



RDM5Z series Auto-reclose Moulded Case Circuit Breaker



Better Communicate Function

RS485 communicate port, Support protocol of Modbus and State Grid. Functions of Telemetry, Telesignalling, telecontrol, Teleadjusting for system remote control.



Full range measure and maintenance

Intelligent control unit consists of microelectronics processing, has functions of power grid monitor and protect.



Higher Reliability

New design With proprietary technology, through series of Reliability experiment.



Safe Power Protection

Has accurate selective protection, auto-reclose function for distribution automatic operate.

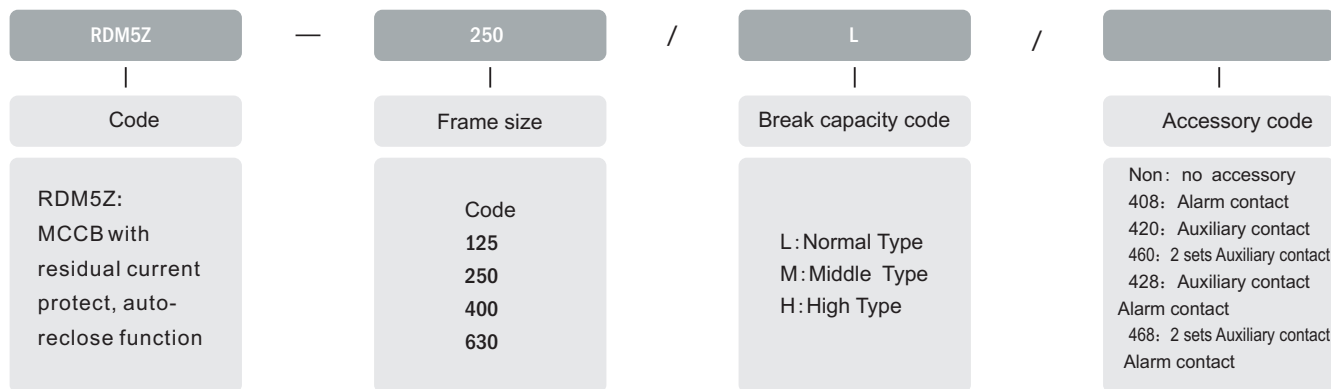
RDM5Z series Auto-Reclose Circuit Breaker

Introduction

RDM5Z series Auto-Reclose circuit breaker(MCCB) is mainly applied to power system of AC50/60Hz, rated operated voltage up to 400V, rated operate current up to 630A, 3-phase and 4 lines and neutral point grounding directly. MCCB is used to distribute electric energy, protect circuit. And it also works for protecting under-voltage, overvoltage protect(includes power side phase-loss, voltage -loss,Faulted neutral line), overcurrent protect(Current induced self generating function), short-circuit protect, residual current protect. And it has online real time monitor and display the circuit parameters of current, voltage, residual current. And the Auto-reclose function can reclose the circuit after solving the faults automatically.

Standard: IEC60947-2 GB14048.2 and GB/Z6829.

Type selection



Note: 1) Has external terminal port, remote switch function instead of regular shunt release function. Own overvoltage, undervoltage protect function instead of regular undervoltage release.

2) Auto-reclose function, has two methods of auto-manual operate and motor operate.

3) Current set $(0.4 \sim 1.0) \times I_n$ + close, 1A adjustable

For example: RDM5Z-250M/420 200A 500mA 100Pcs means that RDM5Z-250, Middle type capacity, with Auxiliary contact, rated current 200A, rated leakage operate current 500mA, other parameter default, 100PCS.

Residual Current Time Set

Time set	Performance Characteristic				
	Non-delay Performance Characteristic				
0.3s	Residual current	$1 \Delta n$	$2I \Delta n$	$5I \Delta n$	$10I \Delta n$
	Max break time(s)	0.3	0.15	0.04	0.04
Limit non drive time 0.06s of delay type performance characteristic					
0.5s	Residual current	$1 \Delta n$	$2I \Delta n$	$5I \Delta n$	$10I \Delta n$
	Max break time(s)	0.5	0.2	0.15	0.15
	Limit non drive time (s)		0.06	0.06	0.06
Limit non drive time 0.2s of delay type performance characteristic					
0.7s	Residual current	$1 \Delta n$	$2I \Delta n$	$5I \Delta n$	$10I \Delta n$
	Max break time(s)	0.7	0.3	0.25	0.25
	Limit non drive time (s)		0.2	0.15	0.15

