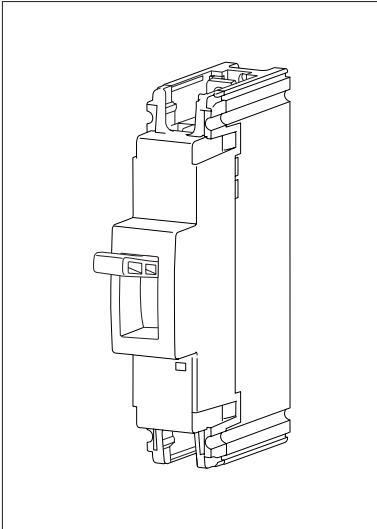


**Instruction Manual for
Moulded Case Circuit
Breaker**

**Type
E160-SF (1 Pole)**



Please retain this manual for future reference.
The Manufacturer assumes no responsibility for damages resulting from non-application or incorrect application of the instructions provided herein.

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2M0432SAA (KRB-5352)

1 Safety Notices

Be sure to read these Instructions and other associated documents accompanying the product thoroughly to be familiarize yourself with the product handling, safety information, and all other precautions before mounting, using, servicing, or inspecting the product. In these Instructions, safety notices are divided into "Warning" and "Caution" according to the hazard level:

Warning : A warning notice with this symbol indicates that neglecting the suggested procedure or practice could result in lethal or serious personal injury.

Caution : A caution notice with this symbol indicates that neglecting the suggested procedure or practice could result in moderate or slight personal injury and/or property damage.

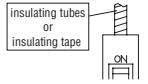
Note that failing to observe **Caution** notices could result in serious results in some cases. Because safety notices contain important information, be sure to read and observe them.

Mounting Precautions

(For detailed mounting dimensions, refer to the TemBreak2 catalogue.)

Caution

- Electrical work should only be undertaken by suitably qualified persons.
- Do not place the product in an area that is subject to high temperature, high humidity, excessive dusty air, corrosive gas, strong vibration and shock, or other unusual conditions. Mounting in such areas could cause a fire or malfunction.
- Be careful to prevent foreign objects (debris, concrete powder, iron powder, etc.) and rainwater from entering product. These materials inside the product could cause a fire or malfunction.
- Prior to commencing any work on the product, open an upstream circuit breaker or isolator to ensure that no voltage is applied to the product. Otherwise, electrical shock may result.
- When connecting cable or busbar to the product, tighten terminal screws to the torque specified in this manual. Otherwise, a fire could result.
- For front-connected breakers, Insulate all bare conductors of the line side until the breaker end. Insulate all bare conductors by insulating tubes or the like. Insufficient insulation may result in short-circuit.
- Do not block the arc gas vents of the product to ensure adequate arc space. Blocking these vents could result in failure of circuit interruption.



Handling Precautions

Warning

- Never touch terminals. Otherwise, electric shock may result.

Caution

- When the breaker trips open automatically, remove the cause, then return the handle to the I (ON) position. Should a fault be interrupted, the breaker must be inspected. Otherwise, a fire may result.

Maintenance Precautions

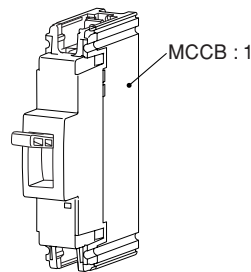
Caution

- Service and/or inspection of the product must be done by persons having expert knowledge.
- Before servicing or inspecting the product, open an upstream circuit breaker or the like to isolate all sources of power. Otherwise, electric shock may result.
- Regularly check that the MCCB terminal screws are tightened to torque values shown within this manual, failure to do so may result in fire.

Other Precautions

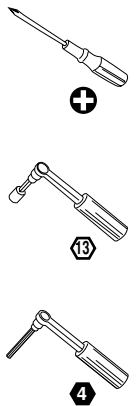
- Do not carry this product by accessory leads, as this may cause damage to the product.
- Unauthorised opening of the breaker cover will invalidate product warranty.
- When installing the product, use wires or conductors, the cross sectional areas of which accommodate the rated current of the product. Using wires or conductors with inadequate cross sectional areas may cause false tripping and overheat.

