

MQC-63

MINIATURE CIRCUIT BREAKER



APPLICATION

MQC-63 is applicable to a line of Ac 50/60Hz, 230V in single pole, 400V in double, three, four poles for protecting overload and short circuit, and rated current up to 63A. It can also be used for infrequent line conversion under the normal condition. The breaker is applicable to lighting distribution system in industrial enterprise, commercially district, high-rise building and dwelling house. It conforms with the standards of IEC60898.

MAIN TECHNICAL PARAMETER

TYPE	MQC-63	
Pole	1P	1P, 2P, 3P
Rated Current (A)	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63	
Rated Voltage (V)	230/240	400/415
Ambient Temperature	-5 C ~ +40 C	
Type of Instantaneous Release	B, C, D	
Rated Short Circuit Breaking Capacity Icn (KA)	4 (6)	

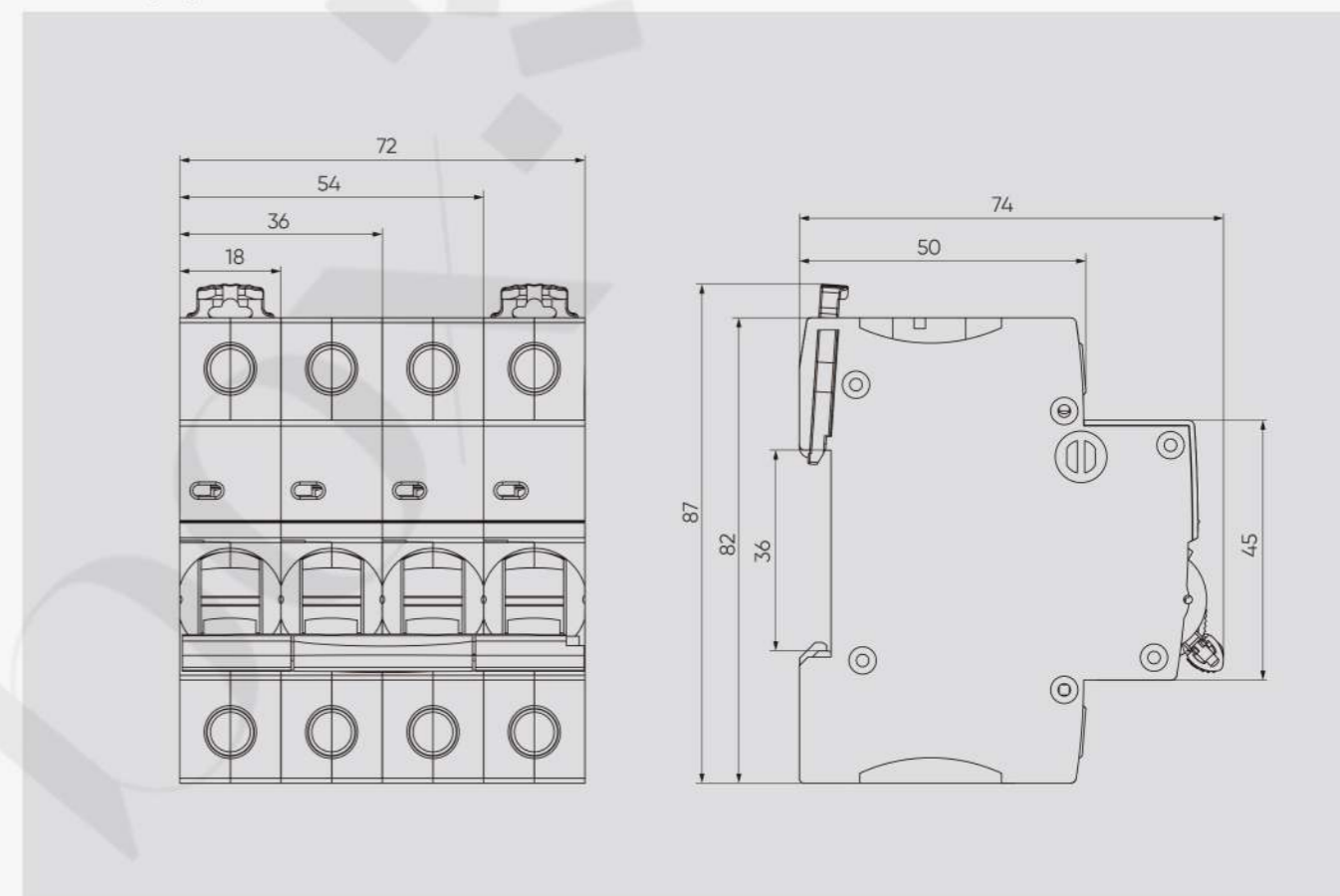
APPLICABLE CONDUCTING WIRE

Rated Current (A)	1-6	10	16, 20	25	32	40, 50	63
Normal Cross Section of Wire (mm ²)	1	1.5	2.5	4	6	10	16

THE OVER-CURRENT PROTECTION PROPERTY

Ambient Temperature	Initial Status	Test Current	Test Time	Expected Result	Note
30±2 C	Cold position	1.13In	t≥1h	Non-release	
	Carried out immediately after previous test	1.45In	t<1h	Release	
	Cold position	2.55In	1s<t<60s (In≤32A)	Release	Current smoothly rises to specified value within 5s
	Cold position	2.55In	1s<t<120s (In>32A)	Release	
-5~+40 C	Cold position	3In	t≥0.1s	Non-release	Type B
	Cold position	5In	t<1s	Release	Type B
	Cold position	5In	t≥0.1s	Non-release	Type C
	Cold position	10In	t<1s	Release	Type C
	Cold position	10In	t≥0.1s	Non-release	Type D
	Cold position	20In	t<1s	Release	Type D

DIMENSIONS(mm)



MQC-63DC

DC MINIATURE CIRCUIT BREAKER



APPLICATION

MQC-63DC DC circuit breaker is used for overload and short-circuit protection in lines with rated dc voltage up to 1200V and rated current up to 63A, as well as for infrequent operation and conversion of lines.

