Moulded Case Circuit Breaker

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Moulded Case Circuit Breaker 5A to 1600A

Outline
MCCB, in which a circuit breaker and trip device are assembled in a mould case, can manually or electrically open and close the electric circuit. MCCB can automatically cut off electric power in case of overload and short circuit.

Characteristics
MCCB and ELCB (Earth Leakage Circuit Breaker) with the same size this features interchangeability and construction with modularized panel since the size of MCCB is the same as an ELCB in the same frame. And it's easy to replace and maintain.

AB Type 50AF, 100AF & 225AF MCCB

Various Ratings
MCCB has a variety of rated current frame from small to large capacities (30AF~1200AF).

Formation of Series According to Breaking Ratings (capacity)
MCCB has four (4) types of breaking capacities economical type, standard type, high interrupting type and very high interrupting types. This feature allows easy application of design with an appropriate breaking capacity

GB Type - 100AF & 250AF MCCB

Increased Breaking Capacity

The breaking capacities of new Meta-MEC Series are increased 80% to 90% higher than those of the existing Hi-MEC Series (based on voltage of 460VAC).

Easy to Mount Optional Accessories Free usage

Equipped with an open-close type auxiliary cover, users can easily mount optional accessories.

Micro Processors Based Electronic Trip MCCB

Perfect Interchangeability. The AB type frame has the same size as the existing Hi-MEC Series, and it allows trouble-free application of product to distribution panel.

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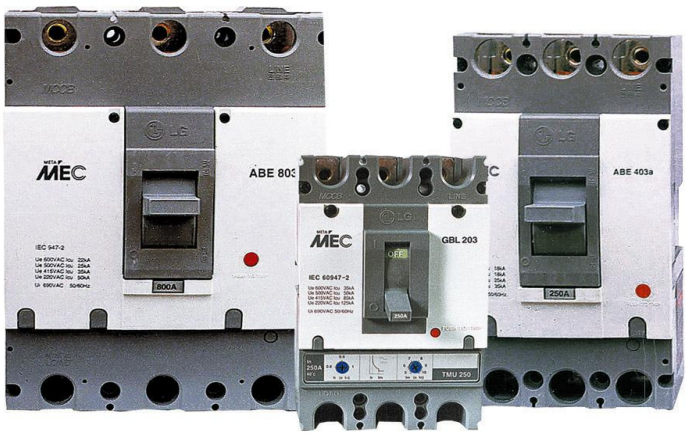

Increased Variety.

For the economical type, standard type, high interrupting types of MCCB 225AF, the model with rated current of 100A is added.

Standardization of Major Dimensions.

Panel designing and manufacturing are standardized with the unified dimensions of 24mm-high terminal base and 60mm-high nameplate protrusion. (Reduced height of nameplate protrusion from 99mm to 60mm enables to compose ideal panels.)

MCCB and ELCB with identical size.
The identically sized frames of MCCB and ELCB allow users to interchange MCCB with ELCB.

Meta-MEC Series (400AF to 800AF)

Adjustable Rated Current.

Rated currents can be easily adjusted within a same frame MCCB by simply changing the Rating Plug, which can change rated currents.

Easy to Mount and Change Optional Accessories.

Use of auxiliary cover and optional accessories in the form of cassette allow user to easily attach or replace accessories. And the number of mountable internal accessories is increased.

Adjustable Characteristics of Instantaneous Operation.

While an ordinary product has the fixed characteristics of instantaneous operation, new Meta-MEC has a function to adjust the characteristics of instantaneous operation. This function allows users to directly adjust an instantaneous trip current.

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Rationalization of Frame Size.

The frame size of MCCB is same as ELCB in the same rating: the frame sizes of the economical type, standard type, .high interrupting type and current limiting types are identical within a AF.

Increased Breaking Capacity. The breaking capacities of Meta-MEC Series are increased 5 to 20% higher than those of other existing products.

Ratings

General MCCB (S Type) No. of Electric Poles Rated Current Rated Breaking Capacity Current.
*The figures in ( ) of the rated breaking capacity current are for the products with rated current of 3A.
General MCCB (E Type). No. of Electric Poles Rated Current Rated Breaking Capacity.
General MCCB (E Type). No. of Electric Poles Rated Current Rated Breaking Capacity.
General MCCB (High interrupting Type: H &L Type) No. of Electric Poles Rated Current Rated Breaking Capacity.
MCCB for Motor Protection No. of Electric Poles Rated Current Rated Breaking Capacity.
Products of Hi _ MEC Series No. of Electric Poles Rated Current Rated Breaking Capacity.
Instantaneous Magnetic only Circuit Breaker Maximum magnetic release trip Current Rated Current Rated Breaking Capacity.
Electronic MCCB Rated Current Rated Breaking Capacity.

Accessories

Auxiliary Switch Contact (AX) AX indicates operating ON/OFF status of MCCB
P.10 Maximum number of the attached contactors (based on 3-pole product)
Meta-MEC(30AF to 225AF) : 2 each
Meta-MEC(400AF to 800AF) : 4 each
The existing products(1000AF, 1200AF) : 2 each
Hi-MEC(30AF to 225AF) : 2 each (to be discontinued)

Alarm switch Contact (AL) Alarming switch contact indicates Trip status.
Maximum number of attachments (based on 3-pole type products)

Meta-MEC (30AF to 225AF): 2 each
Meta-MEC(400AF to 800AF) : 4 each
The existing products(1000AF, 1200AF) : 2 each
Hi-MEC(30AF to 225AF) : 2 each (to be discontinued)

Shunt Release Device (SHT) SHT provide remote controlled tripping of MCCB by switching voltage.
Maximum number of the attached contacts (based on 3-pole product)

- Meta-MEC (30AF to 225AF): 1 each
- Meta-MEC(400AF to 800AF) : 4 each
- Existing products (1000AF, 1200AF): 1 each
- Hi-MEC (30AF to 225AF): 1 each (to be discontinued)

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Under Voltage Release Device (UVT) UVT trips MCCB to prevent damages in the events of voltage drop.
Maximum number of the attached contacts (based on 3-pole product)
- Meta-MEC (30AF to 225AF): 1 each
- Meta-MEC (400AF to 800AF): 2 each
- The existing products (1000AF, 1200AF): 1 each
- Hi-MEC (30AF to 225AF): 1 each (to be discontinued)

Insulation Barrier Insulation barriers are used for insulating phase terminals and preventing damages from inflow of conductible foreign materials (standard specification).

Terminal Cover Terminal cover is an accessory device designed to cover the terminals of line and load
External Operating Handle This handle is an accessory device used for operating MCCB and confirming the ON, OFF and Trip statuses with the panel cover closed

Specification

Standards
IS 13947-2
IEC 60947-2

Qualification and Certificate Safety Certificate of Electrical Appliances
CE Marking
NEMA AB-1
UL & CSA