YCM1 Moulded Case Circuit Breaker

General

YCM1 series moulded case circuit breaker(herein after called circuit breaker)is one of our new type circuit breakers, which adopts international advanced design and manufactural technology, it can be divided into L-type (standard type), M-type (higher breaking type), H-type (current limiting type) according to the rated ultimate short circuit breaking capacity (Icu). With the features of small and compact, high breaking capacity, short arcing-over distance, anti-vibration, the circuit breaker is used popularly on land and marine products, they are applied for the power distribution network of AC 50Hz,rated insulation voltage 800V (YCM1-63 to 500V), rated working voltage 690V(YCM1-63 to 400V) and below, rated current up to 1600A, it can be used to distribute electric power and protect power equipment against overload, short circuit, undervoltage etc, It also takes protective effect when motors infrequently start and protecting against overload, short circuit and lacking voltage. In the series, frame ranging from 63-630A three-pole product also comes with a transparent cover, it is convenient for customer to observe the product operation.

The circuit breaker can be installed vertically, or horizontally. This product complies with standard of IEC60947-2, specification of 6A only has electromagnetic (instantaneous) type; with () is not recommended 225L type with cage terminal can be elevated.

Type designation

YC M 1 - □ □ □ / □ □ □ □

- N pole for 4P circuit breaker(note 3)
- Application(note 1)
  1. for power distribution; 2. for motor protection
- Release method and accessories code(note 2)
- Number of poles
- Operation mode(note 2):
- Code of breaking capacity:
  L-standard type;
  M-higher type;
- Frame size
- Design sequence number
- MCCB
- Company code

Note:

1. Blank for power distribution,2 for motor protection
2. Blank for direct operation with handle, Z for operation with rotary handle, P for motor-driven operation.
3. There are 4 types of N-pole for 4P breaker:
   A:Without current release components, N-Pole is always at making status(not breakers);
   B:Without current release components, N-Pole makes with the other three poles;
   C:With current release components, N-Pole makes with the other three poles;
   D:With current release components, N-Pole is always at making status(not breakers);

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Function and features

1. Temperature: -5℃~+40℃; the average value within 24h shall not exceed +35℃. For the circuit breaker with thermo-magnetic release, +40℃ is set to be the standard temperature for ratings. For temperature not between -5℃~+40℃, please contact us for temperature compensation correction;
2. Altitude: not exceed 2000m (Please contact with us for reduction coefficient if altitude at the mounted site exceed 2000m)
3. Pollution grade: Grade 3;
4. Air conditions:
   At mounting site, relative humidity not exceed 50% at the max temperature of +40℃, higher relative humidity is allowable under lower temperature. For example, RH could be 90% at +20℃, special measures should be taken to occurrence of dews.

Specifications

Type			YCM1-63		YCM1-125		YCM1-250		YCM1-400		YCM1-630		YCM1-800	
Poles	P		3	3, 4	2, 3, 4		2, 3, 4		3	4	3	4	3, 4	3
Rated current In	A		10, 16, 20, 25 32, 40, 50, 63		10, 16, 20, 25 32, 40, 50, 63 80, 100, 125		100, 125, 140 160, 180, 200 225, 250		225, 250, 315 350, 400		400, 500, 630		630, 700, 800	
Rated insulation voltage Ui	V		500		800									
Rated impulse withstand voltage Uimp	V		6000		8000									
Rated operation voltage Ue	V		AC400		AC400/690									
Breaking capacity class			L	M	L	M	L	M	L	M	L	M	M	H
Limit short-circuit breaking capacity Icu	kA	400V	35	50	35	50	35	50	50	65	50	65	75	100
		690V			8	10	8	10	10	20	10	20	30	30
Working short-circuit breaking capacity Ics	kA	400V	22	25	22	25	22	25	35	32.5	35	42	50	50
		690V			4	5	4	5	5	10	5	10	15	15
Arcing distance	mm		50						100					
Operation times	t		120		120		120		60		60		20	
			1500		1500		1000		1000		1000		500	
			8500		8500		7000		4000		4000		2500	

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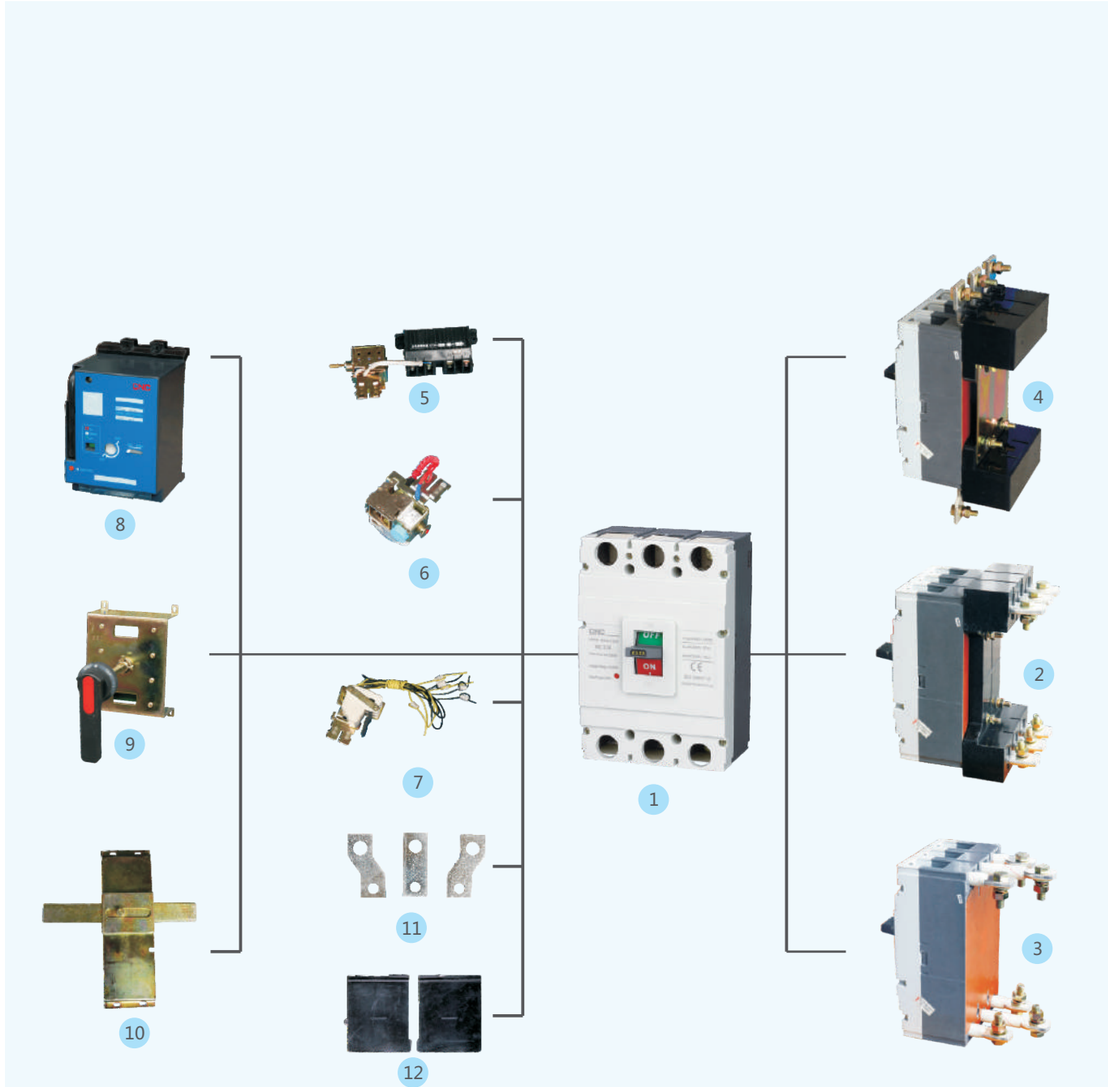

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Product overview

YCM1 Moulded Case Circuit Breaker

1. MCCB (fixed type)
2. Rear plug-in type
3. Rear connection type
4. Front plug-in type
5. Under-voltage release
6. Shunt release
7. Alarm contact
8. Motor-drive operation mechanism
9. Extended manual operation handle
10. Mechanical interlock
11. Front connection plate
12. Rubber isolator

Release method and accessories code

Code / Release method / Accessories name	Electromagnetic instantaneous release	Complex release
Without parts	200	300
Alarm contact	208	308
Shunt release	210	310
Auxiliary contact	220	320
Undervoltage release	230	330
Shunt release, Auxiliary contact	240	340
Shunt release, Undervoltage release	250	350
Secondary auxiliary contact	260	360
Auxiliary contact, Undervoltage release	270	370
Shunt release, Alarm contact	218	318
Auxiliary contact, Alarm contact	228	328
Undervoltage release, Alarm contact	238	338
Shunt release, Auxiliary contact, Alarm contact	248	348
Secondary auxiliary contact, Alarm contact	268	368
Auxiliary contact, Undervoltage release, Alarm contact	278	378

Note:

1. Complex release is hot inverse time release cascade electromagnetic instantaneous release.
2. 268/368(Secondary auxiliary contact, Alarm contact) is only used for Inm=630A circuit breaker.