Circuit breakers are suitable for dc system applications such as communication and photovoltaic systems.
Standard: GB/T 14048.2, IEC 60947-2.

PRODUCT FEATURES

- Excellent breaking ability;
- Dual wiring function of conductor and busbar;
- Energy storage operation, fast closure, long life;
- Convenient installation and disassembly;
- Contact on/off indication, higher security;
- 3.6 Green environmental protection and energy saving.

NORMAL OPERATION CONDITIONS

- Ambient temperature: $-35^{\circ}\text{C}\sim+70^{\circ}\text{C}$
- Relative humidity of air: $\leq 95\%$
- Altitude: $\leq 2000\text{m}$



MAIN TECHNICAL PARAMETER

TECHNICAL DATA	
Type	MQC-63DC
Rated Voltage U_e (V)	150V/300V DC(1P), 300V/600V DC(2P), 600V/1200V DC(4P)
Rated current I_n (A)	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63
Rated Insulation Voltage U_i (V)	1200
Rated Impulse Withstand Voltage U_{imp} (kV)	4
Pole	1P, 2P, 3P, 4P
Type of Instantaneous Release	C(7~10) I_n
Rated Short Circuit Breaking Capacity I_{cn} (kA)	6
Mechanical and Electrical Life	Mechanical life 20000 times, electrical life 1500 times
Tightening Torque (N·m)	2.0
Class of Pollution	2 class
Protection Grade	IP20
Installation Category	II, III category

THE OVER-CURRENT PROTECTION PROPERTY (REFERENCE TEMPERATURE 30°C)

PRODUCT NAME					
Test	Test Current	Initial Status	Test Time	Expected Result	Note
a	$1.05I_n$	Cold positior	$t \leq 1\text{h}$	Non-release	
b	$1.30I_n$	Carried out immediately after previous test	$t < 1\text{h}$	Release	Current smoothly rises to spec fied va u_e within 5s
c	$7I_n$	Cold positior	$t \leq 0.2\text{s}$	Non-release	
d	$10I_n$	Cold positior	$t < 0.2\text{s}$	Release	

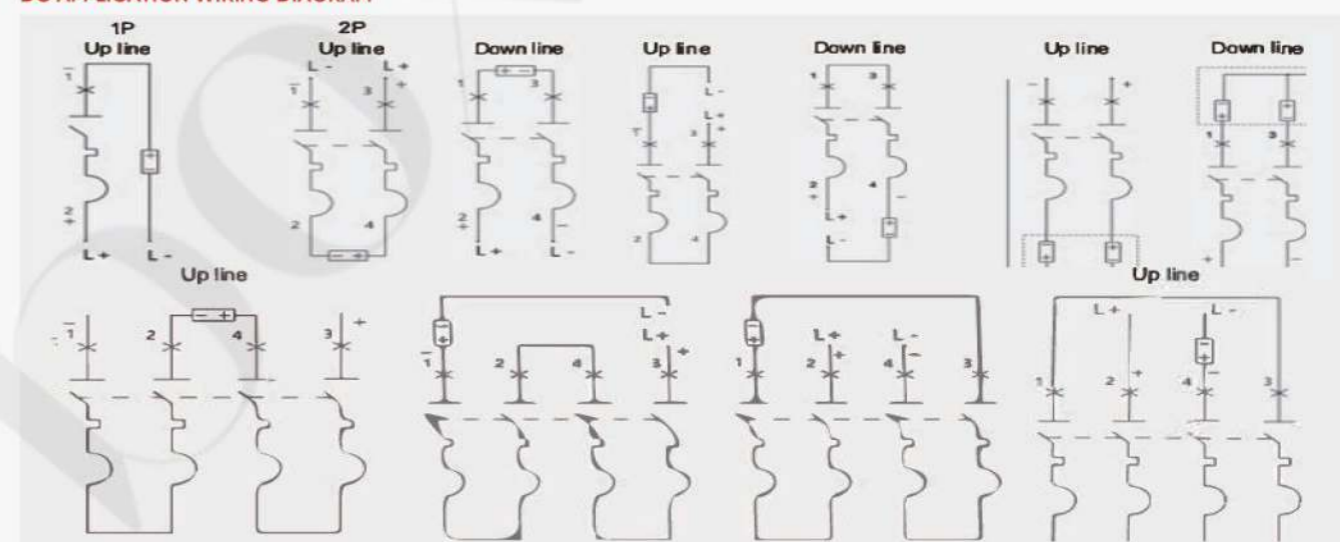
APPLICABLE CONDUCTING WIRE

Rated Current (A)	1-6	10	16, 20	25	32	40, 50	63
Narminal Cross Section of Wire mm^2		1.5	2.5	4	6	10	16

POWER CONSUMPTION PER POLE OF CIRCUIT BREAKER

RATED CURENT IN (A)	MAXIMUM POWER CONSUMPTION PER POLE (W)
1~10	2
13~32	3.5
40~63	5

DC APPLICATION WIRING DIAGRAM



WIRING DIAGRAM DESCRIPT ON:

- L+: positive power supply, L-: negative power supply;
- +: circuit breaker positive pole, -: circuit breaker negative pole;
- $-\square-\square-$: Load;
- DC power supply is usually "L-" grounding, positive and negative power supply system polarity "M" grounding;
- It is strictly forbidden to remove the sealing plug of quadrupole products for wiring operation.

DIMENSIONS(mm)

