

Distribution Apparatus

Molded Case Circuit Breaker



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YCM1
Moulded Case
Circuit Breaker



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YCM1LE
Earth Leakage
Circuit Breaker



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YCM3
Moulded Case
Circuit Breaker



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YCM7
Moulded Case
Circuit Breaker



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YCM7RE
Electronic Adjustable
Circuit Breaker



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YCM7T/A, RT
Thermal Magnetic Adjustable
Circuit Breaker

Air Circuit Breaker



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YCW1
Air Circuit Breakers



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YCW3
Air Circuit Breaker

Motor Starter



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YCM1
Moulded Case
Circuit Breaker

Automatic Transfer Switch



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YCQ6B
Automatic Transfer Switch



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YCQ9M
Automatic Transfer Switch

Changeover Switch



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YCHGL-63~3150A
Load-isolation Switch



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YCQ2
Dual-power Automatic
Transfer Switch



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YCS1
Dual-power Automatic
Transfer Switch



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YCHGLZ1-125~3150A
Transfer Load-isolation Switch

CNC
ELECTRIC

YCM1 Series
Distribution Apparatus



- More competitive price
- Reliable performance for more safety
- Reliable tripping of unipolar overload protection



- Multi-function choices: fixed type, thermal magnetic 1 adjustable type and 2 adjustable type, electronic adjustable type.
- Design for small size
- Modular accessories for easy and convenient installation

General

YCM7, YCM7RT, YCM7T/A, YCM7RE series circuit breaker is a new generation of breaker.

This breaker is applied for the distribution network of AC 50Hz, rated insulation voltage 800V, rated working current up to 800A, which is for electric energy distribution, circuit protection, protection power supply facility from destroying by the fault of overloading, short circuit and undervoltage, meanwhile it is also used for protection from unfrequent starting, over loading, short circuit and undervoltage of the motor.

This breaker has such characteristics as high short circuit interrupting capacity, short arcing and etc., which is a ideal product for users. This breaker can be installed vertically, and also horizontally

This breaker comply with standard IEC60947-2.



