

YCM7 series


Moulded Case Circuit Breaker

OPERATION INSTRUCTION

Standard: IEC 60947-2

CNC

Deliver
Power For Better Life

-  Before installing and using this product, please read this manual carefully and pay more attention to safety.

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Instructions

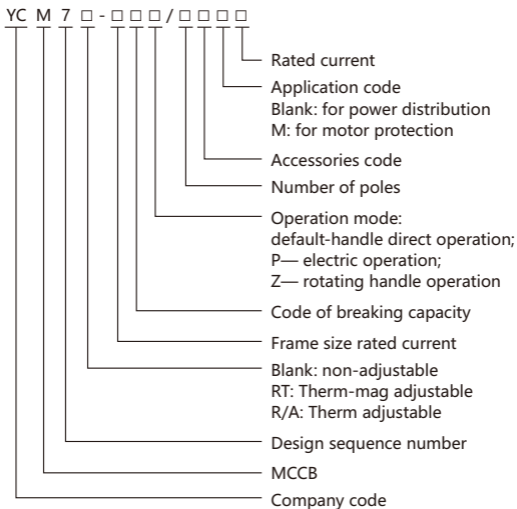
Operating conditions

1. Ambient temperature
 - a) Maximum not higher than +40°C
 - b) Minimum not lower than -5°C
 - c) The average value within 24h does not exceed +35°C
2. Altitude: $\leq 2000\text{m}$;
3. Air conditions

At mounting site, relative humidity not exceed 50% at the maximum temperature of +40°C. For the wettest month, the maximum relative humidity averaged shall be 90% while the lowest temperature averaged in that month is +20°C, special measures should be taken to occurrence of condensation.
4. Pollution grade: 3, the pollution grade of accessories installed in the circuit breaker is 2.
5. The installation category of main circuit breaker shall be III, and the installation category of auxiliary circuit and control circuit shall be II.
6. Installation conditions

Mounting conditions: inclination between mounting plane and vertical plane not exceed $\pm 5^\circ$. It adopts up inline, and the external magnetic field of the installation site should not exceed 5 times of the geomagnetic field in any direction.

Type designation



Main parameters of circuit breaker

Table 1 Main parameter of YCM7RT, YCM7T/A

Model	Rated current In (A)	Overload long time-delay tripping current adjustable range Ir(A)	Short circuit instantaneous tripping current adjustable range Ii(A)	Rated insulation voltage Ui(V)	Rated operation voltage Ue(V)	Rated ultimate short-circuit breaking capacity Icu(kA) 400V Icu(kA) 400V	Rated service short-circuit breaking capacity Ics(kA) 400V	Number of poles
YCM7RT-160S	63A, 80A, 100A 125A, 160A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	25	18	3, 4
YCM7T/A-160S								
YCM7RT-250S	125A, 160A 200A, 250A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	25	18	3, 4
YCM7T/A-250S								
YCM7RT-400S	250A, 320A 400A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	35	25	3, 4
YCM7T/A-400S								
YCM7RT/-400M	250A, 320A 400A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	50	35	3, 4
YCM7T/A-400M								
YCM7RT/-630M	500A, 630A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	50	35	3, 4
YCM7T/A-630M								
YCM7RT/-800M	630A, 800A	0.8~1In (0.7-1In)	(6~10)In, (8~10)In -	690	400	50	35	3, 4
YCM7T/A-800M								

Table 2 Main parameter of YCM7

Model	Rated current In (A)	Rated insulation voltage Ui (V)	Rated operation voltage Ue (V)	Rated ultimate short-circuit breaking capacity Icu(KA) 400V	Rated service short-circuit breaking capacity Ics(kA) 400V	Number of poles
YCM7-125S	63A, 80A, 100A, 125A	800	400/690	15	8	3, 4
YCM7-160S	63A, 80A, 100A, 125A, 140A, 160A			35	25	
YCM7-250S	100A, 125A, 140A, 160A, 180A, 200A, 225A, 250A			35	25	
YCM7-400S	250A, 315A, 350A, 400A			35	25	
YCM7-400M	250A, 315A, 350A, 400A			50	35	
YCM7-630M	630A			50	35	
YCM7-800M	800A			50	35	