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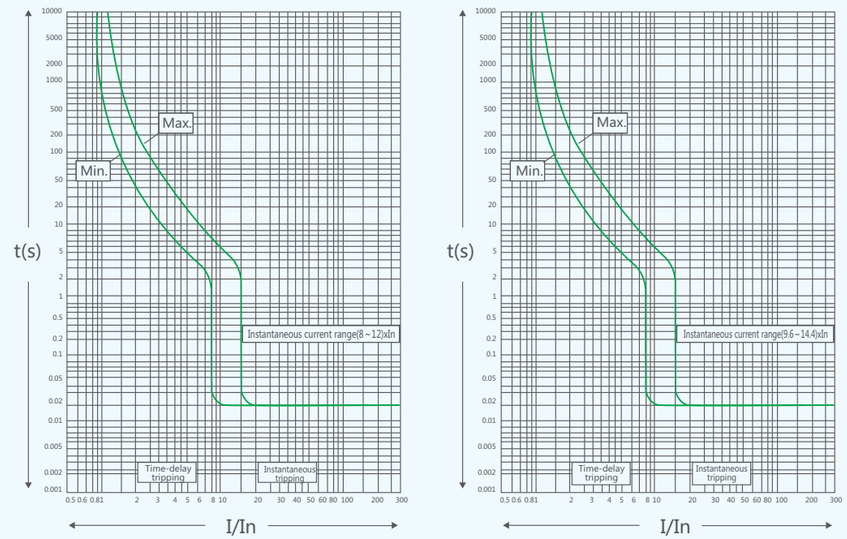
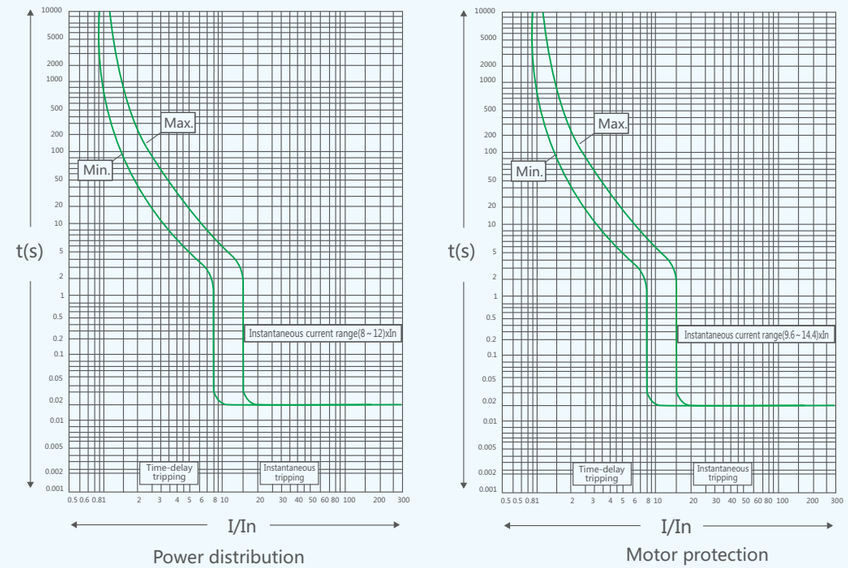
Overall and mounting dimensions(mm)

1. Curves



YCM1-63 time/current characteristic curve



YCM1-125 time/current characteristic curve

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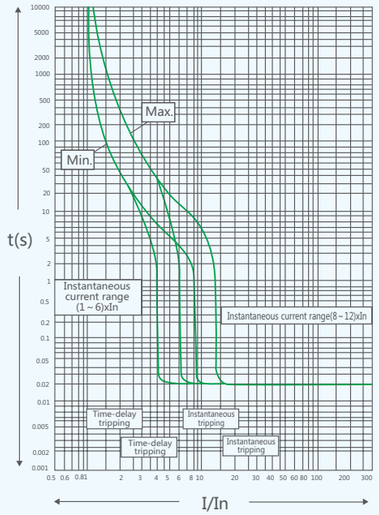
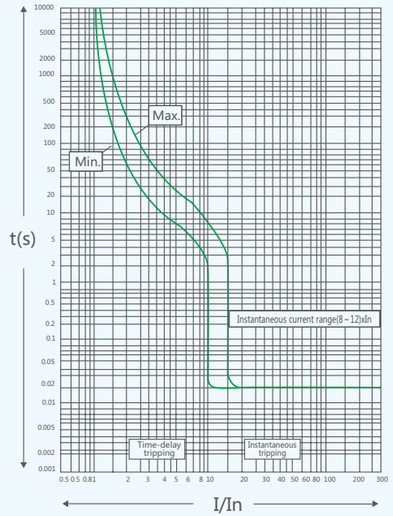
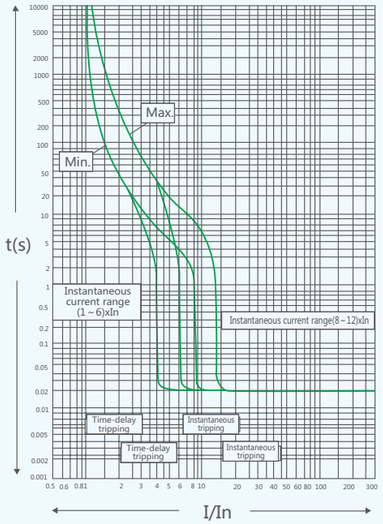


Power distribution

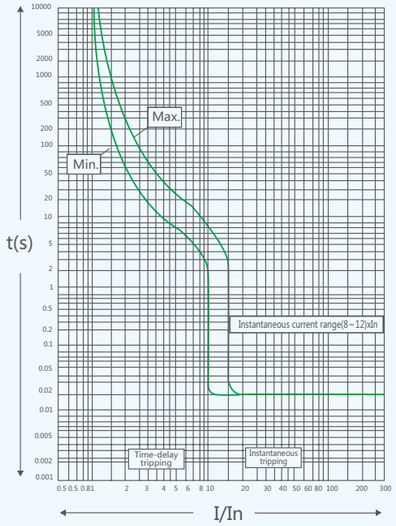


Motor protection

YCM1-250 time/current characteristic curve



Power distribution



Motor protection

YCM1-400 time/current characteristic curve

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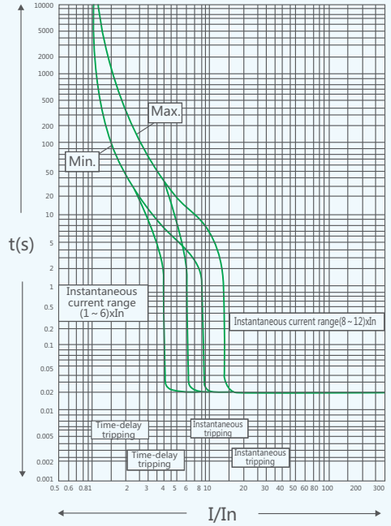
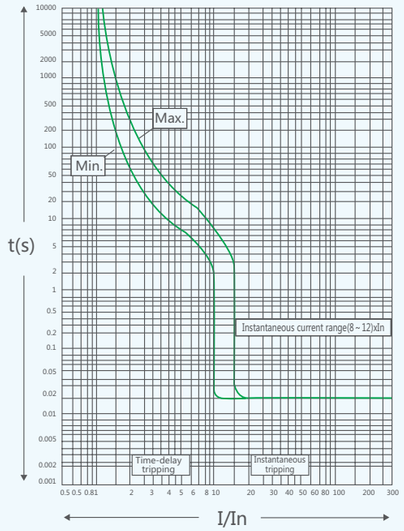
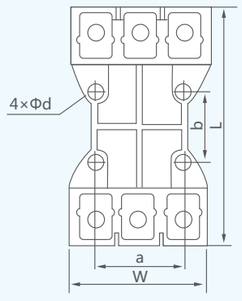


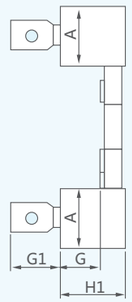
YCM1-630 time/current characteristic curve (distribution)

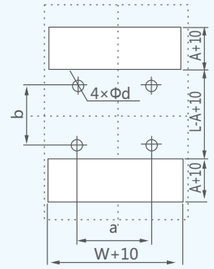


YCM1-800 time/current characteristic curve (distribution)

2. Figure and installation dimension of rear plug-in wiring type







Dimension of installation hole

Figure and installation dimension of rear plug-in wiring type

Unit:mm

Type	W	L	A	H1	G	G1	a	b	d
YCM1-63	75	135	18	28	17	15	50	60	6
YCM1-125	92	170	38	50	33	28	60	56	6.5
YCM1-250	107	186	46	50	33	40	70	54	7
YCM1-400	144	270	50	60	40	48	88	143	9
YCM1-630	182	300	65	60	40	53	100	123	9
YCM1-800	212	298	57	100	43	129	140	143	9

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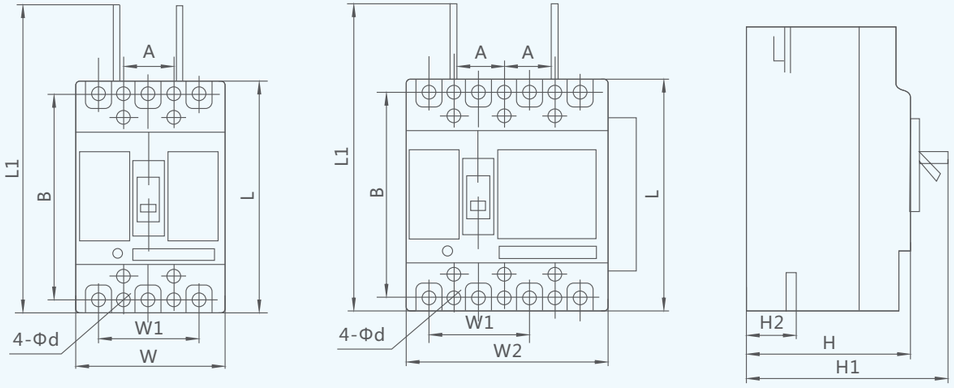
Overall and mounting dimensions(mm)



Type	Overall size (mm)								Installation size (mm)		
	W	L	H	W1	W2	L1	H1	H2	A	B	Φd
YCM1-63L	78	135	74	50	-	156	92	28	25	117	3.5
YCM1-63M	78	135	82	50	103	156	100	28	25	117	3.5
YCM1-100L	92	150	68	60	-	200	88	24	30	129	4.5
YCM1-100M	92	150	86	60	122	200	105	24	30	129	4.5
YCM1-225L	107	165	86	70	-	215	110	24	35	126	5
YCM1-225M	107	165	103	70	142	215	127	24	35	126	5
YCM1-400L	150	257	107	96	198	357	162	38	44	194	7
YCM1-400M	150	257	107	96	198	357	162	38	44	194	7
YCM1-630L	182	271	112	116	240	370	165	42	58	200	7
YCM1-630M	182	271	112	116	240	370	165	42	58	200	7
YCM1-800M	210	280	116	140	280	385	168	42	70	243	7
YCM1-1250	210	406	141	140	-	715	193	60	70	375	11

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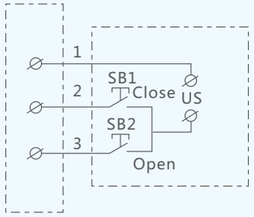
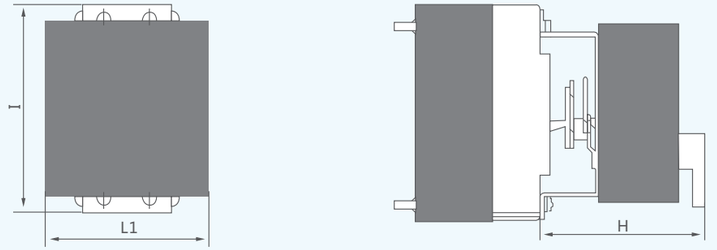
1. Motor-driven operation accessories

Installation and electrical wiring of electric operation device
Figure and dimension of normal type electric operation device see picture and table



