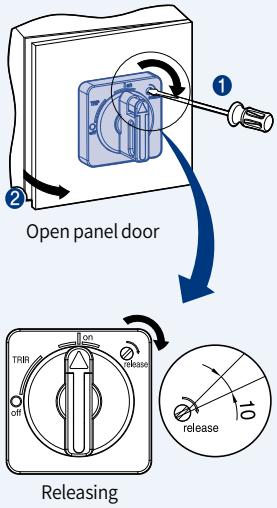
Installation of auxiliaries

E-handle structure



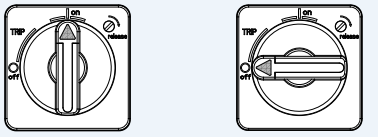
E-handle locking device

When opening the panel door at ON position



Locking
Installation at Of, Off position

❶ Setting to regular position through turning the handle

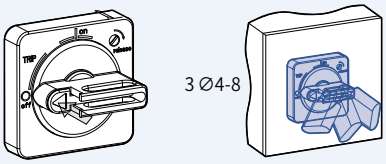


On position
(Vertical state)

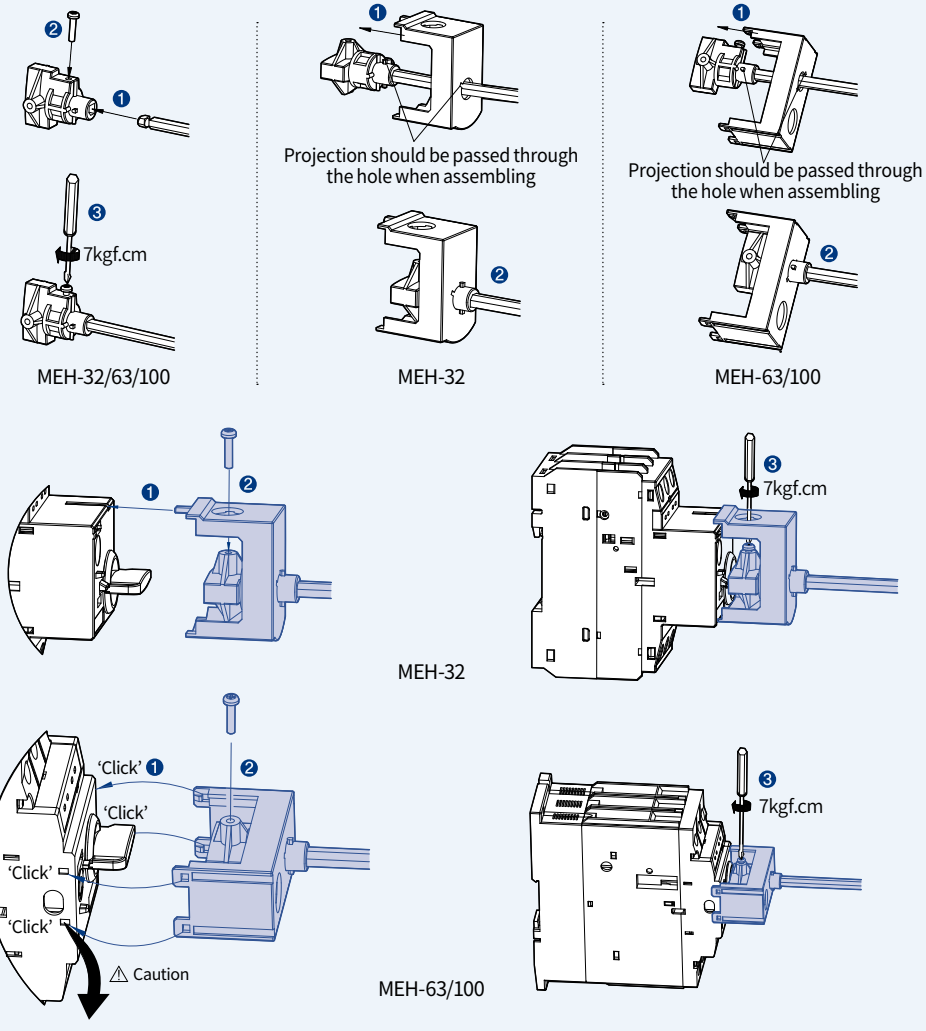
Off position
(Horizontal state)

❷ Pushing

❸ Locking

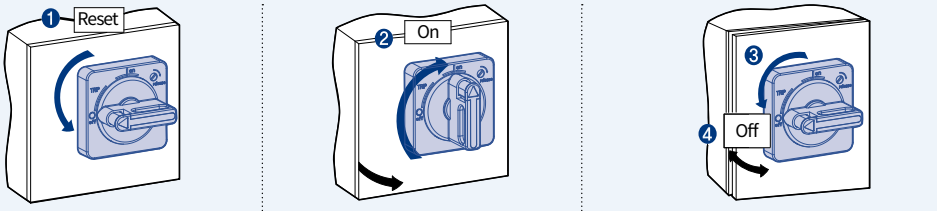


E-handle Installation



Restricted fact of Assembling
Assembling is available for MMS-63/100 with 4 holes on the main cover which is produced after June, 2007 based on manufacturing date.

E-handle operating test



※Caution
If trying to open the door at ON or Trip position, locking knob can be damaged.

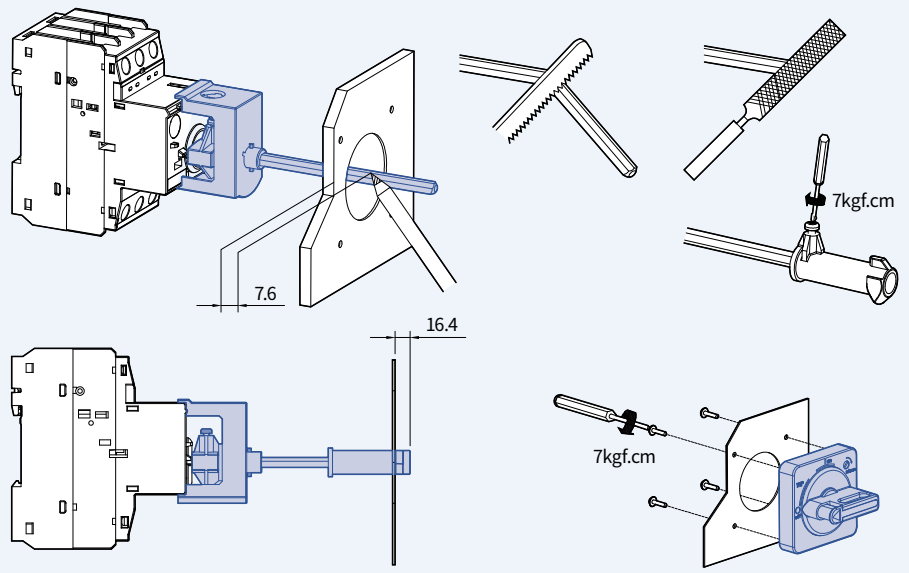
At On position
Panel door can not be opened

At Trip position Panel door can not be opened.
At Off position Panel door can be opened

Installation of auxiliaries

[mm]

E-handle cutting off the shaft & applying the handle



Enclosure