

Distribution Apparatus

YCM7YV MCCB



General

YCM7YV series electronic plastic case circuit breaker (hereinafter referred to as: circuit breaker) is suitable for low-voltage power grids with AC 50Hz, rated insulation voltage 800V, rated operating voltage 400V and below, and rated operating current up to 800A. The circuit breaker has overload long-delay inverse time limit, short-circuit short-delay inverse time limit, short-circuit short-delay fixed time limit, short-circuit instantaneous and under-voltage protection functions. Under normal circumstances, the circuit breaker is used for infrequent switching of circuits and infrequent starting of motors. This series of circuit breakers has isolation function, and its corresponding symbol is " — — — — — " Standard: IEC60947-2.

Operating conditions

1. Ambient air temperature
 - a) The upper limit value does not exceed +40°C;
 - b) The lower limit value does not exceed -5°C;
 - c) The average value over 24 hours does not exceed +35°C;
2. Altitude

The altitude of the installation site does not exceed 2000m.
3. Atmospheric conditions

The relative humidity of the atmosphere does not exceed 50% when the ambient maximum temperature is +40°C; it can have higher relative humidity at lower temperatures; when the monthly average minimum temperature of the wettest month is +25°C, the monthly average maximum temperature of the month is +25°C. The relative humidity is 90%, taking into account condensation that occurs on the product surface due to temperature changes.
4. Pollution degree

Pollution degree 3, the accessories installed in the circuit breaker have a pollution degree 2.
5. Installation category

The main circuit of the circuit breaker shall be installation category III, and the auxiliary circuit and control circuit shall be installation category II.
6. Installation conditions.

Circuit breakers should generally be installed vertically, usually with upward wiring, and the external magnetic field at the installation site should not exceed 5 times the geomagnetic field in any direction.

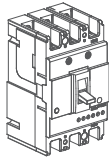
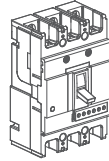
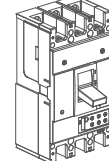
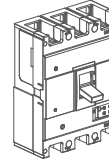
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Selection

YCM7YV	250	M	3	3	00	100-250A
Model	Shell frame	Breaking capacity	Number of poles	Tripping method	Accessorie	Rated current
YCM7YV	160 250 400 630	M: Standard breaking	3:3P	3: Electronic	00: No accessories	16-32A 40-100A 64-160A 100-250A 160-400A 252-630A

Technical data

Type	YCM7YV-160M	YCM7YV-250M	YCM7YV-400M	YCM7YV-630M
Frame(A)	160	250	400	630
Number of poles	3	3	3	3
Products				
Rated current adjustable range In(A)	16-32, 40-100, 64-160	100-250	160-400,	160-400, 252-630,
Rated voltage Ue(V)	AC400V	AC400V	AC400V	AC400V
Rated insulation voltage Ui(V)	AC800V	AC800V	AC800V	AC800V
Short-circuit breaking capacity Icu/1cs(kA)	AC400V 35/25	35/25	50/35	50/35
Operation life (cycle)	ON OFF	1500 8500	1000 7000	1000 4000
Motor-driven operation	•	•	•	•
External rotary handle	•	•	•	•
Automatic tripping device	Electronic type	Electronic type	Electronic type	Electronic type