YCM1-63,125,250 Dimension of normal type electric operation device



YCM1-400,630,800 Dimension of normal type electric operation device

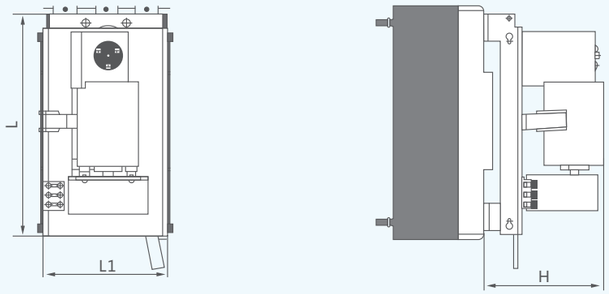


Figure and dimension of normal type electric operation device Unit:mm

Type	L	L1	H
YCM1-63	107	76	91
YCM1-125	118	90	103.5
YCM1-250	156	105	101
YCM1-400	254	141	132
YCM1-630	254	140.5	129
YCM1-800	226	132	122

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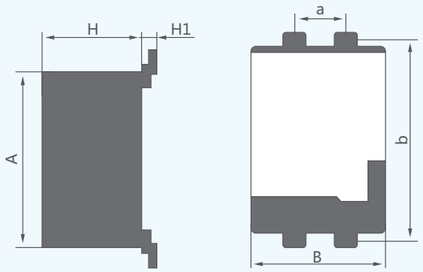
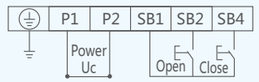
Figure and dimension of electronic type electric operation device see picture and table





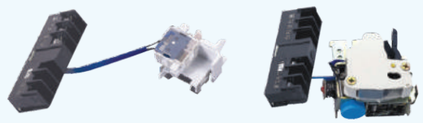
Wiring of electronic type electric operation device
Voltage: AC230V, AC400V or
DC24V, DC110V and DC220V

Figure and dimension of electronic type electric operation device Unit:mm

Type	A	B	H	H1	a	b
YCM1-63	102	74	79	11.5	25	117
YCM1-125	116	90	77	12.5	30	128
YCM1-250	116	90	77	15	35	126
YCM1-400	176	130	115	27	44	215
YCM1-630	176	130	115	38	58	200
YCM1-800	176	130	115	31	70	243

Under voltage release	Rated working voltage Ue V	AC230V AC400V
	Acting voltage V	(0.35-0.7)Ue
	Reliable close voltage V	(0.85~1.1)Ue

Shunt release	Rated control power voltage Us V	AC230V AC400V DC24V DC110V DC220V
	Acting voltage V	(0.7~1.1)Ue

Auxiliary, Alarm contact	Frame current Inm	Rated thermal current Ith
	Inm≤225	3A
	Inm≥400	6A

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YCM1LE Earth Leakage Circuit Breaker

General

YCM1LE series earth leakage circuit breaker (herein after called circuit breaker)is applied for the power distribution network of AC 50Hz,rated current 800A.The circuit breaker can protect people against indirect contact with dangerous electric current and prevent fire disaster caused by insulation fault and single-phase ground fault. It can be used to distribute electric power and protect power equipment against overload and short circuit. The circuit breaker can change the circuit and start moto infrequently. The rated residual operating current and the maximum off-time can be adjusted on-site according to actual situation, the circuit breaker can be customized alarm function and no tripping function.
The YCM1LE complies with standard of IEC60947-2.

Type designation

YC M 1 LE - □ □ □ / □ □ □ □ □

- Alarm modular:
  (I: alarm, tripping; II: alarm, no tripping)
- Note is for 4P code
- Application:
  blank: for power distribution
  2.for motor protection
- Tripping mode and accessories code (chart 1)
- Number of poles (2,3,4P)
- Operation mode:
  blank:direct operation with handle
  Z:operation with rotary handle
  P:motor-driven operation
- Code of breaking capacity:
  L-standard type
  M-higher type
- Frame size
- Electronic residual Current Circuit Breaker
- Design sequence number
- MCCB
- Company code

Note:

A: Without current release components, N-Pole is alwaus at making status, not makes and breaks with other three poles;

B: Without current release components, N-Pole makes with the other three poles(N-Pole first makes then breaks);

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Specifications

Type		YCM1LE-100			YCM1LE-225			YCM1LE-400		YCM1LE-630	
Frame current Inm(A)		100			225			400		630	
Rated current In(A)		10, 16, 20, 25, 32, 40 50, 63, 80, 100			100, 125, 140, 160 180, 200, 225			225, 315, 350, 400		400, 500, 630	
Pole		2	3	4	2	3	4	3	4	3	4
Rated insulation voltage Ui(V)		AC800									
Rated working voltage Ue(V)		AC400									
Rated impulse withstand voltage Uimp(V)		8000									
Arcing-over distance (mm)		50						100			
Breaking ability level		L	M		L	M		L	M	L	M
Rated ultimate short-circuit breaking capacity Icu(kA)		30	50		30	50		50	65	50	65
Rated working short-circuit breaking capacity Ics(kA)		15	35		15	35		35	42	35	42
Rated residual short-circuit breaking capacity		7.5	12.5		7.5	12.5		12.5	13.5	12.5	13.5
Rated residual operating current IΔn(mA)	No time-delay type	30/100/500 100/300/500			30/100/500 100/300/500			100/300/500		300/500/1000	
	Time-delay type	100/300/500			100/300/500			100/300/500		300/500/1000	
Rated residual unoperating current IΔn(mA)		1/2 IΔn			1/2 IΔn			1/2 IΔn		1/2 IΔn	
Operating performance (times)	Power on	1500			1000			1000		1000	
	Power off	8500			7000			4000		4000	
	Total times	10000			8000			5000		5000	
Residual current protection opreating time		IΔn			2IΔn			5IΔn		10IΔn	
Max. breaking time(s)	No time-delay type	0.2			0.1			0.04		0.04	
	Time-delay type	0.4/1			0.4/1			0.3/1		0.3/1	

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Release method and accessories code

Table 1

	Release method and accessories code		Accessories installation and down-leads			
Accessories name	Electromagnetic release	Complex release	YCM1LE-100/3 YCM1LE-225/3	YCM1LE-100/4 YCM1LE-225/4	YCM1LE-400/3 YCM1LE-630/3	YCM1LE-400/4 YCM1LE-630/4
Without parts	200	300	◄□	□	□	□
Alarm contact	208	308	◄□□	◄□□	◄□□	◄□□
Shunt release	210	310	◄●□	◄●□	◄●□	◄●□
Auxiliary contact	220	320	◄■□	◄■□	◄■□	◄■□
Undervoltage release	230	330	◄○□	◄○□	◄○□	◄○□
Shunt release, Auxiliary contact	240	340	—	◄■●►	—	◄■●►
Secondary auxiliary contact	260	360	◄□■►	◄■■►	◄■□■►	◄■■►
Auxiliary contact, Undervoltage release	270	370	—	◄○■►	—	◄○■►
Shunt release, Alarm contact	218	318	—	◄□●►	—	◄●□►
Auxiliary contact, Alarm contact	228	328	◄■□	◄■□	◄■□	◄■□
Undervoltage release, Alarm contact	238	338	—	◄○□►	—	◄□○►
Shunt release, Auxiliary contact, Alarm contact	248	348	—	◄●■□►	—	◄■□●►
Secondary auxiliary contact, Alarm contact	268	368	—	◄■□■►	—	◄■□■►
Auxiliary contact, Undervoltage release, Alarm contact	278	378	—	◄○■□►	—	◄■□○►

Note: handle left right Alarm contact □ Shunt release ● Auxiliary contact ■ Undervoltage release ○

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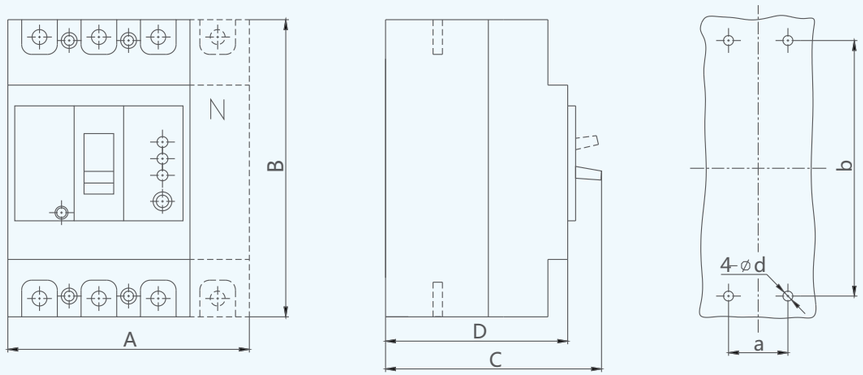
Overall and mounting dimensions(mm)



Type	Pole	Overall size (mm)				Installation size (mm)		
		A	B	C	D	a	b	Φd
YCM1LE-100	3	92	150	110	92	30	129	4.5
	4	122				60		
YCM1LE-225	3	107	165	110	90	35	126	4.5
	4	142				70		
YCM1LE-400	3	150	257	146.5	106.5	44	194	7
	4	198				94		
YCM1LE-630	3	210	280	155	115.5	70	243	7
	4	280				140		

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YCM2 Moulded Case Circuit Breaker

General

YCM2 series moulded case circuit breaker(herein after called circuit breaker)is applied for the power distribution network of AC 50Hz,rated current from 12.5 to 1600A, rated insulation voltage 800V(Inm=125A to 500V),rated working voltage up to 690V(Inm=125A to 400V)and below, it can be used to distribute electric power and protect power equipment against overload, short circuit and undervoltage. The circuit breaker can change the circuit and start motor infrequently. the circuit breaker with frame size below 400A takes protective effect when motors infrequently start and protecting against overload, short circuit and lacking voltage.
The YCM2 complies with standard of IEC60947-2.