Table 3 Accessories

Accessory name	Accessory code	Release Mode
Auxiliary contact	200	208
Shunt release	400	308
Alarm contact		
Auxiliary contact		
Under-voltage release		
Auxiliary contact+ Shunt release		
Under-voltage release+ Shunt release		
Two groups of auxiliary contacts		
Under-voltage release+ Auxiliary contact		
Alarm contact+ Shunt release		
Alarm contact+ Auxiliary contact		
Alarm contact+ Under-voltage release		
Auxiliary contact+ Alarm contact+Shunt release		
Alarm contact+Shunt release+ Under-voltage release		
Alarm contact+Two groups of auxiliary contacts		
Auxiliary contact+Alarm contact+ Under-voltage release		

Wiring Requirements

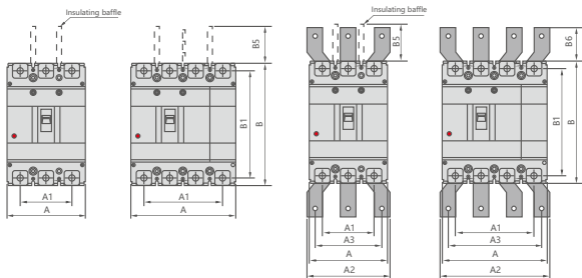
The cross-sectional area of copper conductor corresponding to rated current

Rated current $I_n(A)$	16 20	25	32	40 50	63	80	100	125 140	160	180 200 225	250	315 350	400
Cross-sectional area of conductors(mm^2)	2.5	4	6	10	16	25	35	50	70	95	120	185	240

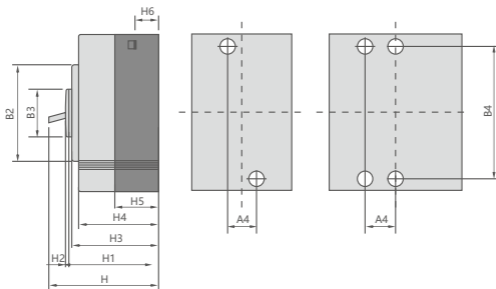
Rated current (A)	Cable		Copper bars	
	Quantity	Cross-sectional area(mm^2)	Quantity	Size($mm \times mm$)
500	2	150	2	30×5
630	2	185	2	40×5
700, 800	2	240	2	50×5

When adjusting the rated current, first check whether the cross-sectional size of the connecting wire corresponds to the rated current. It is recommended to use the connecting wire corresponding to the maximum rated current of the circuit breaker shell.

Front Connection & Overall



Outline Overall and Installing Dimensions



Electronic adjustable circuit breaker	Overall dimensions											
	A		A1		A2		A3		B	B1	B2	B3
	3P	4P	3P	4P	3P	4P	3P	3P				
YCM7-125S	75	100	50	75	-	-	-	-	130	114	85	50
YCM7-160S	90	120	60	90	-	-	-	-	155	134	103	50
YCM7-250S	105	140	70	105	-	-	-	-	165	144	103	50
YCM7-400S	140	185	88	132	140	196	112	168	257	230	179	90
YCM7-400M	140	185	88	132	140	196	112	168	257	230	179	90
YCM7-630M	140	185	88	132	140	196	112	168	257	230	179	90
YCM7-800M	210	280	140	210	180	250	140	210	275	243	192	90

Electronic adjustable circuit breaker	Overall dimensions										Installing dimensions		Bolt
	B5	B6	H	H1	H2	H3	H4	H5	H6	A4	B4		
YCM7-125S	50	-	92	72	4	68	61	41	24	25	111	M8/M6	
YCM7-160S	50	-	94	72	4	68	61	41	24	30	132	M8	
YCM7-250S	100	-	96	72	4	68	61	46	24	35	126	M8	
YCM7-400S	110	43	155	107	5	105	97	64	36	44	194	M10	
YCM7-400M	110	43	155	107	5	105	97	64	36	44	194	M10	
YCM7-630M	110	42	155	107	5	105	97	64	36	44	194	M10	
YCM7-800M	110	87	155	107	5	104	97	65	24	70	242.5	M12	

Note: The corresponding model size of YCM7RT and YCM7T/A is the same as that of YCM7

Ordering instruction

1. Name and model of circuit breaker
2. Rated current and setting multiples of circuit breakers
3. Accessories Name and Rated Voltage



CERTIFICATE

Product Model: YCM7 series

Standard: IEC 60947-2

Inspector : **CNC 001**

Production date: Printed on the product
or package.

This product is qualified according
to the delivery inspection

CNC

YCM7 Series

CNC ELECTRIC

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