

RDM5E series Moulded Case Circuit Breaker

Introduction

RDM5E series Electronic MCCB is applied to power distribution network of AC50/60Hz, Rated operate voltage up to 690V, Rated current up to 800A. It is mainly used to distributing electric energy and protecting circuit and power-supply device against the faults of overload, short-circuit and under-voltage. And it also can work for transferring circuit and starting motor unfrequently. MCCB has protect functions of overload long-time-delay inverse time limit, short-circuit short-time delay inverse time limit, short-circuit short-time constant time-lag, short-circuit instantaneous and undervoltage. This product has advantages of small volume, high breaking capacity, short-arc, accessory easy install, anti-vibration.

This product conforms to standard of IEC60497-2 / GB14048.2.

Type selection

RDM5E	125	M	P	/	4	4	00	2	I	R
Model No.	Frame size	Breaking capacity	Operate Method		Pole	Release code	Accessory code	Application	Communicate Accessory	Install and wire code
RDM5E: RDM5E series MCCB	?? 125 250 400 800	M:Middle Type H:High Type	Non: direct handle operate Z: rotary handle operate P: motor operate		3: 3P 4: 4P	4:Electronic Release	See Table1	Non: Distribut MCCB 2: Motor protect MCCB	Non: basic type I:communicate shunt alarm accessory II: state feedback communicate accessory	Non : front board connect R: back board connect PF: insert type front board connect PR: insert type back board connect

Note: 1) Overload thermal memory function, Short-circuit(short-time delay) thermal memory function


2) Communicate function: Standard Rs485 Port, Modbus Fieldbus Protocol. External functional accessories as the following Table:

Code	Name	Function
1	Communicate shunt alarm accessory	communicate+ shunt+ overload alarm without tripping+ Reset+ indicator
2	State feedback communicate accessory	4 Remote communicate+ Reset+ operate indicator
3	Prepaid accessory	prepaid control+ indicator

For example: RDM5E-250MP/4310B 225A AC230V-shunt release 100Pcs means that RDM5E-250, Middle breaking capacity M type, motor operate, 4Pole B Type distribute protect MCCB with Ac230V shunt-release, front board connect, rated current 225A, 100PCS.

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Internal Accessory Code Table

Alarm Switch
 Auxiliary Switch
 ● Shunt Release
 ○ Under-voltage Release
 → Lead Direction
 Handle
 left install  Right install 

Code	Accessory	RDM5E-125	RDM5E-250	RDM5E-400、800
		3P/4P		
00	No internal accessory			
08	Alarm switch			
10	Shunt release			
20	Auxiliary switch(1NO1NC)			
	Auxiliary switch(2NO2NC)			
30	Under-voltage release			
40	Shunt release+Auxiliary switch(1NO1NC)			
	Shunt release+Auxiliary switch(2NO2NC)			
50	Shunt release+Under-voltage release			
60	2 sets Auxiliary switch(2NO2NC)			
	2 sets Auxiliary switch(4NO4NC)			
70	Under-voltage release+Auxiliary switch(1NO1NC)			
	Under-voltage release+Auxiliary switch(2NO2NC)			
18	Shunt release+Alarm switch			
28	Auxiliary switch(1NO1NC)+Alarm switch			
38	Under-voltage release+Alarm switch			
48	Shunt release+Auxiliary switch(1NO1NC)+Alarm switch			
68	2 sets Auxiliary switch(2NO2NC)Alarm switch			
78	Under-voltage release Auxiliary switch(1NO1NC)Alarm switch			

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Main Technical parameter

Frame size rated current $I_{nm}(A)$	125		250		400		800			
Rated current $I_n(A)$	32、63、125		250		400		630、800			
Current set $I_R(A)$	(12.5~125)+close		(100~250)+close		(160~400)+close		(250~800)+close			
Pole	3P/4P									
Rated frequency(Hz)	50									
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		≤ 50		≤ 100		≤ 100			
Short-circuit breaking capacity level	M	H	M	H	M	H	M	H		
Rated ultimate short-circuit breaking capacity $I_{cu}(kA)$	50	85	50	85	65	100	75	100		
Rated operate short-circuit breaking capacity $I_{cs}(kA)$	35	50	35	50	42	65	50	65		
Rated short-time withstand current $I_{cw}(kA/0.5s)$	—		—		5		10			
Using Type	A		A		B		B			
Standard	GB14048.1 GB14048.2 GB14048.4									
Ambient temperature	$-35^{\circ}C \sim +70^{\circ}C$									
Electrical life	8000		8000		7500		7500			
Mechanical life	20000		20000		10000		10000			
Communicate function	■		■		■		■			
Time set	■		■		■		■			
Shunt release	■		■		■		■			
Undervoltage release	■		■		■		■			
Alarm contact	■		■		■		■			
Auxiliary contact	■		■		■		■			
Dimension (mm)		W	92(3P) 122(4P)		107(3P) 142(4P)		150(3P) 198(4P)		210(3P) 280(4P)	
		L	150		165		257		280	
		H1	110		115		148		168	
		H2	96		94		115		122	