Type designation

YC M 2 - □ □ □/ □ □ □

- Application:
  - blank for power distribution
  - 2 for motor protection
- Tripping mode and accessories code(Table 3)
- Number of poles
- Operation mode:
  - blank: direct operation with handle
  - Z: operation with rotary handle
  - D: motor-driven operation
- Code of breaking capacity:
  - S-standard type
  - H-current limiting type
- Frame size
- Design sequence number
- MCCB
- Company code

Specifications

Breaker's overload long delay & short-circuit instantaneous protection feature refer to diagram below

Serial No.	Distribution system breaker			Circumstance temperature
	Testing current(times)	Tripping time	Status	
1	1.05In	1h non-tripping (In≤63A), 2h non-tripping (In>63A)	Initial	+40℃±2℃
2	1.3In	1h tripping(In≤63A), 2h tripping (In>63A)	Following serial 1	+40℃±2℃
3	10In	≤0.2s tripping	Initial	Any suitable temperature

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Table 2

Type	Rated current (A)	Poles	Rated insulation voltage (V)	Rated operation voltage (V)	Rated ultimate short-circuit breaking capacity (kA) AC400V (Icu)	Rated working short-circuit breaking capacity (kA) AC400V (Ics)	Operation life (times)	
							Electrical	Mechanical
YCM2-125S	12.5, 16, 20, 25 32, 40, 50, 63 80, 100, 125	1, 2 3, 4	500	400	25	50%	1500	8500
YCM2-125H					35	75%	1500	8500
YCM2-160S	16, 20, 32, 40 50, 63, 80, 100 125, 160	3, 4	660		35	75%	1000	7000
YCM2-160H					50	75%	1000	7000
YCM2-250S	100, 125, 160 180, 200, 225 250				35	75%	1000	7000
YCM2-250H					50	75%	1000	7000
YCM2-400S	200, 225, 250 315, 350, 400				50	75%	1000	4000
YCM2-400H					65	75%	1000	4000
YCM2-630S	400, 500, 630				50	75%	1000	4000
YCM2-630H					65	75%	1000	4000
YCM2-800S	500, 630 700, 800				50	75%	500	2500
YCM2-800H					65	75%	500	2500
YCM2-1600S	800,1000,1250,1600				65	75%	500	2500

Release method and accessories code

Table 3

Code / Accessories name	Release method: Electromagnetic instantaneous release	Complex release
Without parts	200	300
Alarm contact	208	308
Shunt release	210	310
Auxiliary contact	220	320
Undervoltage release	230	330
Shunt release, Auxiliary contact	240	340
Shunt release, Undervoltage release	250	350
Secondary auxiliary contact	260	360
Auxiliary contact, Undervoltage release	270	370
Shunt release, Alarm contact	218	318
Auxiliary contact, Alarm contact	228	328
Undervoltage release, Alarm contact	238	338
Shunt release, Auxiliary contact, Alarm contact	248	348
Secondary auxiliary contact, Alarm contact	268	368
Auxiliary contact, Undervoltage release, Alarm contact	278	378

Note:

1. Complex release is hot inverse time release cascade electromagnetic instantaneous release.
2. 268/368(Secondary auxiliary contact, Alarm contact) is only used for Inm=630A circuit breaker.

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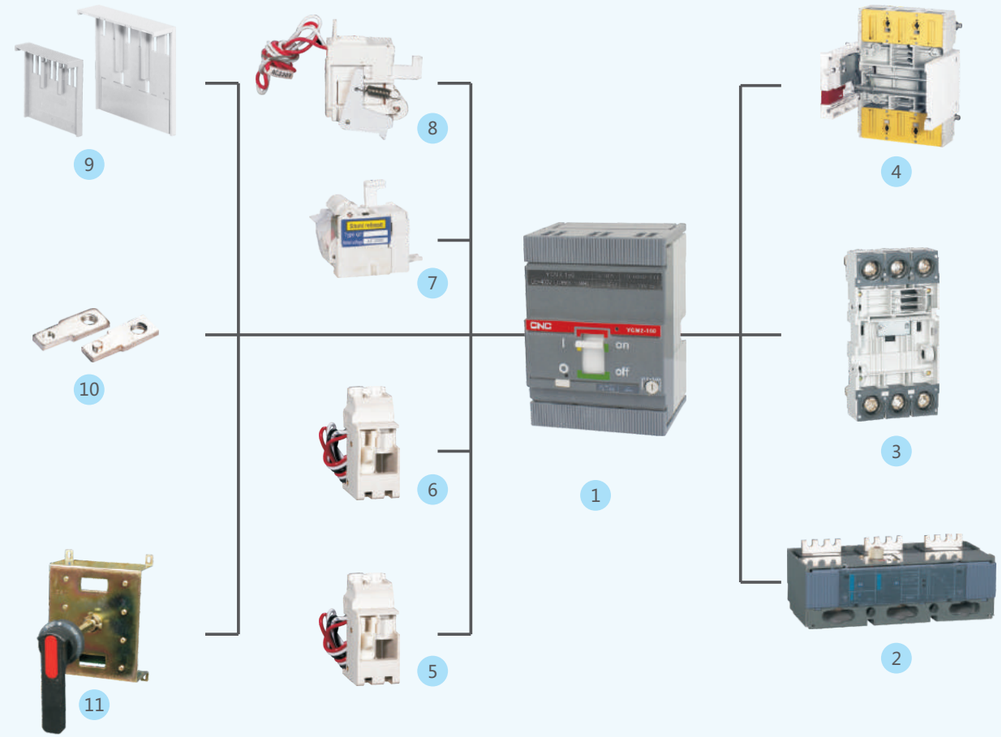
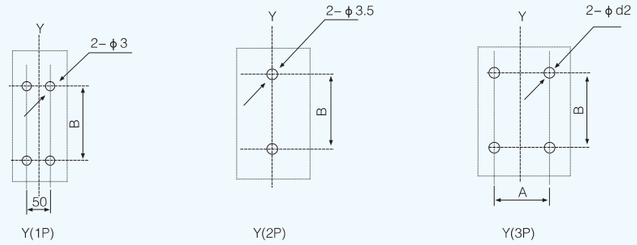
Product overview

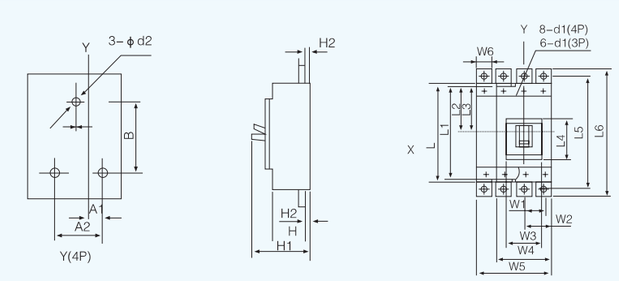


1. Breaker 2. Electronic release 3. Plug-in socket 4. Draw-out base
5. Alarm contacts 6. Auxiliary contacts 7. Shunt release 8. Under voltage release
9. Arc partitions between phases 10. Extended terminals 11. Electric operating mechanism

A

Overall and mounting dimensions(mm)





Code																					
Model	W1	W2	W3	W4	W5	W6	L	L1	L2	L3	L4	L5	L6	H	H1	H2	A	A1	A2	B	D1	Φd2
YCM2-125	25	38	76/101	76	101	14	125	120	74.5	72	45	150	166	70	91	25.5	25	125	12.5	100	M8	4.5
YCM2-160	30	45	90/120	90	120	14	125	120	74.5	72	45	150	166	80	103	27.5	30	125	15	100	M8	4.5
YCM2-250	35	52.5	105/140	105	140	20	175	170	89.75	87.25	105	210	235	101.5	135	25	35	175	17.5	139	Φ8.5	5.5
YCM2-400	44	70	105	14	183.75	25	259	254	127.75	125.25	105	285	330	101.5	135	25	43.75	259	22	214	Φ10.5	5.5
YCM2-630	70	105	140	210	285	40	273	268	127.75	125.25	105	329	365	101.5	167.5	41.5	70	273	35	237	Φ10.5	5.5
YCM2-800	70	105	140	210	285	40	273	268	127.75	125.25	105	329	365	101.5	167.5	41.5	70	273	35	237	Φ10.5	5.5
YCM2-1600	70	105	140	210	285	50	406	406	217	217	105	526/518	540	138.5	204.5	33.5	70	406	35	378	Φ12.7	5.5

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YCM3 Moulded Case Circuit Breaker

General

YCM3 series moulded case circuit breaker(herein after called circuit breaker)which adopts international advanced design and manufactural technology, small and compact, modularization, high breaking capacity, short arcing-over distance, environment protecting etc. They are applied for the power distribution network of AC 50Hz,rated working voltage 690V and below, rated current from 12.5A to 1600A, it can be used to distribute electric power and protect power equipment against overload, short circuit, undervoltage etc. The circuit breaker can change the circuit and start motor infrequently.

YCM3 series circuit breaker is equiped with intelligent controllers, with the increasing selection range of setting current,power supply is more reliable, successive and safe.

The YCM3 complies with standard of IEC60947-2,GB14048.2.

This product have isolating function.

Type designation

YC M 3 - □ □ □ / □ □ □

- Application:
  - blank for power distribution
  - 2 for motor protection
- Tripping mode and accessories code(Table 1)
- Number of poles (3P, 4P)
- Operation mode:
  - blank: direct operation with handle
  - Z: operation with rotary handle
  - P: motor-driven operation
- Code of breaking capacity:
  - N-standard type
  - H-current limiting type
- Frame size (100, 160, 250, 400, 630, 1600A)
- Design sequence number
- MCCB
- Company code

Technical Data

Breaker's overload long delay & short-circuit instantaneous protection feature refer to diagram below

Serial No.	Distribution system breaker			Circumstance temperature
	Testing current(times)	Tripping time	Status	
1	1.05In	1h non-tripping (In≤63A), 2h non-tripping (In > 63A)	Initial	+40℃±2℃
2	1.3In	1h tripping(In≤63A), 2h tripping (In > 63A)	Following serial 1	+40℃±2℃
3	10In	≤0.2s tripping	Initial	Any suitable temperature

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Serial No.	Motor protection breaker			Circumstance temperature
	Testing current(times)	Tripping time	Status	
1	1.05In	2h non-tripping	Initial	+40℃±2℃
2	1.2In	2h tripping	Following serial 1	+40℃±2℃
3	1.5In	4min tripping	under serial 1 current till breaker reach thermal balance	Any suitable temperature
4	7.2In	2~10s tripping	Initial	
5	12In	≤0.2s tripping	Initial	

Model		YCM3-100	YCM3-160	YCM3-250
Poles		3P, 4P	3P, 4P	3P, 4P
Structural max rated current Inm(A)		100	160	250
Rated current In(A)		12.5, 16, 20, 25 32, 40, 50, 63 80, 100	16, 20, 25, 32 40, 50, 63, 80 100, 125, 160	20, 25, 32, 40, 50, 63 80, 100, 125, 160, 180 200, 225, 250
Rated voltage Ue(V)		AC400, AC690	AC400, AC690	AC400, AC690
Rated insulating voltage Ui(V)		690	690	690
Rated withstand voltage Uimp(kV)		6	6	6
Rated ultimate short-circuit breaking capacity Icu(kA)		Model N:35 Model H:70	Model N:35 Model H:70	Model N:35 Model H:70
Rated working short-circuit breaking capacity Ics(kA)		Model N:18 Model H:Ics=75%Icu	Model N:18 Model H:Ics=75%Icu	Model N:18 Model H:Ics=75%Icu
Application type		A	A	A
Tripping unit		thermomagnetic / Intelligent	thermomagnetic / Intelligent	thermomagnetic / Intelligent
Residual current protection		With residual current protection module	With residual current protection module	With residual current protection module
Working Lifespan	Mechanical	8500	8500	7000
	Electrical	1500	1500	1000
Operating method	Manual	Yes	Yes	Yes
	Rotatory handle	Yes	Yes	Yes
	Electrical operating	Yes	Yes	Yes
Instal method	Fixed(front panel)	Yes	Yes	Yes
	Fixed(back panel)	Yes	Yes	Yes
	Drawout(front panel)	Yes	Yes	Yes
	Drawout(back panel)	Yes	Yes	Yes

