



CIRCUIT PROTECTION DEVICES

MCB | RCD | ISOLATOR

MERCURY SERIES

MCB - MERCURY SERIES (MC)

MINIATURE CIRCUIT BREAKER

SPECIFICATION



Available Range (Product Code / Model)

- MCM 6K / 1P-C6
- MCM 6K / 1P-C10
- MCM 6K / 1P-C16
- MCM 6K / 1P-C20
- MCM 6K / 1P-C32

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.

Features

- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON/OFF).
- Clear indication of the contact position
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- Suitable for household or similar applications in accordance with: IEC 60898-1, tripping characteristics C.

Standards: IEC 60898-1
Rated Current In (A): 6, 10, 16, 20, 32
Rated Voltage Un (V AC): 1P: 230
Operational Voltage (V AC): Min. : 24; Max. : 250/440
Rated Frequency (Hz): 50/60
Rated Insulation Voltage (V AC): Phase to Ground: 250 Phase to Phase: 500
Number of Poles (P): 1
Tripping Characteristic: Characteristic C (In): 5-10
Thermal Operating Limit (In): 1.13 - 1.45
Degree of Protection: IP20, with Connected Conductors
Electrical Endurance (Cycles): 6,000
Mechanical Endurance (Cycles): 20,000
Breaking Capacity: 6 kA
Fire Resistance According to IEC 60695: 960 °C
Busbar Connection: Pin Type
Mounting Position: Any
Conductor Cross-Sections: Solid and Stranded (mm²): 1-35 Finely Stranded with End Sleeve (mm²): 1-16
Terminal Tightening Torque (N·m): 2.5
Ambient Temperature (°C): -5 ~ +40, Max. 95 % Humidity
Altitude (Meters): Max. 2000



RCD - MERCURY SERIES (MC)

RESIDUAL CURRENT DEVICE

SPECIFICATION

Available Range (Product Code / Model)

- MCR / 2P / 40-30

Functions




- Switching and isolation function.
- Controlling.
- Protection against the effects of sinusoidal alternating earth fault currents.
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults.
- Used in residential building, non-residential building, energy sources, industry and infrastructure.

Features

- Electromagnetic type, voltage independent.
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF).
- Adequate printing of all data on the front provides long-term identification.

Types

Both RCCBs and RCBOs are further divided into types depending on the operating function:

- Type AC:  For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.
- Type A:  For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.
- Type S:  For selectivity, with time delay.

Standard: IEC 61008-1

Type (Wave Form of the Earth Leakage Sensed): AC, A

Trip Time Type: Instantaneous, Selectivity S

Number of Poles: 1P+N

Rated Current I_n (A): 40

Rated Voltage U_e (V AC): 230

Rated Insulation Voltage U_i (V AC): 500

Rated Frequency f_n (Hz): 50/60

Rated Residual Currents $I_{\Delta n}$ (mA): 30

Rated Conditional Short-Circuit Current: $I_{nc} = I_{\Delta c} = 6000$ A SCPD Fuse 100 A Gg

Making and Breaking Capacity I_m (A): 1,000

Rated Residual Breaking Capacity $I_{\Delta m}$ (A): 1,000

Rated Impulse Withstand Voltage (1.2/50) U_{imp} (kV): 8

Dielectric Test Voltage at ind. freq. for 1 min. (kV): 2.5

Electrical Life (Times): 10,000

Mechanical Life (Times): 20,000

Degree of Protection: IP20, with Connected Conductors

Mounting position: Any

Conductor Cross-Sections:

Solid and Stranded (mm²): 0.75-16

Finely Stranded with End Sleeve (mm²): 0.75-10

Terminals:

Terminal Tightening Torque (N·m): 2.8

Ambient Temperature (°C): -25 ~ +45, Max. 95 % Humidity

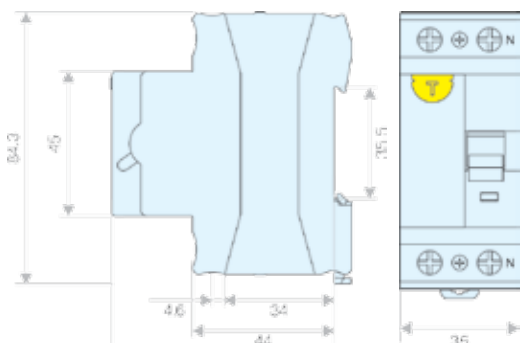
Storage Temperature (°C): -40 ~ +75

Altitude (Meters): Max. 2,000



Tripping Sensitivity Data

- RCD with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.



RCD - MERCURY SERIES (MC)

RESIDUAL CURRENT DEVICE

BENEFITS



Same groove design with MCB. Well matched during installation.



Venting grooves improve heat dissipation even in multiple-pole configurations.



MCB's and RCCB's can be connected with both PIN type busbar and FORK type busbar at the top and bottom terminals.



N pole mark, quick and easy identification.



Anti false wiring design to ensure safe wiring.

ISOLATOR - MERCURY SERIES (MC)

MAIN SWITCH

SPECIFICATION

Available Range (Product Code / Model)

- 40 MCI / 2P / 40

Functions

- Making and breaking under load condition.
- Providing safety isolation for terminal distribution system.
- Used in residential building, non-residential building.

Features

- The handle provides a clear indication of the contact position.
- Adequate printing of all data on the front provides long-term identification.
- Based the technology of MCB series 3SB1-63N, similar design to series 3SB1-63N.
- Matched with series MCB 3SB5, 3SB52, 3SB1-63N.
- Full sets of accessories.



Standards: IEC 60947-3

Approval: CE

Rated Current I_e (A): 40

Rated Voltage U_i (V AC): 230

Rated Insulation Voltage V_i (V AC): 500

Number of Poles: 2

Degree of Protection: IP20, with Connected Conductors

Electrical Life (Times): 1,500

Mechanical Life (Times): 8,500

Rated Short-Time Withstand Current $12 I_e$: 1S

Mounting Position: Any

Conductor Cross-Sections

Solid and Stranded (mm²): 0.75-35

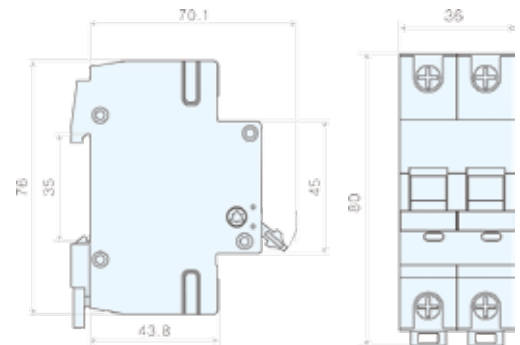
Finely Stranded with End Sleeve (mm²): 0.75-25

Terminal Tightening Torque (N·m): 2.5

Ambient Temperature (°C): -25 ~ +45, Max. 95 % Humidity

Storage Temperature (°C): -40 ~ +75

Altitude Max.(Meters): 2,000



ACL Cables PLC,

60, Rodney Street,
Colombo 08, Sri Lanka

T : +94 11 760 8300
F : +94 112 699 503

E : info@acl.lk
W : www.acl.lk