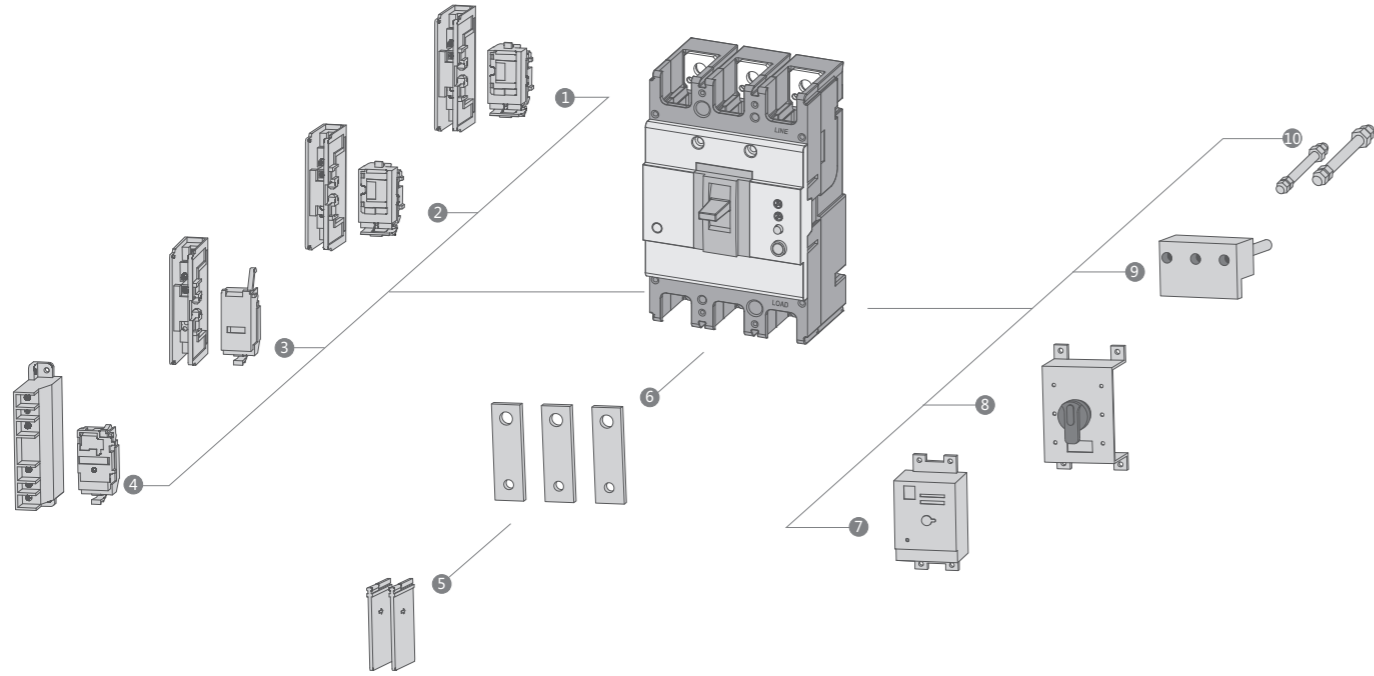
Product Features

1. Miniaturization design
Product volume miniaturization can meet the customer's personality needs of the product installation size.
2. Size uniform
The same shell level, different breaking capacity (S, M), different functions (air, leakage) product installation size is completely consistent.
3. The function of the reasonable parameter setting
Circuit breaker can realize long-time delay overload inverse time, short circuit instantaneous action protection functions such as parameter setting, users can set their own protective properties required, the distribution network is used in the circuit breaker on the lower level with more reasonable.

Suitable Working Environment and Mstallation Condition

1. Altitude less than 2000m
2. Ambient medium temperature is from -5°C to +40°C (+45°C for shipping product)
3. Humidity resistance
4. Bacteria resistance
5. Nuelear radiation resistance
6. Max lean degree is 22.5 degree.
7. Can operate normally when it comes to vibrataion of ship.
8. Can operate normally when it comes to earthquake(4g).
9. The medium should be no risk of blasting and can't erode the metal and damage insulating gas as well as conductive dust.
10. Work in the places where is no rain and snow.

Circuit Breaker Component



- 1. Auxiliary contact
- 2. Alarm contact
- 3. Shunt release
- 4. Undervoltage release
- 5. Interphase barrier
- 6. Front connection plate
- 7. Motor driven operation mechanism
- 8. Extended manual operation handle
- 9. Plug in rear connection
- 10. Rear connection plate

Selection Guide

YCM7 - 125 M P / 4 300 - 125A 2 A Q1 D1 Q 2

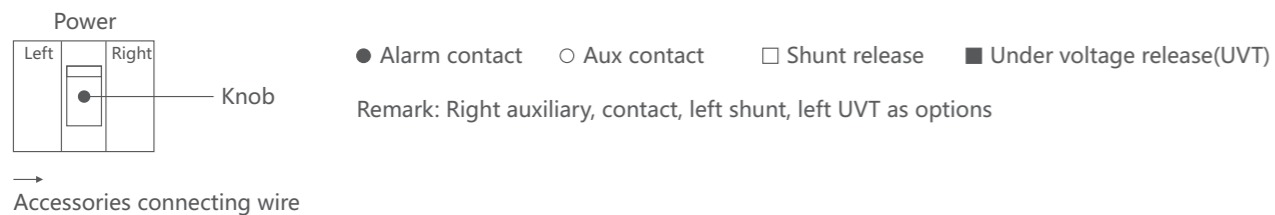
Type	Frame Inm	Breaking capacity ICU/ICS(kA)		Operation	Poles
YCM7	125	M		P	4
MCCB	125, 160, 250, 630, 800	S	M	P: Motor-driven Z: Rotary handle W: Direct	3: 3P 4: 4P
	Remark: 125 Frame upgrade from 63 160 Frame upgrade from 125 250 Frame upgrade from 225 630 Frame upgrade from 400	125 160 250 400 630 800	15/8 25/18 25/18 35/25 50/35 50/35 50/35		