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Following diagram on previous page

Model		YCM3-400	YCM3-630	YCM3-1600
Poles		3P, 4P	3P, 4P	3P, 4P
Structural max rated current Inm(A)		400	630	1600
Rated current In(A)		400	630	800, 1000 1250, 1600
Rated voltage Ue(V)		AC400, AC690	AC400, AC690	AC400, AC690
Rated insulating voltage Ui(V)		690	690	750
Rated withstand voltage Uimp(kV)		6	6	8
Rated ultimate short-circuit breaking capacity Icu(kA)		Model N:40 Model H:85	Model N:45 Model H:85	65
Rated working short-circuit breaking capacity Ics(kA)		Model N:22.5 Model H:Ics=75%Icu	Model N:22.5 Model H:Ics=75%Icu	48
Application type		A	A	A
Tripping unit		Intelligent	Intelligent	Intelligent
Residual current protection		With residual current protection module		—
Working Lifespan	Mechanical	5000	5000	2500
	Electrical	1000	1000	500
Operating method	Manual	Yes	Yes	Yes
	Rotatory handle	Yes	Yes	Yes
	Electrical operating	Yes	Yes	—
Instal method	Fixed(front panel)	Yes	Yes	Yes
	Fixed(back panel)	Yes	Yes	—
	Drawout(front panel)	Yes	Yes	—
	Drawout(back panel)	Yes	Yes	—

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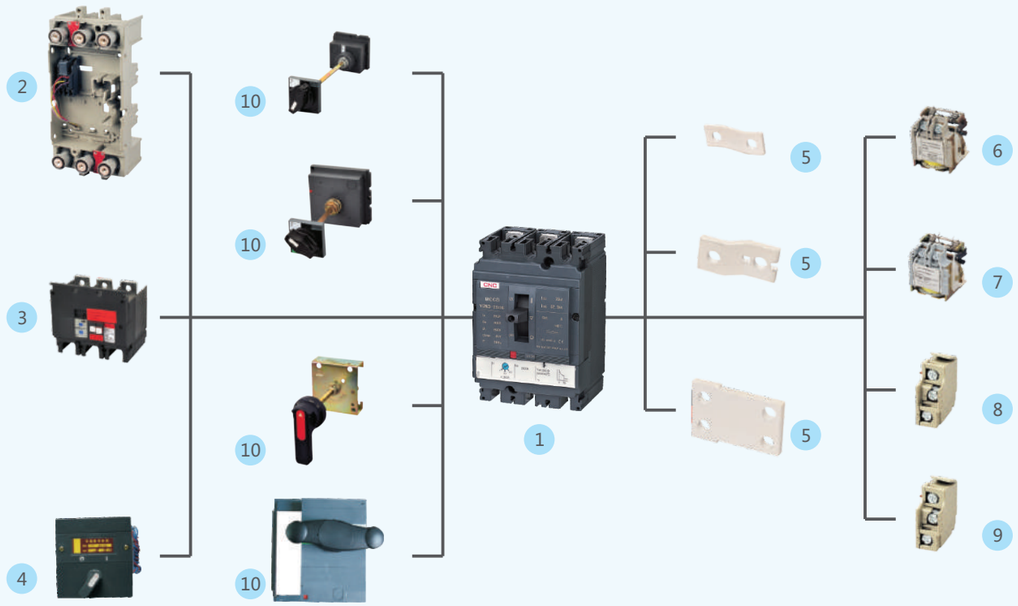
Release method and accessories code

Table 1

Accessory Code / Tripping unit type / Accessories name	Instantaneous trip only (Electromagnet trip)	Duplex trip (Thermalmagnet trip)
No accessory	200	300
Alarm contact	208	308
Shunt trip	210	310
Shunt + Alarm	218	318
Auxiliary contacts(1 set)	220	320
Auxiliary + Alarm	228	328
Undervoltage trip	230	330
Undervoltage + Alarm	238	338
Auxiliary + Shunt	240	340
Shunt + Aux. + Alarm	248	348
Auxiliary contacts(2 sets)	260	360
Auxiliary(2) + Alarm	268	368
Undervoltage + Aux.	270	370
Aux. + Undervoltage + Alarm	278	378

Product overview



1. Body 2. Plugin bottom base 3. Residual current protecting module 4. Electrical operating module
5. External wiring board 6. Shunt trip 7. Undervoltage trip 8. Auxiliary contact 9. Alarm contact 10. Rotatory handle

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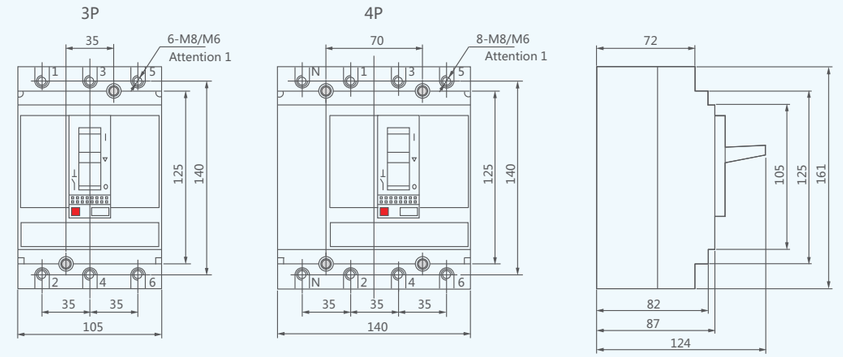
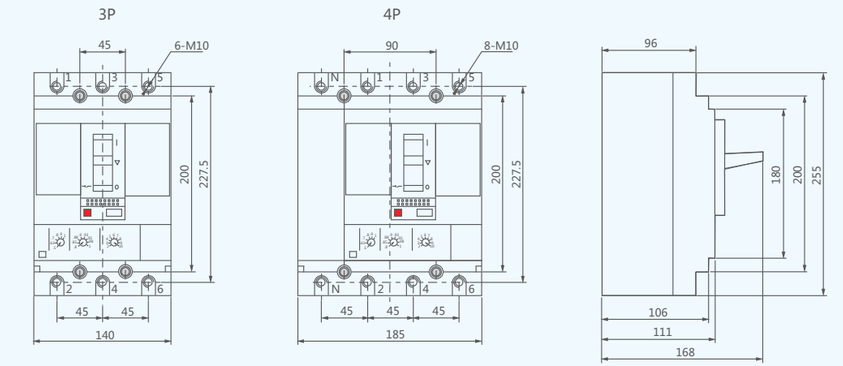
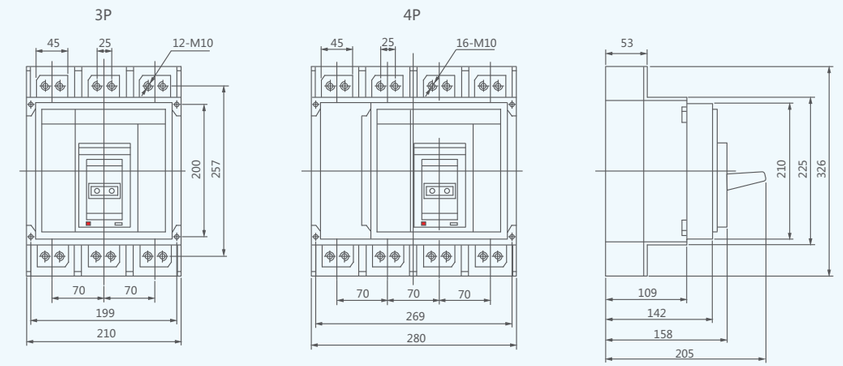
YCM3-100, 160, 250 shape & dimension



YCM3-400, 630 shape & dimension



YCM3-1600 shape & dimension



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YCM7 Moulded Case Circuit Breaker

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 690V, rated working voltage

up to 690V, 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 (upright), and also horizontally

This breaker comply with standard IEC60947-2.

Product Features

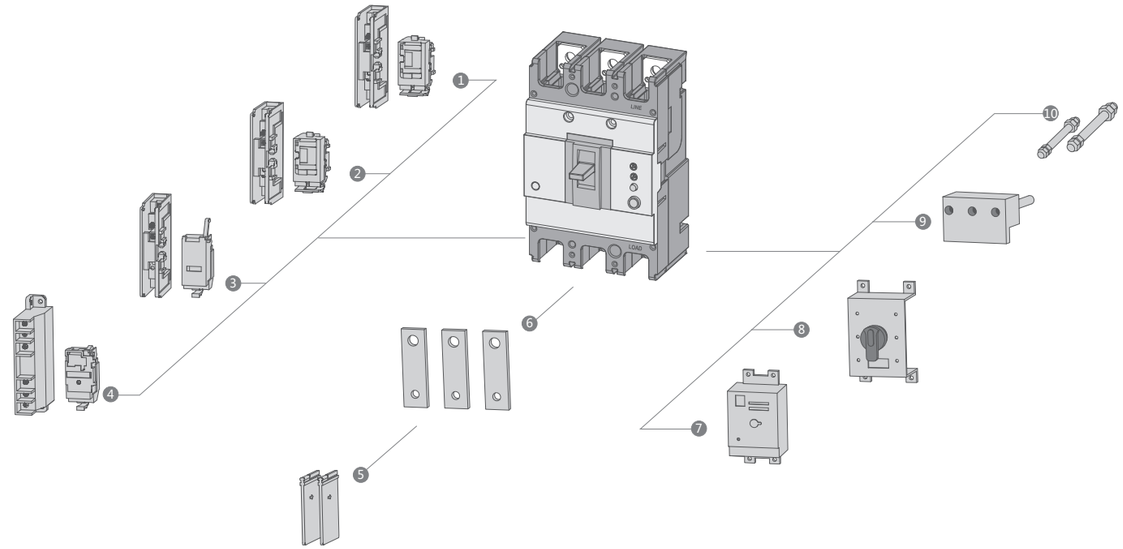
1. Miniaturization design
   Product volume miniaturization can meet the customer's personality needs of the product installation size.
2. Size uniform
   The same shell level, different sub ability (S, M), different functions (air, leakage) product installation size is completely consistent.
3. The 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 Encironment and Mstallation Condition

1. Altitude less than 2000m
2. Ambient medium temperature is from -50℃ to +40℃ (+45℃ for shipping product)
3. Can withstand moist cuir
4. Can withstand mold
5. Can withstand nuclear radiation
6. Max incination is 22.5°
7. It can still work reliably if the product subjects to the normal vibration from ships
8. It can still work reliably if the product subjects to the earthquake (4g)
9. Put in the place where is no explosion danger and conductive dust, can't corrode metel and destroy the insnlation sleet.
10. Put in the place where is no sleet.

