

Application

YTTM1 series moulded case circuit breaker is a new type product developed and manufactured by Adopting international advanced technology. It is supplied with rated insulation voltage 800V and used for circuit of AC 50Hz, rated operation voltage AC 400V or below rated operation current up to 800A for infrequent changing over and starting of the motors. Equipped with the protection devices for over-current, short circuit and under voltage, the product is capable of preventing damage of circuits and supply units. The product conforms to IEC60947-2 standard.



Specifications

Model	Rated Frame Current (A)	Rated Current (A)	Rated Working Voltage (V)	Rated Insulated Voltage (V)	Rated Ultimate Short-circuit Breaking Capacity KA 400V	Rated Ruling Breaking Capacity KA 400V	Overall Dimension			Mounting Dimension(Front in Wiring)		
							L	W 3P/4P	H	A	B	4- d
YTTM1-63	63	6,10,16,20,25,32,40,50,63	AC400V	AC500V	25	18	135	78/103	81.5	25	117	3.5
YTTM1-125	125	10,16,20,25,32,40,50,63,80,100,125	AC690V	AC800V	35	22	150	92/122	86	30	129	4.5
YTTM1-250	250	100,125,140,160,180,200,225,250	AC690V	AC800V	35	22	165	107/142	103	35	162	4.5
YTTM1-400	400	225,250,315,350,400	AC690V	AC800V	50	35	257	150/198	105	44	194	7
YTTM1-630	630	400,500,630	AC690V	AC800V	50	35	270	182/240	110	58	200	7
YTTM1-800	800	630,700,800	AC690V	AC800V	75	50	275	210	115.5	70	243	7

Working Condition

- Not over altitude 2000m
- Ambient temperature is between -5 to+40
- Withstand the influence of moist air;
- Withstand the influence of smoke fog,salt mist;
- Withstand the influence of fungus;
- The max. gradient is 22.5 ;
- Working reliable under the condition of normal vibration in ship;
- Working reliable under the condition of earth quake(4g);
- Working in the medium which not any explosive, no enough dielectric to corrode metal, no gas to damage insulation and electric conduction dust.
- Working in the place would not be invaded by rain and snow

Protective Characteristics

The thermodynamic of a circuit breaker provides the feature of inverse time-delay,while the magnetic release the instantaneous operation as shown on Table 1 (distribution circuit breaker)and Table 2 (motor protection circuit breaker):

Table 1(for distribution)

Rated current of release(A)	Thermodynamic release(ambient temp:land+40 ,marin+45 )		Electromagnetic release action current(A)
	1.05In(cold state) Non-action time(h)	1.30In(Hot state) Action time(h)	
10 In 63	1	1	10In±20%
63 In 100	2	2	
100 In 800	2	2	5In±20% 10In±20%

Table 2(for protective motor)

Rated current of release(A)	Thermodynamic release(ambient temp:land+40 ,marin+45 )				Electromagnetic release action current(A)
	1.0In(cold state) Non-action time(h)	1.20In(Hot state) Action time(h)	1.50In(Hot state) Action time(h)	7.2In(cold state) Non-action time(h)	
10 In 225	2	2	4min	4s<Tp 10s	12In±20%
225 In 800			8min	6s<Tp 20s	

Note:No 5In magnetic release on 100A, 125A or YTTM1-160 and YTTM1-225.

Sectional area of connecting conductor

Rated Current Value	10	16	25	32	40	63	80	100	125	160	180,220,225	250	315,350	400
Cable(mm²)	1.5	2.5	4	6	10	16	25	35	50	70	95	120	185	240

Rated Current Value	Cable		Copper Row	
	Cable(mm²)	Quantitly	Dimension(mm)	Quantitly
500	150	2	30×5	2
630	185	2	40×5	2
700,800	200	2	40×5	2

Accessories

The accessories are fixed into the circuit breaker.

- Remote tripping:  
MX or MN releases are used to trip the circuit breaker.
- This release trips the circuit breaker when the control voltage drops below the trip-ping threshold
- Tripping threshold between 35% to 70% of the rated voltage
- Circuit-breaker closing is possible only if the voltage exceeds 85% of the rated voltage.
- Circuit-breaker tripping by an MN release meets the requirements of standard IEC 60947-2.

Moulded Case Circuit Breaker Accessories



MX(Shunt Release)

Technical Data	
Rated Control Voltage Us(V)	230V, 400V AC
Operating Voltage(V)	(0.7-1.1) Us

shunt release