



MCB SERIES

High breaking miniature
circuit breaker

instruction manual



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MCB,MCCB,RCBO,ACB,VCB,AC,SPD
RCCB,ATS,EV, DC, DB,GW

A / SCOPE OF APPLICATION.

MCB high breaking small circuit breaker (hereinafter referred to as circuit breaker) is a kind of current limiting circuit breaker with overload and short-circuit double protection, suitable for AC 50Hz or 60Hz rated voltage 230V/400V, rated current up to 63A in the line, used for overcurrent protection of the line facilities and electrical equipment in the building and similar places, can also be used for infrequent on-off operation.

Working conditions for normal use.

A. Altitude not exceeding 2000m.

B. Surrounding air temperature is not higher than +40 °C and not lower than -5 °C , the average value of 24h does not exceed 35 °C .

C. Relative humidity in the surrounding air temperature of +40 °C not more than 50%: in the lower temperature allows greater relative humidity, the wettest month of the monthly average maximum relative humidity does not exceed 90%, at the same time, the average minimum temperature of the month does not exceed +25 °C , and take into account the temperature change occurs on the surface of the product condensation;.

D. The pollution level of the installation site for the pollution level 2

E. Applicable to the installation category II III place;.

B / CATEGORIZATION

1, according to the number of poles: unipolar, two-pole, three-pole, four-pole.

2 、 According to the type of instantaneous release device: C-type, D-type (C-type for lighting protection, D-type for power protection).

3, current specifications: C-type 1, 3, 6, 10, 16, 20, 25, 32, 40, 50, 63A; D-type 1, 3, 6, 10, 16, 20, 25, 32, 40A.

C / TECHNICAL DATA

1 、 Basic specifications and parameters are shown in Table 1

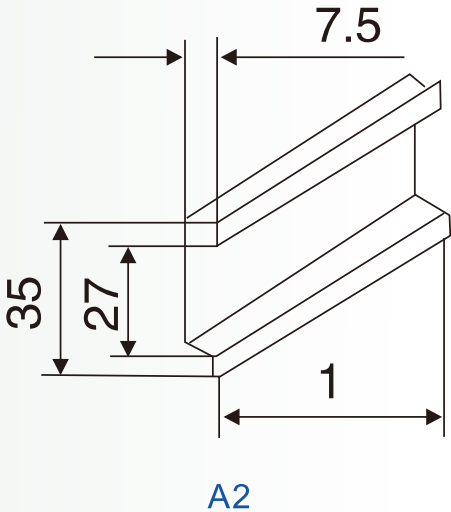
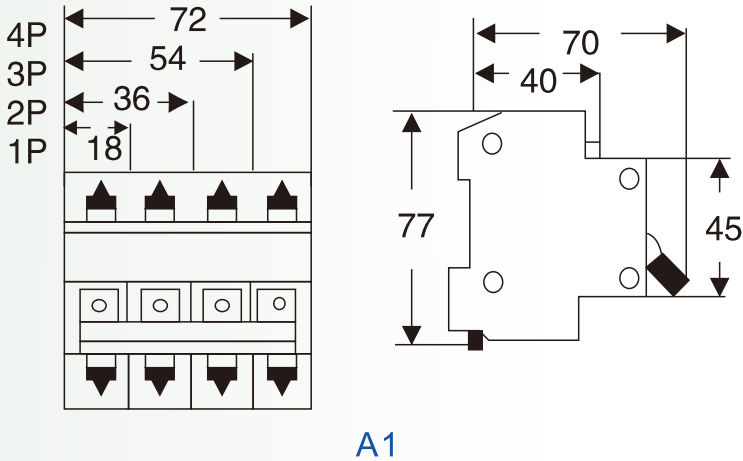
Model	Rated current(A)	Type(Pole)	Rated voltage(V)	Rated short-circuit breaking capacity (A)
MCB	1-40	1	230	6000
		2 、 3 、 4	400	
MCB	50-63	1	230	4500
		2 、 3 、 4	400	
MCB	1-40	1	230	4500
		2 、 3 、 4	400	

2、The overcurrent protection characteristics of circuit breakers are shown in Table 2

Serial number	Model specification	Starting state	Test current	Test time	Expected result	Remarks
1	All values	Cold	1.13In	t>1h	Non-detachable	
2	All values	Hot	1.45In	t<1h	De-buckling	Immediately following 1 test
3	In≤32	Cold	2.55In	1s<t≤60s	De-buckling	
	In>32			1s<t≤120s		
4	Type C	Cold	5In	t>0.1s	Non-detachable	
	Type D		10In			
5	Type C	Cold	10In	t<0.1s	De-buckling	
	Type D		50In			

D / Appearance and installation dimensions

The circuit breaker is installed on a guide rail, and the external dimensions and installation dimensions of the product are shown in A1 and A2.



E / USE AND MAINTENANCE

1、The overload characteristics of this series of circuit breakers are set by the manufacturer, and cannot be adjusted arbitrarily in use, so as not to affect the characteristics.

2、The calibrated temperature of this series of circuit breaker is $30\pm5^{\circ}\text{C}$, if more than one circuit breakers are installed in the same sealed box. The temperature of the inner box rises accordingly, and the use current is $0.8I_n$.

3、When the ambient temperature changes, its rated current value should be corrected accordingly see A3.

A3

correction current (A) rated current (A)	temp	0°C	10°C	20°C	30°C	40°C
		1	1.11	1.06	1	0.9
3		3.54	3.38	3.2	3	2.7
6		6.82	6.55	6.29	6	5.6
10		11.87	11.28	10.68	10	9
16		18.4	17.64	16.45	16	17.2
20		23.25	22.18	21.16	20	18.4
25		19.08	27.73	26.45	25	23.1
32		37.76	36	34.14	32	29.2
40		47.47	45.12	42.7	40	36
50		57.09	55	52.6	50	47.3
63		71.00	68.4	65.7	63	60.1