A

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

A

Selection Guide

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

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

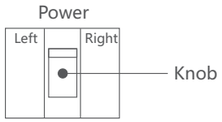
Tripping mode and inner accessory	Rated current(A)		Application	Option for 4P MCCB
300	125A		2	A
First figure means tripping unit way 2: Only with magnetic release 3: Thermal release+,magnetic release body Remark: The last two figures means accessory code (see accessories list)	125 160 250 400 630 800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

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

A

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		○ ○ □	○ ○ □	○ ○ □	○ ○ □

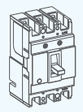
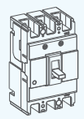
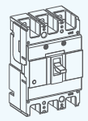


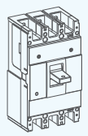
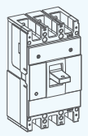
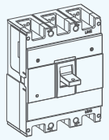
● Alarm contact ○ Aux contact □ Shunt release ■ Under voltage release(UVT)

Remark:
1. Right auxiliary, contact, left shunt, left UVT as options
2. Spec 220, 320, 240, 340, 270, 370 aux contact can be two contacts, need to confirm when ordered.

A

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	AC400V	AC400V
Rated insulation voltage Ui(V)		AC690V	AC690V	AC690V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V	15/8	35/25	35/25
Operation life (cycle)	ON	1000	1000	1000
	OFF	7000	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	AC400V	AC400V
Rated insulation voltage Ui(V)		AC690V	AC690V	AC690V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V	35/25 50/35	50/35	50/35
Operation life (cycle)	ON	1000	1000	500
	OFF	4000	4000	2500
Motor-driven operation		●	●	●
External rotary handle		●	●	●
Automatic tripping device		Thermo-magnetic	Thermo-magnetic	Thermo-magnetic

● Means accessory as option

A

Characteristic Feature

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

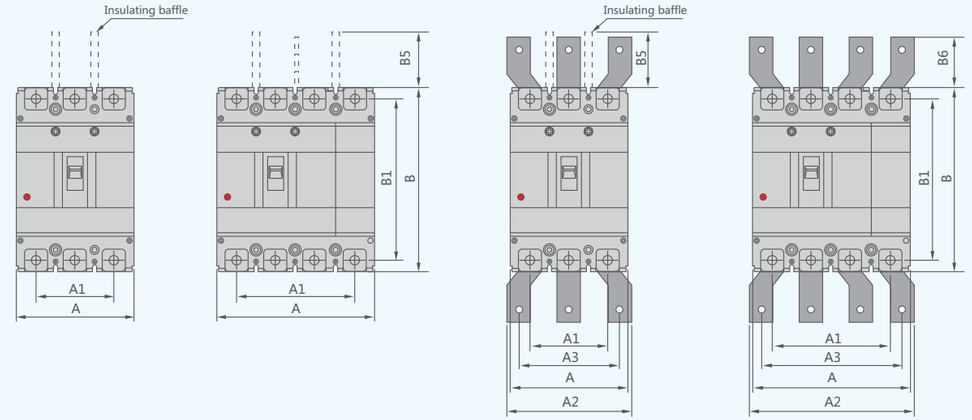
Test current	Current time	Conventional time		Initial status
		In≤63	63＜In	
Conventional non-trip current	1.05	≥1h	≥2h	Cold status
Conventional trip current	1.30	＜1h	＜2h	Hot status

2. When ambient temperature is ±40℃ for electrmotor 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
		In≤800	
Conventional non-trip current	1.0	≥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=10In
   - Instant trip (for motor protection) I=12In
   - Current setting accuracy ±20%

Front Connection & Overall



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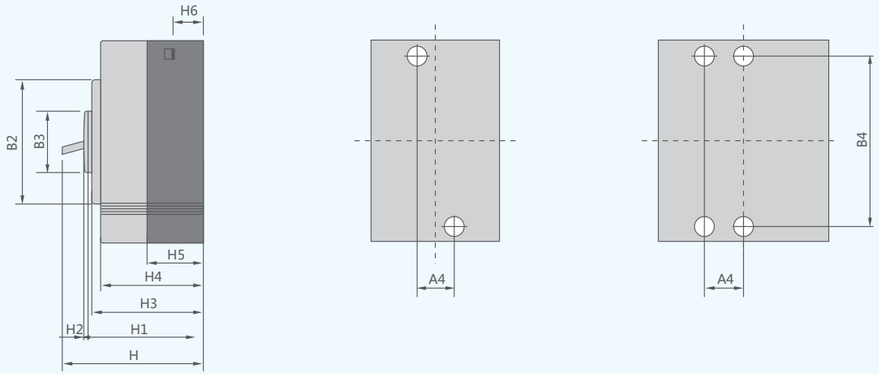
Outline Overall and Installing Dimensions



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

A

YCM7RE Electronic Adjustable Circuit Breaker

General

YCM7RE Series Electronic circuit breaker is suitable for ac 50 Hz, rated voltage 690V, the rated working current 800A low voltage power grid.

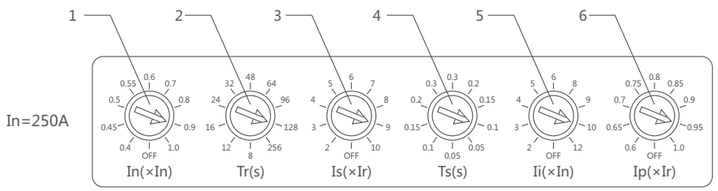
Suitable Working Environment and Installation Condition

1. Altitude less than 2000m
2. Ambient medium temperature is from -50℃ to +40℃ (+45℃ for shipping product)
3. Can withstand humid air
4. Can with stand mold
5. Can withstand nuclear radiation
6. Max inclination is 22.5°
7. It can still work reliably if the product subjects to the normal vibration from ships
8. It can still work reliably if the product subjects to the earthquake (4g)
9. Put in the place where is no explosion danger and conductive dust, can't corrode metal and destroy the insulation.
10. Put in the place where is no sleet.

Features

1. Above MCCB can put accessories such as, UVT, Shunt, Aux, Alarm contact, Motor-driven operation, Mechanism, Rotary handle.
2. Function available as over-load long-time delay, short-circuit time-delay,instant protection.
3. Earth-fault protection, Thermal analog Pre-alarm, indication, Over-current, indication operational current.

Panel and Function



1. Adjustable setting value of rated current IN
2. Adjustable setting value of long time-delay operated TL±
3. Adjustable setting value of short time-delay current Is
4. Adjustable setting value of short time-delay operated time Ts
5. Adjustable setting value of instant current Ii
6. Adjustable setting value of over-load alarm current Ip

A

Selection Guide

YCM7 | RE | - | 160 | P/3 | 400 | 160A | 2 | A

Type	The adjustable type
YCM7	RE
MCCB	RE: Electronic adjustable

Current frame code optional	Operation	Poles
160	P	3
Inm=160 Inm=250 Inm=400 Inm=630 Inm=800	P: Motor-driven Z: Rotation handle W: Direct	3: 3P 4: 4P

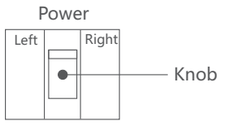
Tripping mode and inner accessory	Application	Option for 4P MCCB
400	2	A
The intelligent tripping device Remark: The last two figures means accessory code (see accessories list)	1: Power distribution 2: Motor-protection	A:N pole without protection, ON/OFF without B:N pole without protection, ON/OFF switched Remark: If the customer has no specific requirements, the quadrupole product will be the default for the B class

YCM7RE
Electronic Adjustable Circuit Breaker

A

YCM7RE 3P Accessories Code

Model		YCM7RE-160	YCM7RE-250	YCM7RE-630	YCM7RE-800
No. of poles		3	3	3	3
Code	Accessory name				
308	Alarm contact	●	●	●	●
310	Shunt release	□	□	□	□
320	Auxiliary contact	○	○	○	○
330	Under-voltage release			■	■
340	Shunt auxiliary contact	○ □	○ □	○ □	○ □
360	Two groups auxiliary contacts	○ ○	○ ○	○ ○	○ ○
370	Auxiliary contact UVT			○ ■	○ ■
318	Shunt alarm contact			● □	● □
328	Auxiliary alarm contact	● ○	● ○	● ○	● ○
338	UVT alarm contact			● ■	● ■
348	Shunt auxiliary alarm contact			● ○ □	● ○ □
368	Two groups aux alarm contact			● ○ ○	● ○ ○
378	Aux contact UVT alarm contact			● ○ ■	● ○ ■
380	Two groups aux contact and shunt			○ ○ □	○ ○ □



→ Accessories connecting wire

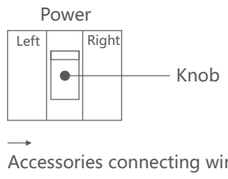
● Alarm contact ○ Aux contact □ Shunt release ■ Under voltage release(UVT)

Remark:
1. Right auxiliary, contact, left shunt, left UVT as options
2. Spec 220, 320, 240, 340, 270, 370 aux contact can be two contacts, need to confirm when ordered.

A

YCM7RE 4P Accessories Code

Model		YCM7RE-160	YCM7RE-250	YCM7RE-630	YCM7RE-800
No. of poles		4	4	4	4
Code	Accessory name				
308	Alarm contact				
310	Shunt release				
320	Auxiliary contact				
330	Under-voltage release				
340	Shunt auxiliary contact				
360	Two groups auxiliary contacts				
370	Auxiliary contact UVT				
318	Shunt alarm contact				
328	Auxiliary alarm contact				
338	UVT alarm contact				
348	Shunt auxiliary alarm contact				
368	Two groups aux alarm contact				
378	Aux contact UVT alarm contact				
380	Two groups aux contact and shunt				



● Alarm contact ○ Aux contact □ Shunt release ■ Under voltage release(UVT)

Remark:

1. Right auxiliary, contact, left shunt, left UVT as options
2. Spec 220, 320, 240, 340, 270, 370 aux contact can be two contacts, need to confirm when ordered.