2 Packaged Items/Assembly tools

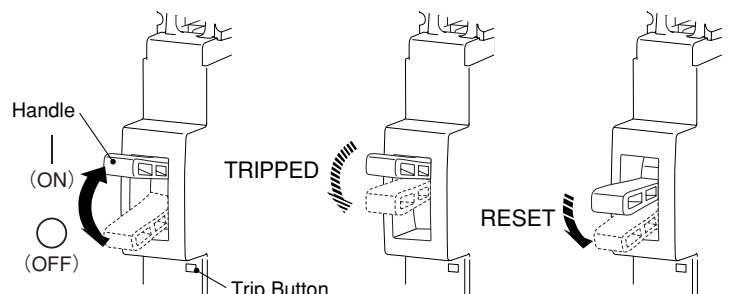


Instruction Manual : 1
(This document)

Connections	Qty	Mounting screw	Qty	Connecting screw
Front Connection	2	M4×65	2	16~50A M5×14
	2	Single Clamp		63~125A M8×14
	2	Double Clamp		

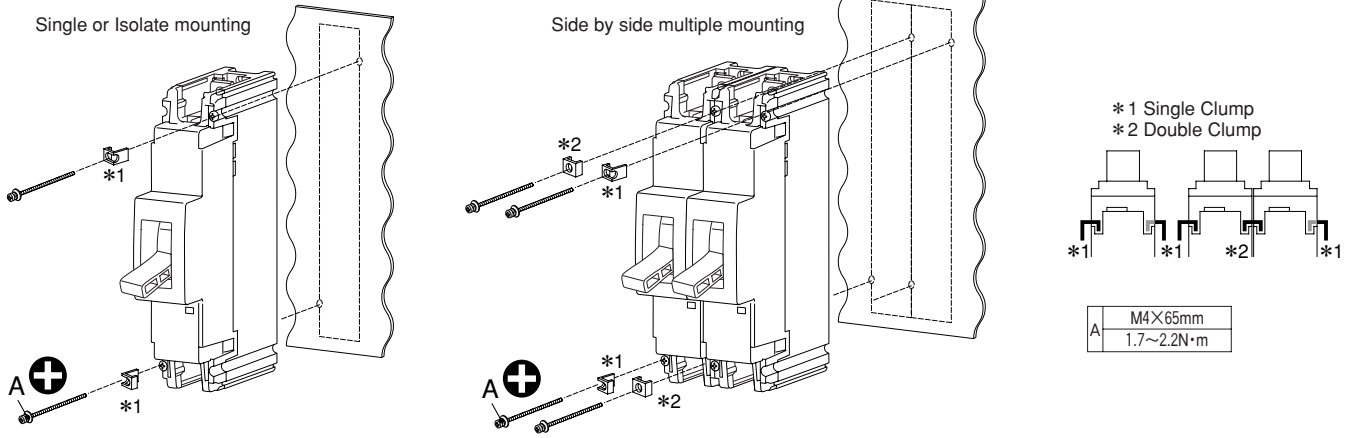


3 Operating Instructions

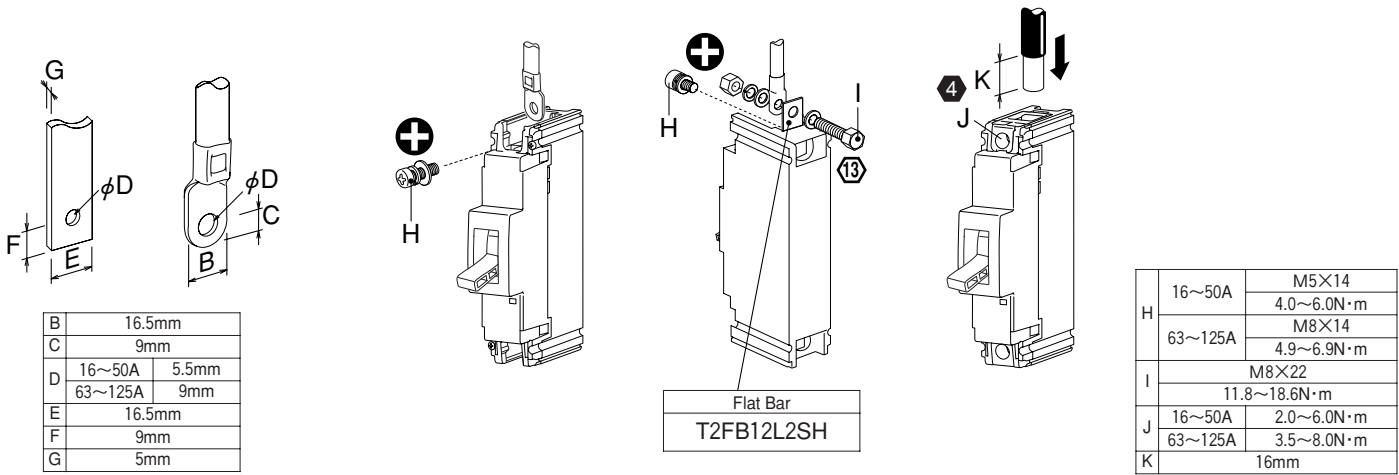


Operation	Operation effort
O (OFF) ⇒ I (ON)	15N
I (ON) ⇒ O (OFF)	19N
TRIP ⇒ O (OFF)	34N

