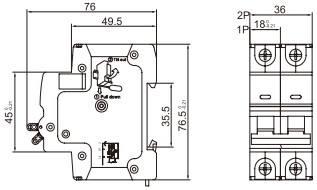
b) Push the stopper on the cicuit breaker upwards, so that the circuit breaker is fixed on the installation rail, and should not be loose and fall;
c) When the main circuit connects the wire, extend the wire in to the wiring hole, and then tighten the wiring screw, so that the wire will not loose and pull out. Bare copper wire can not be exposed outside the terminals;

5. 2 Use and maintenance

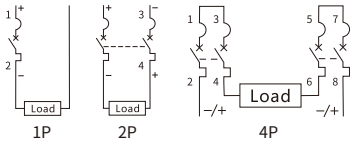
5.2 .1 When the circuit breaker is in operation, it should be checked regularly, and the inspection period depends on the working conditions. Check should cut off the power supply, check fasteners, connecting wires are loose, parts have no damage, and no-load operation several times, the circuit breaker should be flexible, reliable, no hysteresis phenomenon;
5.2.2 After the circuit breaker breaks the overload or short circuit current, the troubleshooting should be done first, and then the closing should be resumed, otherwise the service life of the circuit breaker will be affected;
5.2.3 The circuit breaker shall not be invaded by rain and dropped in the process of use, storage and transportation;

6. Outline and installation dimension



Outline and installation dimension(Unit:mm)

7. Wiring Drawing



Certificate of Conformity

Inspector: INSPECTOR 1

Inspection date: See product or packaging

The product has passed the inspectionand meets the standards, and is allowed to leave the factory.

LMB1-63DC Series Direct Current Miniature Circuit Breaker

User's Manual

Before installing and using the product, please read the user's manual carefully

1. Applicable scope

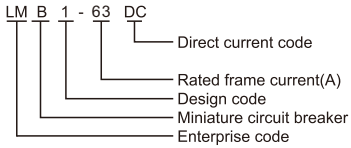
The LMB1-63DC series miniature circuit breaker is suitable for direct current circuit system, rated working voltage of DC400V, and rated current up to 63A of lines. It is used for overload and short circuit protection of lines, and can also be used for infrequent operation and conversion of lines.

This circuit breaker is suitable for commercial office buildings, residential houses and similar buildings.

This product meets the standards of GB/T14048.2 and IEC60947-2, and has international advanced level.

2. Main specifications and technical parameters

2. 1 Model and meaning



2. 2.Main specification

rated current of circuit breaker:
1A、2A、3A、4A、6A、10A、16A、20A、25A、32A、40A、50A、63A ;

2. 3 Technical parameters

2.3.1 The provision form of instantaneous release for circuit breaker is C type, Other types can be customized.
2.3.2 Rated short-circuit breaking capacity of circuit breaker:
LMB1-63DC, Ics=Icu 6kA

2.3.2 Over current protection characteristic of circuit breaker:

NO.	Rated current	Start state	Test current	Specified time	Prospective result
1	In≤63	Cold state	1.13In	t≥0.1h	Non tripping
2	In≤63	Immediately after the previous test	1.45In	t<0.1h	Tripping
3	In≤32	Cold state	2.55In	1s<t<60s	Tripping
	In>32			1s<t<120s	
4	C type	Cold state	5In	t≥0.1s	Non tripping
			10In	t<0.1s	Tripping

2.3.4 Mechanical and electrical life:
Electrical life: 4000 times;
Mechanical life: 20000 times.

3. Product feature

3.1 High rated breaking capacity, up to 7.5kA.
3.2 The circuit breake operating mechanism is a free tripping mechanism with energy storage. The contacts close quickly, overcoming the adverse effects caused by the speed of the manual operating handle and greatly improving the service life of the product: During normal operation, the contacts can only remain in the closed or disconnected position.
3.3 Combined terminal with finger contact protection, high installation performance.

4. Main structure and working principle the product

4. 1 Main structure

The circuit breaker is mainly composed of an insulating shell, an operating mechanism, a delay, an instantaneous release, a contact, an arc extinguishing magnetic steel and an arc extinguishing chamber, etc.

The operating mechanism is a free tripping mechanism. In normal or abnormal operation, the contact can only stay in the closed or disconnected position. The moving contact of the multi-pole circuit breaker si mechanically linked, and each pole is basically closed or disconnected an the same time.

4. 2 Working principle

When the handle is pushed to the ON position, and the handle reaches a certain angle, the contact can be closed instantaneously, eliminating the influence of operation on the contact closing speed. When the line has overloaded fault, the overload current makes the bimetal bend, pushes the latch to release, and the mechanism drives the contact to break quickly to cut off the circuit; when short circuit fault occurs in the circuit, the short circuit current attracts the electromagnet through the coil, and the lever pushes the latch open to release it, achieving the function of cutting off the circuit. The circuit breaker has current limiting function.

When short circuit occurs, the iron core enables the top rod to push the contact and the latch open. The arc resistance enables the short circuit current to decrease, playing a current limiting role. The mechanism acts simultaneously to keep the contact in the disconnected position, and the arc quickly extinguishes through the comprehensive action of the arc extinguishing system.

5. Installation, use and maintenance

5. 1 Installation

5.1 .1 Inspection before installation
a) The circuit breaker components should be undamaged;
b) The data marked on the circuit breaker nameplate should meet the selection requirements;
5.1.2 Installation and wiring
a) The installation position of the circuit breaker (if the handle moves up, it indicates that the circuit is connected, and if the handle moves down, it indicates that the circuit is disconnected) is clipped with the mounting rail.