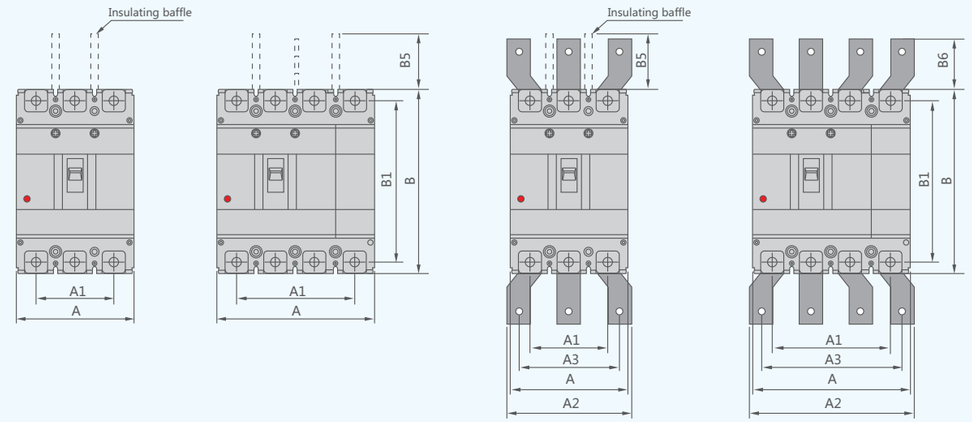
A

Technical Data

Type		YCM7RE-160	YCM7RE-250	YCM7RE-400/630	YCM7RE-800
Frame(A)		160	250	400 630	800
Number of poles		3,4	3,4	3,4	3,4
Products					
Rate current adjustable range(A)		16-32, 40-100, 64-160	100-250	160-400, 252-630	252-630, 320-800
Rated voltage Ue(V)		AC400V	AC400V	AC400V	AC400V
Rated insulation voltage Ui(V)		AC690V	AC690V	AC690V	AC690V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V	35/25	35/25	50/35	50/35
Operation life (cycle)	ON	1500	1000	1000	1000
	OFF	8500	7000	4000	1500
Motor-driven operation		●	●	●	●
External rotary handle		●	●	●	●
Automatic tripping device		Electronic type	Electronic type	Electronic type	Electronic type

● Means accessory as option

Front Connection & Overall



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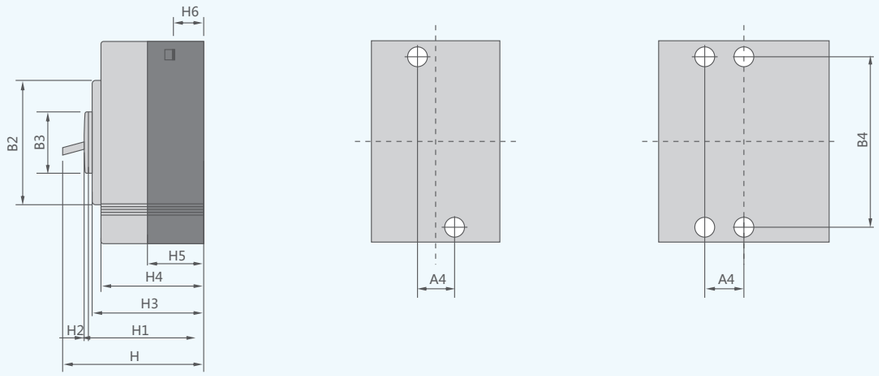
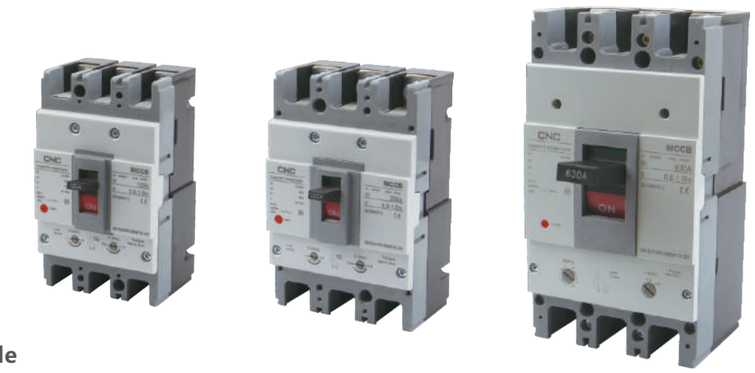
Front Connection & Overall



Thermal magnetic trip 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																
YCM7RE-160M	90	120	60	90	-	-	-	-	155	134	102	50	50	-	109	83	4	68	61	20.7	24	30	132	M8
YCM7RE-250M	105	140	70	105	-	-	-	-	165	144	102	50	100	-	120	91	4	68	61	45	24	35	126	M8
YCM7RE-400M	140	185	88	132	140	196	112	168	257	230	179	90	110	42	155	107	5	105	97	45	36	44	194	M10
YCM7RE-630M	140	185	88	132	140	196	112	168	257	230	179	90	110	42	155	107	5	105	97	45	36	44	194	M10
YCM7RE-800M	210	280	140	210	180	250	140	210	275	243	192	90	110	87	155	107	5	104	97	15	24	70	243	M12

A

YCM7T/A, RT Thermal Magnetic Adjustable Circuit Breaker



Selection Guide

YCM7 | RT | - | 160 | M | Z | / | 3 | 300 | 2 | A | Q1 | D | Q | 2

Type	The adjustable type	Frame Inm	Breaking capacity ICU/ICS(kA)	Operation
YCM7	RT	160	M	Z
MCCB	RT: Therm-mag T/A: Therm/Mag	160, 250, 630, 800 Remark: 160 Frame upgrade from 125 250 Frame upgrade from 225 630 Frame upgrade from 400	S / M 160: 25/18 250: 25/18 400: 35/25 / 50/35 630: 50/35 800: 50/35	P: Motor-driven Z: Rotory handle W: Direct ①: Motor-driven operation DC1, DC3

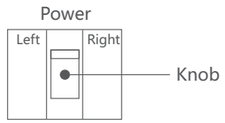
Poles	Tripping mode and inner accessory	Rated current(A)	Application
3	300	160	2
2: 2P 3: 3P 4: 4P	First figure means tripping unit way 2: Only with magnetic release 3: Thermal release+,magnetic release body Remark: The last two figures means accessory code (see accessories list)	160: 50-63, 63-80, 80-100, 100-125, 125-160 250: 100-125, 125-160, 160-200, 200-250 400: 200-250, 250-320, 320-400 630: 400-500, 500-630 800: 500-630, 630-800	1. Power distribution 2. Motor-protection

Option for 4P MCCB	Accessory voltage	Motor-driven operation voltage	Connection	Connection plate
A	Q1	D	Q	2
A: N pole without protection, ON/OFF without B: N pole without protection, ON/OFF switched	UVT Q1: AC220V Q2: AC240V Q3: AC380V Q4: AC415V Shunt F1: AC220V F2: AC380V F3: DC110V F4: DC24V J1: AC125V J2: AC250V J3: DC125 J4: DC24V	DC1 D1: AC220V D2: AC230V D3: AC380V D4: AC400V DC3 D5: AC220V D6: AC110V D7: DC220V D8: DC110V D9: AC110~240V D10: DC100~220V Remark: DC1, DC3 motor-driven operation voltage see extenal accessories table.	Q: Front H: Rear C: Plug-in	1: W/O 2: W

A

Inner Accessories

Model		YCM7T/A-160 YCM7RT-160		YCM7T/A-250 YCM7RT-250		YCM7T/A-400/630 YCM7RT-400/630	YCM7T/A-800 YCM7RT-800
Breaking capacity		S		S		S,M	M
No. of poles		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	○ ■		○ ■		○ ■	○ ■



→ Accessories connecting wire

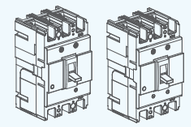
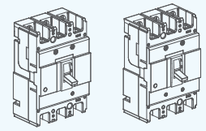
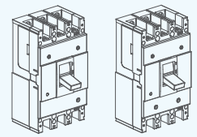
● Alarm contact ○ Aux contact □ Shunt release ■ Under voltage release(UVT)

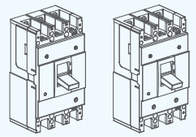
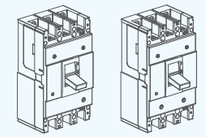
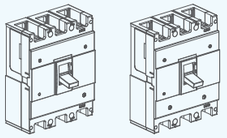
Remark:

1. Right auxiliary, contact, left shunt, left UVT as options
2. Spec 220, 320, 240, 340, 270, 370 aux contact can be two contacts, need to confirm when ordered.

A

Technical Data

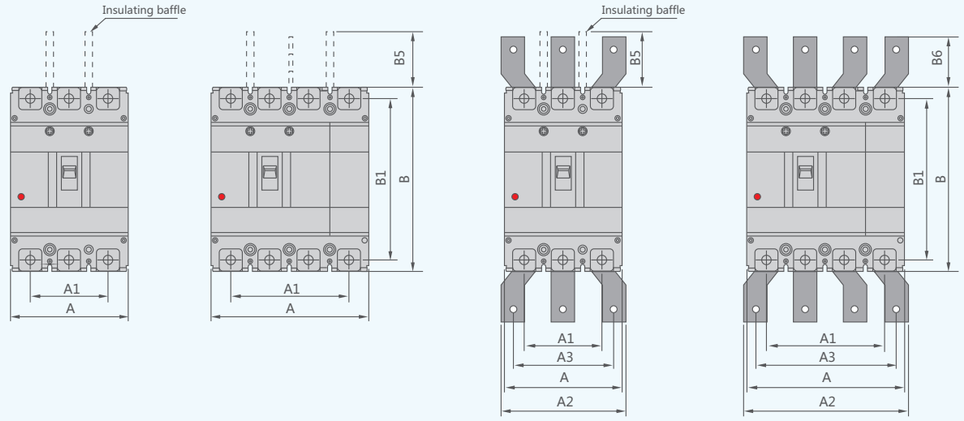
Type		YCM7T/A-160S YCM7RT-160S	YCM7T/A-250S YCM7RT-250S	YCM7T/A-400S YCM7RT-400S
Frame(A)		160	250	400
Number of poles		3,4	3,4	3,4
Products				
Rate current adjustable range(A)		50-63,63-80,80-100, 100-125,125-160	100-125,125-160, 160-200,200-250,	200-250,250-320, 320-400
Rated voltage Ue(V)		AC400V	AC400V	AC400V
Rated insulation voltage Ui(V)		AC690V	AC690V	AC690V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V	25/18	25/18	35/25
Operation life (cycle)	ON	3000	3000	2000
	OFF	7000	7000	4000
Motor-driven operation		●	●	●
External rotary handle		●	●	●
Automatic tripping device		Thermo-magnetic	Thermo-magnetic	Thermo-magnetic