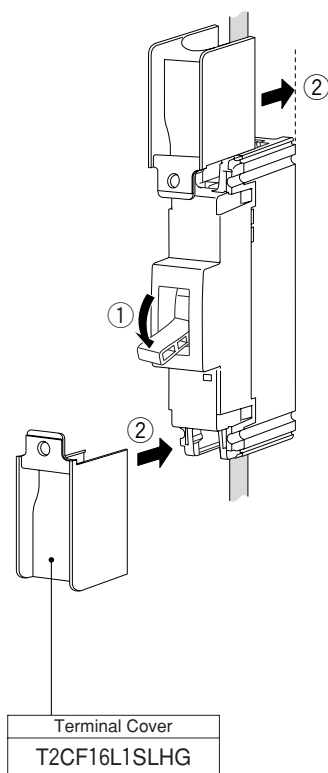
4 Breaker Mounting Procedure



5 Conductor Connection Procedure

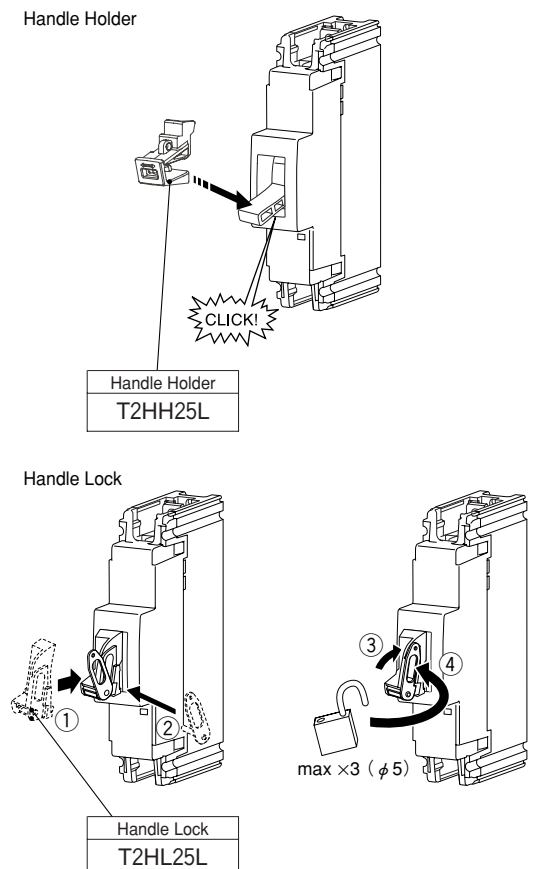


6 Procedure for mounting Terminal Cover



* When removing, remove the items in reverse order of mounting.

7 Procedure for mounting Handle Holder/Lock



* Handle holder/lock can be fitted in any position of ON and OFF.
* The padlock is not supplied.
* When removing, remove the items in reverse order of mounting.