

YCB6 Series



- Reliable performance for more safety
- Convenient to use

CNC
ELECTRIC

YCB6 Series MCB

Overview



High flame retardant, high temperature resistance and impact resistance

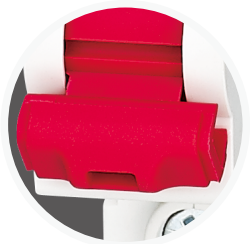


Magnetic blowing arc extinguishing device

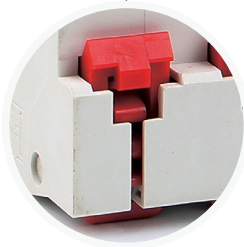


Contact indication window, easy to see ON/OFF status

Wind groove design beside for rapid heat dissipation

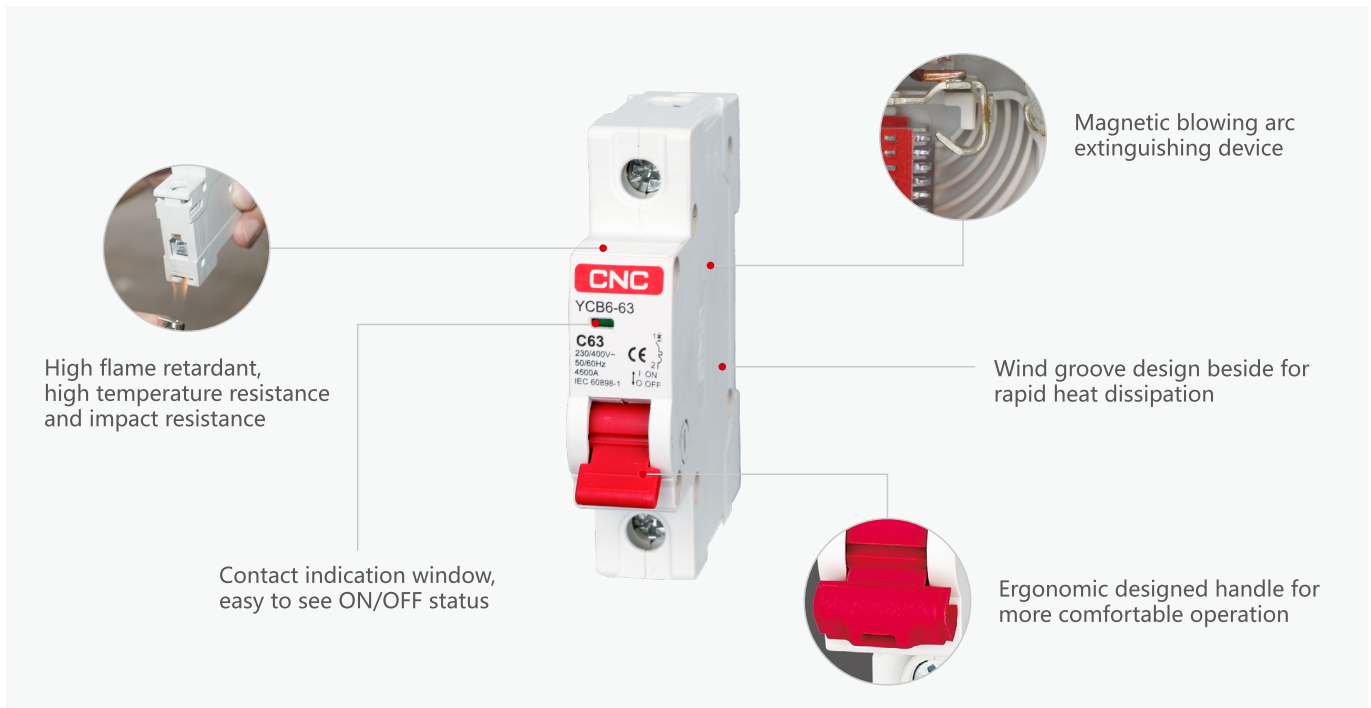


Ergonomic designed handle for more comfortable operation



Easy installation and closely clip

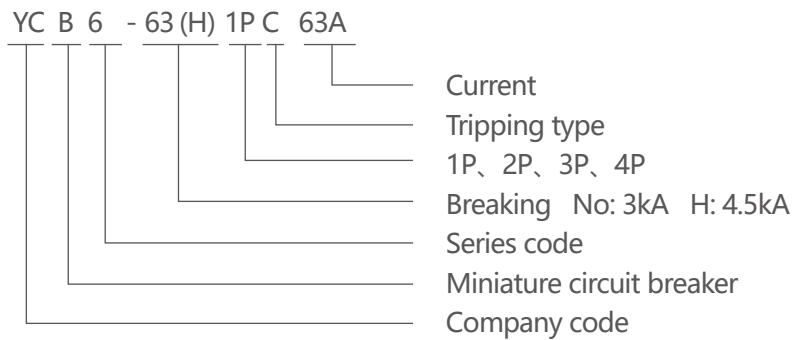
Modular DIN Rail
YCB6-63 MCB



General

YCB6-63 miniature circuit breaker(circuit breaker) is applicable to the circuit with AC50Hz/60Hz, rated voltage of no more than 400V, rated current up to 63 A for overload protection and short circuit protection. This product can be applied to various places such as industrial, commercial, tall buildings, and residential houses.
 Standard: IEC60898-1

Type designation



Modular DIN Rail

YCB6-63 MCB

Technical data

A

Type	Standard		IEC/EN 60898-1
Electrical features	Rated current In	A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
	Poles	P	1, 2, 3, 4
	Rated voltage Ue	V	230/400
	Insulation voltage Ui	V	500
