В



YCM1 series moulded case circuit breaker(herein after called circuit breaker) adopts international advanced design and manufactural technology, it can be divided

into L-type (standard type), M-type (higher 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.

Type designation YC M 1 - 🗆 🗆 / 🗆 🗆 N pole for 4P circuit breaker(note 3) Application(note 1) 1. for power distribution; 2. for motor protection 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 2 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;

Distribution Apparatus YCM1 MCCB

Function and features

- 1. Temperature: $-5^{\circ}C \sim +40^{\circ}C$; the average value within 24h shall not exceed $+35^{\circ}C$. 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:
- lower temperature. For example, RH could be 90% at +20°C, special measures should be taken to occurrence of dews.

Specifications

Туре				YCM	1-63	YCM1	1-125	YCM1-160	YCM	1-250	YCM	1-400	YCM	1-630	YCM1-800	YCM1-1250	YCM1-1600
Poles		Ρ		3	3, 4	2, 3	8, 4	3P	2,	3, 4	3	4	3	4	3, 4	3	3
Rated current In		A		10, 20, 32, 50,	16, 25, 40, 63	10, 20, 32, 50, 80, 125	16, 25, 40, 63 100,	20,25, 32,40, 50,63, 80,100, 125,140, 160	100, 140 180, 225,	125, 160, , 200 , 250	225, 315, 400	, 250, 350,)	400, 630	500,	630, 700, 800	800, 1000 1250	1600
Rated insulation voltage Ui		V		50	0	800											
Rated impulse withstand voltage l	Jimp	V		60	00	8000											
Rated operation voltage Ue		V		AC400 AC400/690													
Breaking capacity c	lass			L	М	L	Μ	L	L	М	L	Μ	L	Μ	М	М	Μ
Limit short-circuit		1.4	400V	35	50	35	50	50	35	50	50	65	50	65	75	85	85
breaking capacity l	cu	КA	690V			8	10	10	8	10	10	20	10	20	30	25	25
Working short-circu	uit	ĿΛ	400V	22	25	22	25	25	22	25	35	42	35	42	50	42.5	42.5
breaking capacity Ics	CS	КA	690V			4	5	5	4	5	5	10	5	10	15	12.5	12.5
Arcing distance mm					50				100								
Operating	Elect	rical li	fe	1500 1500		00	1500	500 1000		1000		1000		500	500	500	
frequency	mecl	hanica	l life	85	00	850	00	8500	70	00	40	00	40	00	2500	2500	2500





At mounting site, relative humidity not exceed 50% at the max temperature of +40°C, higher relative humidity is allowable under

Release method and accessories code

Table 1

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	Release meth accessories	od and code	Ac	cessories installatio	n and down-leads	
Accessories name	Electromagnetic release	Complex release	YCM1-63 YCM1-100	YCM1-160 YCM1LE-225	YCM1-400 YCM1-630	YCM1-800 YCM1-1250
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, under-voltage release	250	350				
Secondary auxiliary contact	260	360	< <u></u>		< I I I I	
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				

handle

Note: left right Alarm contact 🗆 Shunt release • Auxiliary contact 🗉 Undervoltage release •

Distribution Apparatus YCM1 MCCB



- 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

- 8. Auxiliary contact
- 9. Motor-drive operation mechanism
- 10.Extended manual operation handle
- 11. Mechanical interlock
- 12. Front connection plate
- 13. Interphase barrier
- 7. Alarm contact



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Overall and mounting dimensions(mm)







Tupo			Installation size (mm)								
туре	W	L	Н	W1	W2	L1	H1	H2	A	В	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
YCM1-125L	92	150	68	60	-	200	88	24	30	129	4.5
YCM1-125M	92	150	86	60	122	200	105	24	30	129	4.5
YCM1-250L	107	165	86	70	-	215	110	24	35	126	5
YCM1-250M	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
YCM1-1250M	210	406	141	140	-	715	193	60	70	375	11

Distribution Apparatus

YCM1 MCCB

Overall and mounting dimensions(mm)







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Distribution Apparatus YCM1 MCCB

Madal	Matched		D	imensio	ns		11-0.0		Mechanical life	Motor power	
woder	circuit breaker	А	В	С	D	E	Ue(V)	Ie(A)	(times)	(W)	
YCM1-63	YCM1	25	117	74	102	79	К1	≤0.5	14000	14	
YCM1-100	YCM1	30	129	90	116	77	K1	≤0.5	14000	14	
YCM1-225	YCM1	35	126	90	116	77	K1	≤0.5	14000	14	
YCM1-400	YCM1	44	194	130	176	115	K2	≤2	5000	35	
YCM1-630	YCM1	58	200	130	176	115	K2	≤2	5000	35	
YCM1-800	YCM1	70	243	130	176	115	K2	≤2	5000	35	
YCM1-1250	YCM1	70	300	130	176	115	К2	≤2	5000	35	

Distribution Apparatus YCM1 MCCB





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

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

Frame current Inm	Rated thermal current Ith
Inm≤225	ЗА
Inm≥400	6A