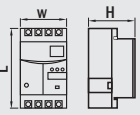
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Optional Function Table

Function set	Set range	Default
1Leakage alarm	On, off(Long press OK key 5S quick switch)	OFF
2Leakage threshold	50、100、200、300、500、800mA、Auto(125\250 frame)	300mA
3Leakage delay	50、100、200、300、500、800mA、1000mA、Auto(400\630 frame)	0.3s
4Special protect	0.3s, 0.5s, 0.7s	OFF
5Overcurrent Ir	Off, On(30mA ?50mA)	In
6Overcurrent Tr	(0.4~1.0) × In+Off	3s
7Short-delay lsd	3s~18s	8lr
8Short-delay Tsd	(2~10) × Ir、 Off	0.2s
9Instantaneous Li	0.1s~1.0s	10lr
10Overvoltage Uov	(2~14) × Ir?Off	275V
11Overvoltage delay	253V~286V, Off	3s
12Under-voltage Ulv	1s~10s	OFF
13Undervoltage delay	154V~187V, Off	3s
14Phase-loss protect	1s~10s	OFF
15Neutral line break protect	Off, On	OFF
16Connect switch on	Off, On	ON
17Break switch off	On, Off	ON
18Auto-reclose	Off, On	ON

Record query	1 History Record	Recordable tripping type, tripping value, Time
	2 Tripping Time	1 Data clear times 2 Total tripping times 3 Locking tripping times 4 Leakage tripping times 5 Current tripping times 6 Voltage tripping times 7 Manual tripping times 8 Neutral line off tripping times 9 Test tripping times 10 Leakage return times
Communicate set	Communication rate	0.6 1.2 2.4 4.8 9.6 19.2
	Communication address	According to the specified address input

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Frame size rated current I_n (A)	125			250			400			630					
Rated current I_n (A)	125			250			400			630					
Current set I_R (A)	(50~125)+OFF, step 1A adjustable			(100~250)+OFF, step 1A adjustable			(160~400)+OFF, step 1A adjustable			(252~630)+OFF, step 1A adjustable					
Pole	3P+N(N-Pole, Through type)														
Rated frequency(Hz)	50、60														
Rated insulation voltage U_i (V)	AC1000														
Rated impulse withstand voltage U_{imp} (V)	8000														
Rated operate voltage U_e (V)	AC400														
Arc distance (mm)	≤ 50						≤ 100								
Short-circuit breaking capacity level	L	M	H	L	M	H	L	M	H	L	M	H			
Rated ultimate short-circuit breaking capacity I_{cu} (kA)	35	50	65	35	50	85	50	65	85	50	65	85			
Rated operate short-circuit breaking capacity I_{cs} (kA)	25	35	42	25	42	50	35	42	55	35	42	55			
Rated short-time withstand current I_{cw} (kA/0.5s)	—			—			5			8					
Using Type	A			A			B			B					
Rated residual operate current $I_{?n}$ (mA)	50、100、200、300 500、800、Auto ¹⁾			50、100、200、300 500、800、Auto ¹⁾			50、100、200、300 500、800、1000、Auto ¹⁾			50、100、200、300 500、800、1000、Auto ¹⁾					
Rated residual non-operate current $I_{?no}$ (mA)	0.5I Δ n														
Rated residual short-circuit making(breaking) capacity $I_{?m}$ (kA)	0.25I $_{cu}$														
Residual current operate time(s)	Non-delay			0.3s											
	Delay			0.5s、0.7s ²⁾											
Residual current operate type	AC Type														
Reclose time(s)	20~60														
Standard	IEC60947-2 GB14048.2 GB/Z6829														
Ambient temperature	-35℃ ~+70℃														
Electrical life	8000			8000			7500			7500					
Mechanical life	20000			20000			10000			10000					
Communicate function	■			■			■			■					
Record query	■			■			■			■					
Time set	■			■			■			■					
Data clear	■			■			■			■					
LCD display	■			■			■			■					
Alarm contact	■			■			■			■					
Auxiliary contact	■			■			■			■					
2 sets Auxiliary contact	■			■			■			■					
Auxiliary contact, Alarm contact	■			■			■			■					
2 sets Auxiliary contact, Alarm contact	■			■			■			■					
Dimension (mm)			W	122			142			198			198		
			L	220			240			336			336		
			H	139			142			182			182		

Note: 1) Auto means Residual current auto-track function, and the residual current value is customizable.

2) The other time shift can be customizable.