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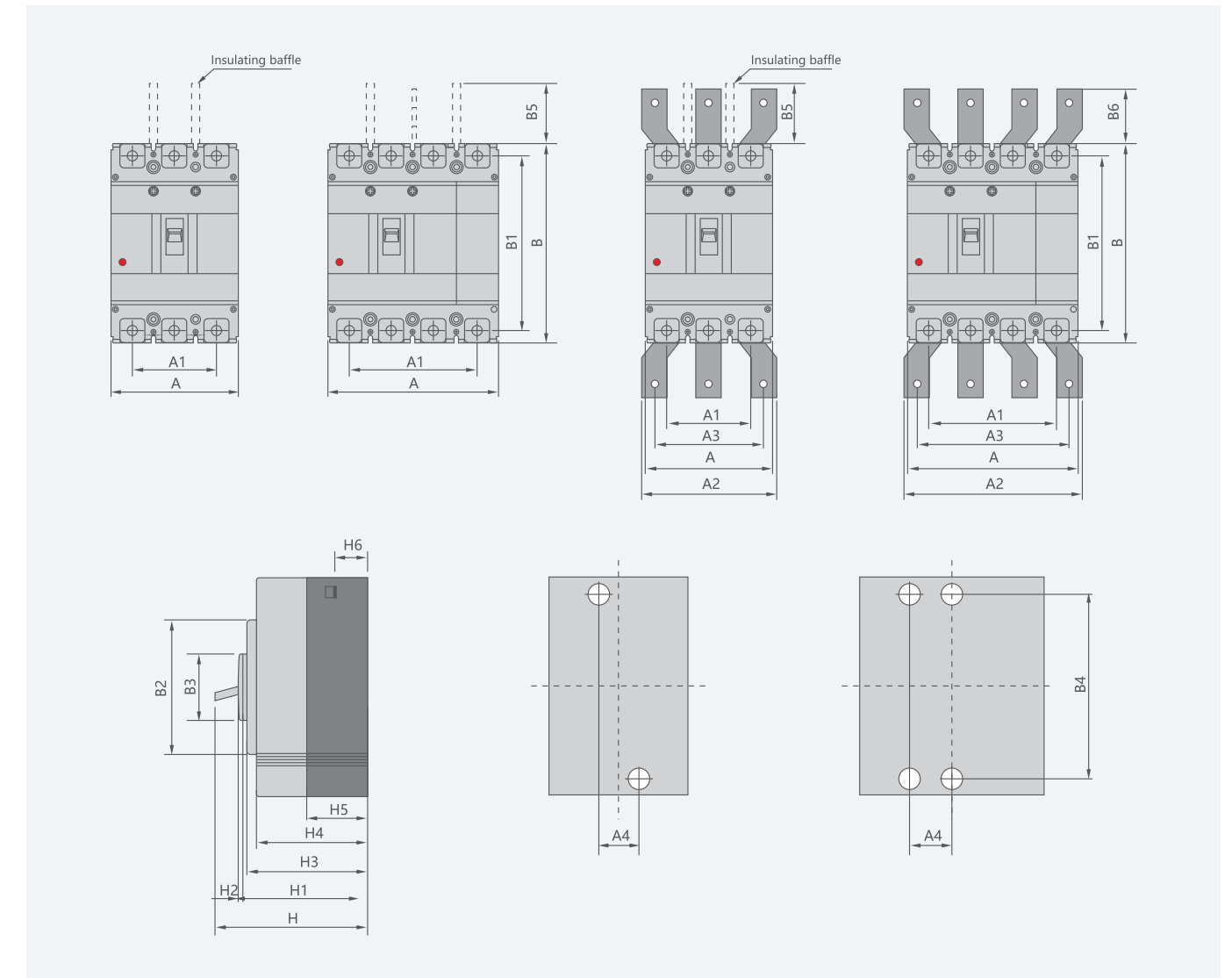
Function description

Specifications and functions			
Classification	Describe		
Display method	LCD display+LED indicator		●
Interface operation	key		●
Protection function	Current protection	Overload long delay protection function	●
		Short circuit protection Time delayprotection	●
		Short circuit instantaneous protection function	●
		Overload warning function	●
	Voltage protection	Undervoltage protection work	●
		Overvoltage protection function	●
		Lack of phase protection function	●
		Power side zero break protection function	●
	Communication function	D/LT645-2007 Multifunctional metercommunication protocol Modbus-RTu	●
		Modbus-RTU communication protocol	○
		RS-485Communication hardware 1 RS-485	●
	External DI/O port function	Communication auxiliary power input	○
		One DI/O programmable control input	○
	Fault record	10 trip failure storage	●
80 protection function logout events recorded		●	
10 gate position changeevents recorded		●	
10 alarm event records		●	
Time function	With year, month, day, minute and second real-time clock function	●	
Measurement function	Measure electrical parameters	Voltage 0.7Ue~1.3Ue,0.5%	●
		Current 0.2In~1.2In,0.5%:	●
		Three-phase and total powerfactor 0.5~100005	●
		Three-phase and total active power, reactivpower,apparent power	●
		Three-phase and total active energy, reactive energy,apparent energy	●
		Voltage harmonics and total voltage harmonic distortion	●
		Current harmonics and total current harmonic distortion	●

Note:
The symbol "●" indicates that it has its function: the symbol "○"indicates that this function is optional; The symbol "-" indicates that thisfunction is unavailable

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Overall and mounting dimensions(mm)



Model	Overall dimensions																		Mounting 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	4P																
160M	105	-	70	-	-	-	-	-	165	144	104	59	110	-	120	98	2	98	84	22.5	24	35	126	M8
250M	105	-	70	-	-	-	-	-	165	144	104	59	110	-	120	98	2	98	97	22.5	24	35	126	M8
400M	140	-	88	-	140	-	112	-	257	230	179	100	110	42	155	110	3	110	97	29	30	44	194	M10
630M	140	-	88	-	140	-	112	-	257	230	179	100	110	42	155	110	3	110	97	30	32	44	194	M10
800M	210	-	140	-	180	-	140	-	257	243	192	90	110	87	155	107	5	104	97	25	25	70	243	M12