



PRODUCT INTRODUCTION

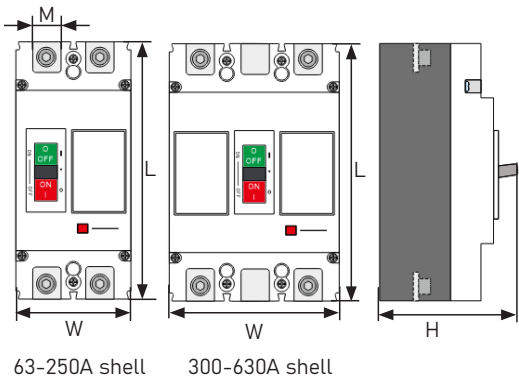
NQCM1Z-H series DC molded case circuit breaker (referred to as mccb) are designed for DC and AC power system applications. Rated for a working voltage of DC600V(36~600V) and a working current up to 1000A. The mccb is non-polarized designed, supports current double directional flow and protect. The mccb have overload and short-circuit protection functions, which can protect lines and power supply equipment from damage. The products are widely used in new energy power (photovoltaics, generators, wind energy, battery etc.), electric vehicles, ships, industrial control, power supplies, telecommunications, rail transport, construction, and other industries.

The mccb compliant with IEC60947-2 standard

PARAMETERS

Product Model	NQCM1Z-125H	NQCM1Z-250H	NQCM1Z-400H	NQCM1Z-630H
Electrical Characteristics				
Pole Number	Non - polar 2P			
Rated Current Ie (A) Support Customization of Other Currents	63, 80, 100, 125	160, 200, 250	300, 350, 400	500, 630
Rated Voltage Ue (V) DC	600(36-600)			
Rated Insulation Voltage Ui (V) DC	1200			
Rated Withstand Impulse Voltage Uimp (kV)	8			
Rated Circuit - breaker Breaking Capacity Icu (kA)	25			
Trip Type	Thermomagnetic Trip			
Trip Curve	8In-12In			
Short-circuit protection trip time	<0.1s			
Pollution Degree	2			
Protection Functions	Overload Protection, Short Circuit Protection			
Isolation Function	Available			
Mechanical Characteristics				
Mechanical Service Life (Times)	8000			
Electrical Service Life (Times)	4500			
Reference Ambient Temperature	30°C			
Operating Ambient Temperature	- 35°C - + 70°C			
Storage Temperature	- 40°C - + 85°C			
Installation Characteristics				
Terminal	Press Plate Type			
Maximum Torque	13N.m			
Installation	Screws Fixed			
Optional Accessory	MX (shunt release), OF (auxiliary contact), SD (alarm contact)			

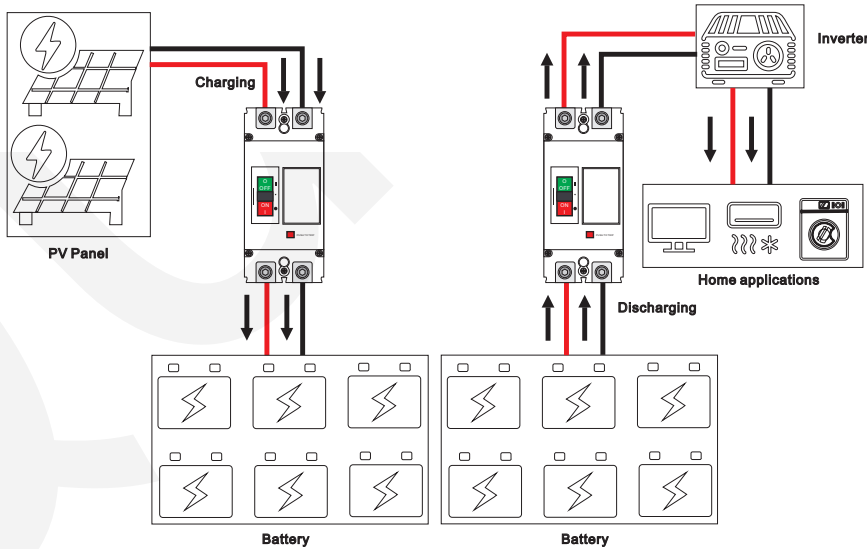
SIZE (UNIT: MM)



Current (A)	63~125A	160~250A	300~400A	500~630A
Size LxWxH (mm)	150x85x65	165x74x104	255x148x149	270x180x149

M:  
63~125A: 17.5mm  
160~250A: 23.5mm  
300~400A: 31mm  
500~630A: 44mm

WIRING METHOD



CONNECTING CABLE

	Current	Recommended Cable (mm²)	Terminal Example	Maximum Wiring Capacity (mm²)
NQCM1Z-125H	63A	16	SC16-8	35
	80A	25	SC25-8	
	100-125A	35	SC35-8	
NQCM1Z-250H	160A	50	SC50-8	70
	200-250A	70	SC70-8	
NQCM1Z-400H	300A	95	SC95-10	120
	350A	120	SC120-10	
	400A	120	SC120-10	
NQCM1Z-630H	500A	150	SC150-12	185
	630A	185	SC185-12	

\*Note: The examples are based solely on hard solid copper wires. For stranded flexible copper wires, as well as copper wires with different requirements for wire diameter and material under various national standards, calculations should be performed based on corresponding conversions. When necessary, copper bars should be used to connect multiple stranded flexible wires.

PRECAUTIONS AND WARNING

- 1, Ensure the circuit breaker is properly rated for the current, voltage, and frequency of the circuit it will control to prevent overloading and damage.
- 2, Always wear appropriate personal protective equipment (PPE) such as insulated gloves, safety glasses, and arc-flash clothing when operating or maintaining the circuit breaker.
- 3, Verify that the circuit is de-energized using a suitable voltage tester before performing any maintenance or inspection on the circuit breaker.
- 4, Avoid rapid or frequent switching of the circuit breaker, as this can cause excessive wear on internal components and reduce its lifespan.
- 5, Follow the manufacturer's operating instructions and lockout/tagout procedures when isolating the circuit breaker to prevent accidental energization and ensure personal safety.