Tripping mode and inner accessory	Rated current(A)	Application	Option for 4P MCCB
300	125A	2	A
First figure means tripping unit way 2: Only with magnetic release 3: Thermal release+,magnetic release body	125 63, 80, 100, 125 160 63, 80, 100, 125, 140, 160 250 100, 125, 140, 160, 180, 200, 225, 250 400 250, 315, 350, 400 630 500, 630 800 500, 630, 700, 800	1. Power distribution 2. Motor-protection	A: N pole without protection, N pole is always ON B: N pole without protection, N pole makes with the other three poles
Remark: The last two figures means accessory code (see accessories list)			

Accessory voltage			Motor-driven operation voltage	Connection	Connection plate
Q1			D1	Q	2
UVT	Shunt	Auxiliary	DC1	DC3	Q: Front H: Rear C: Plug-in
Q1: AC220V	F1: AC220V	J1: AC125V	D1: AC220V	D5: AC220V	1: W/O 2: W
Q2: AC240V	F2: AC380V	J2: AC250V	D2: AC230V	D6: AC110V	
Q3: AC380V	F3: DC110V	J3: DC125	D3: AC380V	D7: DC220V	
Q4: AC415V	F4: DC24V	J4: DC24V	D4: AC400V	D8: DC110V	
				D9: AC110~240V	
				D10: DC100~220V	

Inner Accessories

Model	YCM7-125	YCM7-160	YCM7-250	YCM7-400/630	YCM7-800
Breaking capacity	S	S	S	S, M	M
No. of poles	3,4	3,4	3,4	3,4	3,4
Code	Accessory name				
208, 308	Alarm contact				
210, 310	Shunt release				
220, 320	Auxiliary contact				
230, 330	Under-voltage release				
240, 340	Shunt auxiliary contact				
260, 360	Two groups auxiliary contacts				
270, 370	Auxiliary contact UVT				
218, 318	Shunt alarm contact				
228, 328	Auxiliary alarm contact				
238, 338	UVT alarm contact				
248, 348	Shunt auxiliary alarm contact				
268, 368	Two groups aux alarm contact				
278, 378	Aux contact UVT alarm contact				
280, 380	Two groups aux contact and shunt				



Technical Data

Type	YCM7-125S	YCM7-160S	YCM7-250S
Frame(A)	125	160	250
Number of poles	3,4	3,4	3,4
Products			
Rated current(A)	63, 80, 100, 125	63, 80, 100, 125, 140, 160	100, 125, 140, 160, 180, 200, 225, 250
Rated voltage Ue(V)	AC400V/AC690V	AC400V/AC690V	AC400V/AC690V
Rated insulation voltage Ui(V)	AC800V	AC800V	AC800V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V 15/8	35/25	35/25
Operation life (cycle)	ON	1000	1000
	OFF	7000	7000
Motor-driven operation	●	●	●
External rotary handle	●	●	●
Automatic tripping device	Thermo-magnetic	Thermo-magnetic	Thermo-magnetic

Type	YCM7-400S/M	YCM7-630M	YCM7-800M
Frame(A)	400	630	800
Number of poles	3,4	3,4	3,4
Products			
Rate current(A)	250, 315, 350, 400	500, 630	500, 630, 700, 800
Rated voltage Ue(V)	AC400V/AC690V	AC400V/AC690V	AC400V/AC690V
Rated insulation voltage Ui(V)	AC800V	AC800V	AC800V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V 35/25 50/35	50/35	50/35
Operation life (cycle)	ON	1000	1000
	OFF	4000	4000
Motor-driven operation	●	●	●
External rotary handle	●	●	●
Automatic tripping device	Thermo-magnetic	Thermo-magnetic	Thermo-magnetic

● Means accessory as option

Characteristic Feature

1. Inverse time breaking action property of the over current release of the breaker (for power distribution) at the status that all poles and electrified simultaneously under abrent temp 40°C.