Type		YCM7T/A-400M YCM7RT-400M	YCM7T/A-630M YCM7RT-630M	YCM7T/A-800M YCM7RT-800M
Frame(A)		400	630	800
Number of poles		3,4	3,4	3,4
Products				
Rate current adjustable range(A)		200-250,250-320, 320-400	400-500,500-630	500-630,630-800
Rated voltage Ue(V)		AC400V	AC400V	AC400V
Rated insulation voltage Ui(V)		AC690V	AC690V	AC690V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V	50/35	50/35	50/35
Operation life (cycle)	ON	2000	2000	1500
	OFF	4000	4000	4000
Motor-driven operation		●	●	●
External rotary handle		●	●	●
Automatic tripping device		Thermo-magnetic	Thermo-magnetic	Thermo-magnetic

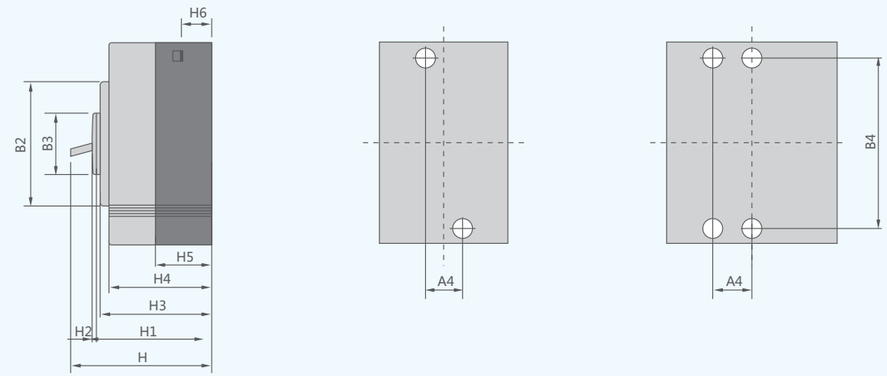
● Means accessory as option

A

Front Connection & Overall



Outline Overall and Installing Dimensions



Thermal magnetic trip circuit breaker	Thermal adjustable 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																
YCM7RT-160S	YCM7T/A-160S	90	120	60	90	-	-	-	-	155	134	103	50	50	-	94	72	4	68	61	41	24	30	132	M8
YCM7RT-250S	YCM7T/A-250S	105	140	70	105	-	-	-	-	165	144	103	50	100	-	96	72	4	68	61	46	24	35	126	M8
YCM7RT-400S	YCM7T/A-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
YCM7RT-400M	YCM7T/A-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
YCM7RT-630M	YCM7T/A-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
YCM7RT-800M	YCM7T/A-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

A

YCP5 Motor Starter

General

YCP5 series AC Motor Starter is suitable for circuits the alternating voltage up to 690V, current up to 80A. The product works to control the overload, phase loss, short circuit protection and infrequent starts of a three-phase squirrel cage asynchronous motor. The Motor Starter can protect the distributing line for infrequent load transfer, and it can also works as an isolator.

Operation and installation condition

1. Installation altitude≤2000m
2. Ambient air temperature -5℃～+40℃ average temperature of 24 hours must below +35℃
3. Relative humidity below 90% when the temperature is +25℃±5℃
4. Ambient pollution level: 3
5. Installation category of the starter: Ⅲ
6. The installation degree of the tilt and vertical plane should not exceed ±5℃
7. Rated working system: continuous duty; intermittent duty

Main Technical parameters

1. Rated isolation voltage Ui(V): 690
2. Rated working voltage Ue(V): 230/240、400/415、440、500、690
3. Rated frequency(Hz): 50
4. Frame size rated current: Inm(A): 25, 80.
5. Rated current of tripping In(A): (Table 1).
6. Rated current adjust range: (Table 1).
7. Rated ultimate short circuit breaking capacity: Icu(kA): (Table 1).
8. Rated operating short circuit breaking capacity: Ics(kA): (Table 1).
9. Rated impulse withstand voltage: Uimp(V): 6000.

A

Table 1

Type	Rated current of tripping (In A)	Rated current adjust range (A)	The standard rated power of three phase motor(kw)										Flashover distance (mm)
			230/240V		400/415V		440V		500V		690V		
			ku kA	ks kA	ku kA	ks kA	Icu kA	ks kA	Icu kA	ks kA	Icu kA	ks kA	
YCP5-25M/ME	0.16	0.1-0.16	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	0.25	0.16-0.25	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	0.4	0.25-0.4	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	0.63	0.4-0.63	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	1	0.63-1	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	1.6	1-1.6	100	100	100	100	100	100	100	100	100	100	50
YCP5-25M/ME	2.5	1.6-2.5	100	100	100	100	100	100	100	100	3	2	50
YCP5-25M/ME	4	2.5-4	100	100	100	100	100	100	100	100	3	2	50
YCP5-25M/ME	6.3	4-6.3	100	100	100	100	50	50	50	50	3	2	50
YCP5-25M/ME	10	6-10	100	100	100	100	15	10	10	10	3	2	50
YCP5-25M/ME	14	9-14	100	100	6	2	6	2	6	2	3	2	50
YCP5-25M/ME	18	13-18	100	100	6	2	6	2	6	2	3	2	50
YCP5-25M/ME	23	17-23	50	50	6	2	6	2	6	2	3	2	50
YCP5-25M/ME	25	20-25	50	50	6	2	6	2	6	2	3	2	50
YCP5-80M/ME	25	16-25	-	-	15	7.5	-	-	-	-	-	-	50
YCP5-80M/ME	40	25-40	-	-	15	7.5	-	-	-	-	-	-	50
YCP5-80M/ME	63	40-63	-	-	15	7.5	-	-	-	-	-	-	50
YCP5-80M/ME	80	56-80	-	-	15	7.5	-	-	-	-	-	-	50

A

The rated power of three phase motor controlled by the starter(Table 2)

Table 2

Type	Rated current of trip (In A)	Rated current adjust range (A)	The standard rated power of three phase motor(kw)					
			AC-3, 50Hz/60Hz					
			230/240V	400V	415V	440V	500V	690V
YCP5-25M/ME	0.16	0.1-0.16	-	-	-	-	-	-
YCP5-25M/ME	0.25	0.16-0.25	-	-	-	-	-	-
YCP5-25M/ME	0.4	0.25-0.4	-	-	-	-	-	-
YCP5-25M/ME	0.63	0.4-0.63	-	-	-	-	-	0.37
YCP5-25M/ME	1	0.63-1	-	-	-	0.37	0.37	0.55
YCP5-25M/ME	1.6	1-1.6	-	0.37	-	0.55	0.75	1.1
YCP5-25M/ME	2.5	1.6-2.5	0.37	0.75	0.75	1.1	1.1	1.5
YCP5-25M/ME	4	2.5-4	0.75	1.5	1.5	1.5	2.2	3
YCP5-25M/ME	6.3	4-6.3	1.1	2.2	2.2	3	3.7	4
YCP5-25M/ME	10	6-10	2.2	4	4	4	5.5	7.5
YCP5-25M/ME	14	9-14	3	5.5	5.5	7.5	7.5	9
YCP5-25M/ME	18	13-18	4	7.5	9	9	9	11
YCP5-25M/ME	23	17-23	5.5	11	11	11	11	15
YCP5-25M/ME	25	20-25	5.5	11	11	11	15	18.5
YCP5-80M/ME	25	16-25	5.5	11	11	-	-	-
YCP5-80M/ME	40	25-40	11	18.5	22	-	-	-
YCP5-80M/ME	63	40-63	15	30	33	-	-	-
YCP5-80M/ME	80	56-80	22	40	45	-	-	-

Acting characteristic of each phase in distribution circuit breaker in the load balanced condition

Table 3

number	Multiple of setting current	Acting time	Initial state	Ambient air temperature
1	1.05In	≤1h non-tripping	Cold state	+40℃±2℃
2	1.3In	≤1h tripping	Start after 1	
3	10In	≤0.02s tripping	Cold state	Any suitable temperature

Acting characteristic of each phase in motor protector circuit breaker in the load balanced condition

Table 4

number	Multiple of setting current	Acting time	Initial state	Ambient air temperature
1	1.05In	≤2h non-tripping	Cold state	+40℃±2℃
2	1.3In	≤2h tripping	Start after 1	+40℃±2℃
3	1.5In	≤3mins tripping	Start after 1 multiple setting current thermal equilibrium	+40℃±2℃
4	7.2In	2~10s tripping	Cold state	+40℃±2℃
5	12In	≤0.2s tripping	Cold state	Any suitable temperature

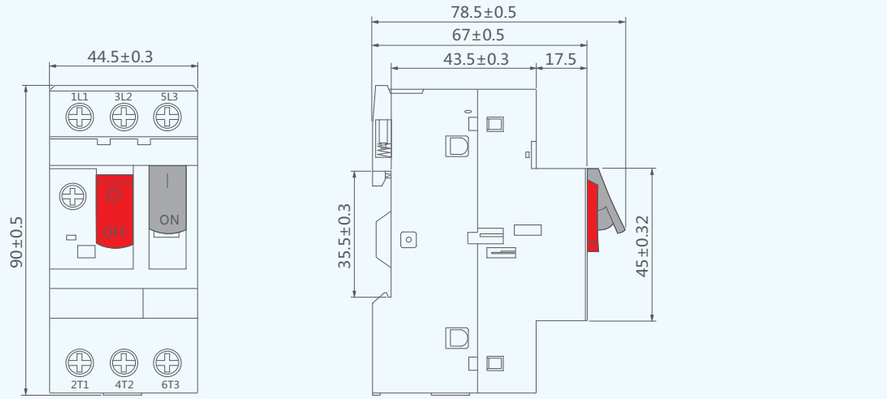
YCP5
Magnetic Starter

Main Technical parameters

1. The breaker can be attached with the UVT, shunt release (these two can not be both installed) and auxiliary contact
2. Acting characteristic of the UVT
   When the voltage reduced to 35%~70% of the rated voltage, the UVT should work; When the supply voltage reduce below 35% of the rated, the UVT should prevent the breaker from closing; When the supply voltage rise over 85% of the rated, the UVT should ensure the breaker to close.
3. Acting characteristic of shunt release
   Shunt release's action voltage range is 70%~110% of rated working voltage, can trip circuit breaker reliably.

Outline and installation dimensions

YCP5-25



YCP5-80