	Rated frequency	Hz	50/60
	Rated breaking capacity	A	3000,4500
	Rated impulse withstand voltage(1.2/50)Uimp	V	4000
	Dielectric test voltage at ind. Freq. for 1min	kV	2
	Pollution degree		2
	Thermo-magnetic release characteristic		B, C, D
Mechanical features	Electrical life	t	6000
	Mechanical life	t	20000
	Protection degree		IP20
	Reference temperature for setting of thermal element	°C	30
	Ambient temperature (with daily average ≤35°C)	°C	-5~+40
Storage temperature	°C	-25~+70	
Installation	Terminal connection type		Cable/Pin-type busbar
	Terminal size top / bottom for cable	mm ²	25
		AWG	18-3
	Terminal size top / bottom for busbar	mm ²	25
		AWG	18-3
	Tightening torque	N*m	2
		ln-lbs	18
	Mounting		On DIN rail EN 60715(35mm)by means of fast clip device
Connection		From top or bottom	

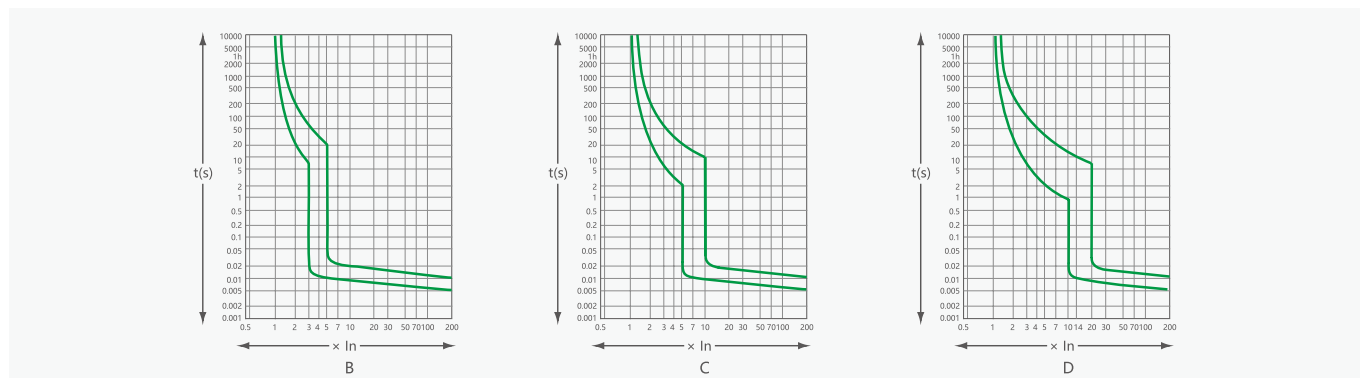
Selection

Type	Test current	Tripping time	Expected result	Type	Test current	Tripping time	Expected result
B,C,D	1.13In	t ≤ 1h(In ≤ 63A)	Not tripping	B	3In	t ≤ 0.1s	Not tripping
	1.13In	t ≤ 2h(In > 63A)		C	5In	t ≤ 0.1s	
B,C,D	1.45In	t < 1h(In ≤ 63A)	Tripping	D	10In	t ≤ 0.1s	
	1.45In	t < 2h(In > 63A)		B	5In	t < 0.1s	Tripping
B,C,D	2.55In	1s < t < 60s(In ≤ 32A)	Tripping	C	10In	t < 0.1s	
	2.55In	1s < t < 120s(In > 32A)		D	20In	t < 0.1s	