Test current	Current time	Conventional time		Initial status
		$I_n \leq 63$	$63 < I_n$	
Conventional non-trip current	1.05	$\geq 1h$	$\geq 2h$	Cold status
Conventional trip current	1.30	$< 1h$	$< 2h$	Hot status

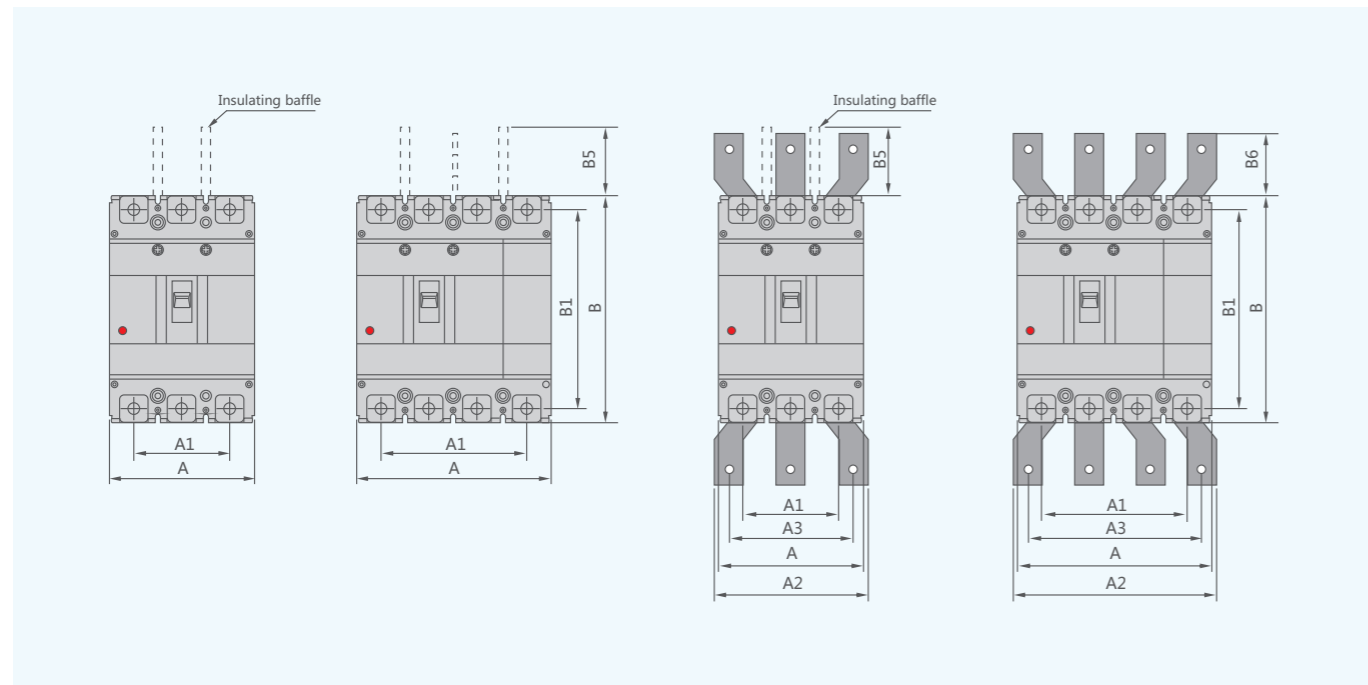
2. When ambient temperature is $\pm 40^\circ C$ for electromotor protection breaker, power on for every pole, inverse time limit characteristic of no temperature compensation is in the following sheet.

Test current	Current time	Conventional time	Initial status
		$I_n \leq 800$	
Conventional non-trip current	1.0	$\geq 2h$	Cold status
Conventional trip current	1.2	$< 2h$	Hot status

