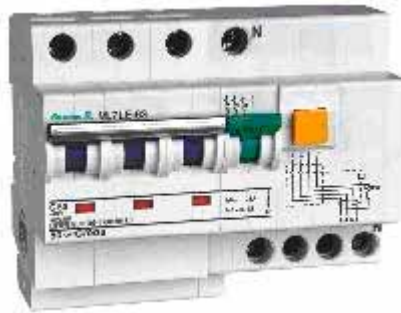


Low Voltage Switch Company - Low Voltage Electronic Components



ML7—63 Series Mini Circuit Breaker

About the Product:

ML7—63 Series Mini Circuit Breaker (hereinafter refers to the circuit breaker) is a new product developed by our company. It is the latest product of the 21st century which has reliable performance, accurate protection feature, high breaking ability and small volume.

The circuit breaker is mainly applied to the overload current protection for AC 50Hz 230V / 400V rated voltage rated maximum current 63A electrical facilities and devices in buildings and similar places. It is also can be used in frequently operated places.

The circuit breaker meets IEC60898、GB10963 《Overload Current Protection Circuit Breaker for Household and Similar Places》 standards. It has passed the safety authentication of electrician products.

Product Features distribution plate and control system have passed model tests IEC 439 - 1 , EN 60 439 - 1 model test for components of distribution plate IEC 439 - 1 air gap and creepage DIN VDE 0110 III/3 flammable feature-blazing rod test DIN VDE 6304 - 3 - IIb electrical appliances (module and components) fireproof experiment (hot line test) standard DIN VDE 0471 - 2 shake-proof, adjustment experiment rank RK 1.0/10 electrical parameters shell rank

Instantaneous button release type and current range

Type B : $3I_n - 5I_n$

Type C : $5I_n - 10I_n$

Type D : $10I_n - 50I_n$

rated current: I_{nm} : 63A

rated voltage: U_e : 50HZ , 230v / 400V

rated current: I_n : Type B、 Type C : 1、 2、 4、 6、 10、 20、 25、 32、 40、 50、 63 A

Type D : 1、 2、 4、 6、 10、 20、 25、 32、 40 A

rated extreme short circuit breaking capability I_{Cn} : 10000 A

rated operating short circuit breaking capability I_{CS} : 7500 A

electrode : 1P、 1P+N、 2P、 3P、 3P+N、 4P

mechanical life span : 20000 times

electric life span : 8000times

Reliable structure design: This mini circuit breaker adopts high accuracy double metal materials as the anti-time thermal protection device which has exact protection property; operation mechanism is four-bar linkage of small operation force and high sensitivity; Instantaneous button release electromagnet which is of small grading, light dynamic metal core, small inertial, fast response, high sensitivity. As a result of internal structure, there is no jam and which has greatly improved the reliability of whole machine. Dynamic contact has small volume and movement inertial which guarantees the speed of the broken dynamic contact so that the arc could shift rapidly; the circuit breaker adopts large arc chamber. The arc movement track is connected by the large arc iron tablet to reduce the resistance of the electric arc and prevent halfway stagnation. There are many iron grids (1-3 pieces). The arc is cut, cooled off, extinguished rapidly and the arc spray mouth adopts multilayered mesh iron grid to further cool off and extinguish the arc and make sure zero flying arc. It can effectively the short circuit between the two electrodes. Both sides of the arc chamber adopt special organic material protection which generates large quantities of insulation steam under the high temperature of the arc to further increase the pressure of the arc root and effectively control the spray direction of the iron steam. Meanwhile, the gas generated by the insulator can cool the arc to enhance the resistance and voltage which provides powerful guarantee for the rapid extinguishment of the arc. The insulation materials at both sides effectively prevent the arc from burning the shell and guarantee the high insulation performance of the product. Among the higher rated current rank products (50A or above), we have ingeniously set up the operation handles for reclosing the rJ threshold, only when the operation force reaches a certain value, the contact can be closed, which makes the contact close on certain high-speed and relatively rules out the influence of human factors on the speed of contact closure. It reduces the contact attrition and improves the life span as well as reliability of the circuit breaker. All the features of the circuit breaker guarantee good current limiting feature, extremely short arc burning time, long life span and reliable performance.

The circuit breaker has clear contact status display.

The reasonable structure design enables optional wire access interface of the power supply.

The wiring terminal adopts frame structure which can closely fasten both flexible and solid wires.

The circuit breaker has complete components and can attach auxiliary contact, alarm contact as well as protection module for the left current movement. It gives great convenience for the automation application.

Working and Environment Conditions

1. Surrounding air temperature: maximum +40 , minimum — 5 , 24 h average value is less than +35 .
2. The altitude of the installation site should below 2000m.
3. Atmospheric relative humidity should below 50% at the maximum temperature +40 . It can be a little higher at lower temperature. Maximum relative humidity of the most humid month should not exceed 90% and the minimum temperature of this month should not exceed +25 with the consideration of the dew on the surface of the product caused by the change of the temperature.
4. Pollution rank: II