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Curve



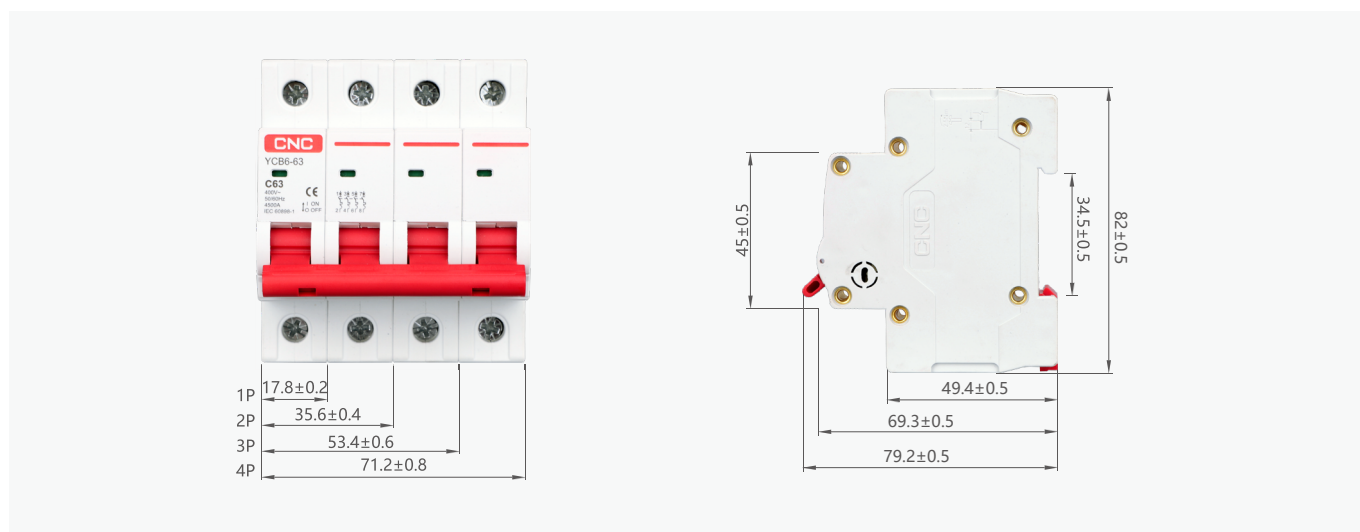
Temperature drop correction table

The maximum allowable current of the circuit breaker is related to the ambient temperature of the circuit breaker. The ambient temperature refers to the temperature in the distribution box or switch cabinet where the circuit breaker is installed. The reference temperature of various circuit breakers can be found in the values of the colored rows in the table.

Product standard: GB/T10963.1 IEC60898-1 (household standard)

temperature (°C)	-5	0	5	10	15	20	25	30	35	40	45
Rated current											
1A	1.16	1.14	1.11	1.09	1.07	1.05	1.02	1.00	0.98	0.95	0.92
2A	2.30	2.26	2.22	2.18	2.13	2.08	2.04	2.00	1.96	1.92	1.88
4A	4.72	4.63	4.53	4.43	4.32	4.22	4.11	4.00	3.89	3.77	3.65
6A	6.97	6.84	6.71	6.57	6.43	6.29	6.15	6.00	5.85	5.69	5.53
10A	12.25	11.95	11.65	11.34	11.02	10.69	10.35	10.00	9.64	9.26	8.86
16A	18.72	18.35	17.98	17.60	17.22	16.82	16.42	16.00	15.57	15.13	14.68
20A	23.24	22.80	22.36	21.91	21.45	20.98	20.49	20.00	19.49	18.97	18.44
25A	29.12	28.57	28.01	27.43	26.85	26.24	25.63	25.00	24.35	23.69	23.01
32A	37.18	36.49	35.78	35.05	34.32	33.56	32.79	32.00	31.19	30.36	29.50
40A	46.66	45.77	44.86	43.93	42.98	42.01	41.02	40.00	38.96	37.88	36.78
50A	58.57	57.43	56.26	55.06	53.84	52.59	51.31	50.00	48.65	47.27	45.84
63A	74.73	73.17	71.57	69.94	68.27	66.56	64.81	63.00	61.14	59.22	57.24

Overall and mounting dimensions(mm)



Modular DIN Rail

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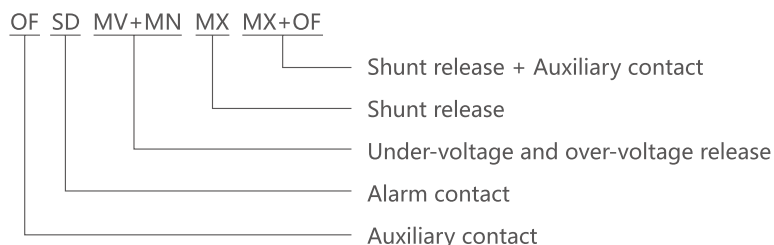


General

This series circuit breaker accessories are used in household, building and other electrical circuits with YCB6-63 circuit breaker cooperated for remote control and diferent accessories selected for different needs, featured with auxiliary signal, opening and closing status indication, and even alarm signal function for better protection on the circuit, personal and property safety.