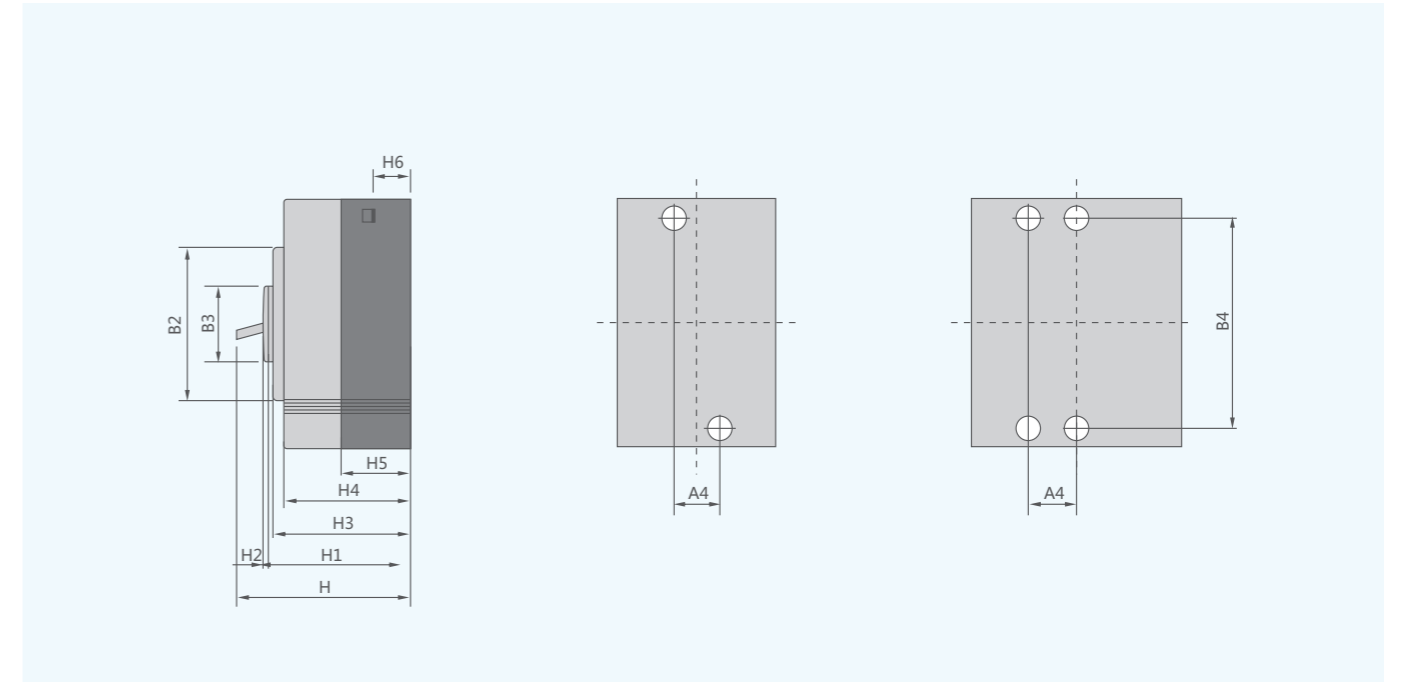
3. Action property of the short-circuit release of the breaker

- ♦ Instant trip (for power distribution) $I = 10I_n$
- ♦ Instant trip (for motor protection) $I = 12I_n$
- ♦ Current setting accuracy $\pm 20\%$

Front Connection & Overall



Outline Overall and Installing Dimensions



Moulded case Circuit breaker	Overall dimensions																		Installing dimensions		Bolt			
	A		A1		A2		A3		B	B1	B2	B3	B5	B6	H	H1	H2	H3	H4	H5		H6	A4	B4
	3P	4P	3P	4P	3P	4P	3P	3P																
YCM7-125S	75	100	50	75	-	-	-	-	130	114	85	50	50	-	92	72	4	68	61	41	24	25	111	M8/M6
YCM7-160S	90	120	60	90	-	-	-	-	155	134	103	50	50	-	94	72	4	68	61	41	24	30	132	M8
YCM7-250S	105	140	70	105	-	-	-	-	165	144	103	50	100	-	96	72	4	68	61	46	24	35	126	M8
YCM7-400S	140	185	88	132	140	196	112	168	257	230	179	90	110	43	155	107	5	105	97	64	36	44	194	M10
YCM7-400M	140	185	88	132	140	196	112	168	257	230	179	90	110	43	155	107	5	105	97	64	36	44	194	M10
YCM7-630M	140	185	88	132	140	196	112	168	257	230	179	90	110	42	155	107	5	105	97	64	36	44	194	M10
YCM7-800M	210	280	140	210	180	250	140	210	275	243	192	90	110	87	155	107	5	104	97	65	24	70	242.5	M12