Standard: IEC60947-5-1

Type designation

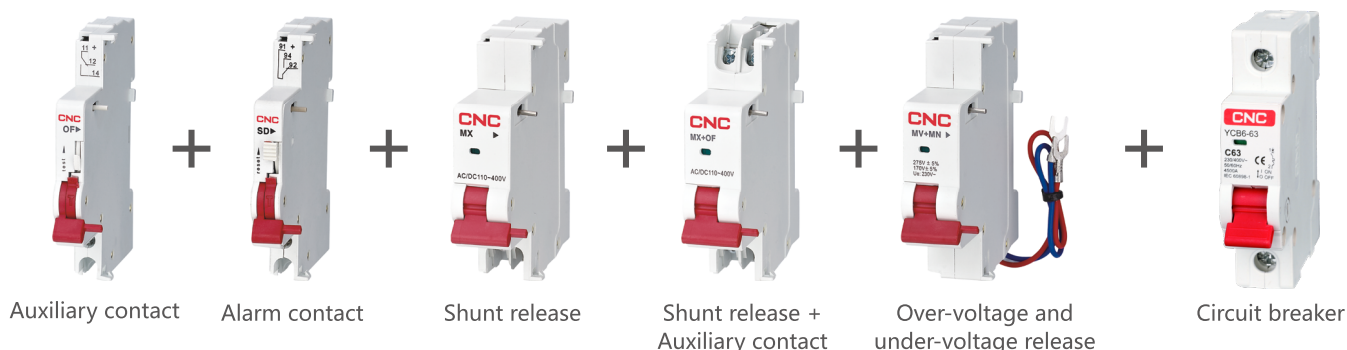


Function

Accessory name	Code	Function
Auxiliary contact	OF	Provide auxiliary signal and control auxiliary circuit
Alarm contact	SD	When the circuit breaker is due to a fault, the alarm signal would work and indicate.
Shunt release	MX	Over the range of 70% ~ 110% of the rated control supply voltage, the release should trip the circuit breaker to protect the circuit.
Shunt release + Auxiliary contact	MX+OF	Remote control of circuit and control the auxiliary circuit by auxiliary contact.
Over-voltage and under-voltage release	MV+MN	When the rated voltage 230V increase to 270V+/-5% or reduce to 170V+/-5%, the circuit breaker should trip for over-voltage and under-voltage protection.

Installation

All the electrical accessories should be installed at the side of the circuit breaker , details are shown in the figure below. (Remark: each MCB can be installed with 3 (MAX.)indicating accessories.)



Operating Conditions

- Ambient temperature: -5°C~+40°C;
- Altitude: Below 2000m;
- Environment: The medium should be no risk of blasting and can't corrode the metal and damage insulating gas as well as conductive dust;
- Installation: 35mm standard din rail.

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Technical data

Auxiliary contact and Alarm contact technical parameters

Accessory name	Rated current(A)			Number of contacts	Diagram
	AC 380V	AC 220V	AC 110V		
Auxiliary contact OF	3	6	1	1NO 1NC	
Alarm contact SD	3	6	1	1NO 1NC	



Shunt release, Shunt release + Auxiliary contact technical parameters

Accessory name	Rated insulation voltage U_i	Rated control voltage U_s	Tripping power consumption (W or VA)	Operation voltage U_s	Diagram
Shunt release MX	415V	AC/DC: 220~380V 110~220V	240	0.7~1.1	
		AC/DC: 24~48V	120		
Shunt release + Auxiliary contact MX+OF	415V	AC/DC: 220~380V 110~220V	240	0.7~1.1	
		AC/DC: 24~48V	120		

Under-voltage & Over-voltage Release technical parameters

Accessory name	Rated working voltage U_e	Trip voltage	Diagram
Over-voltage and under-voltage release MV+MN	AC230V	Under-voltage: 170V±5% Over-voltage: 270V±5%	 2 phase 3 phase 3 phase 4 wire
	AC380V	Under-voltage: 300V±5% Over-voltage: 460V±5%	