D Series
PV DC Moulded Case Circuit Breaker

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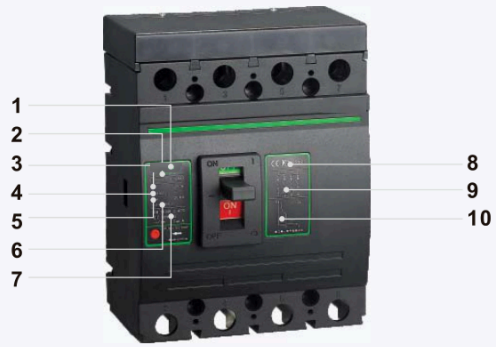
- High Short-Circuit/Breaking Capacity
- Protection Functions: Overload, Short circuit , Unfrequent Operation
- Rated Voltage up to 1000V DC
- Rated Current 125A,250A
- IEC60947-2, GB14048-2
- Easy Installation

Application

D series PV DC Moulded Case Circuit Breaker (MCCB) are mainly used in large solar power system, which are applied for solar DC combiner box ,inverter and DC power distribution cabinet. Rated voltage up to 1000V DC, current up to 250A , with the function of overload protection and short-circuit protection.

Appearance Introduction



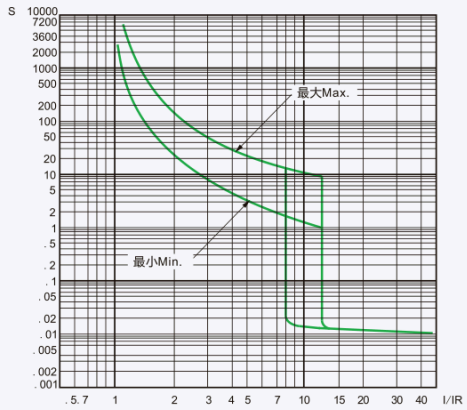
Type Instruction

D	-	250	4P	1000V
Product Code		Max Rated Current	Pole	Rated Voltage
PV DC Moulded Case Circuit Breaker		125A, 250A	4P	1000V

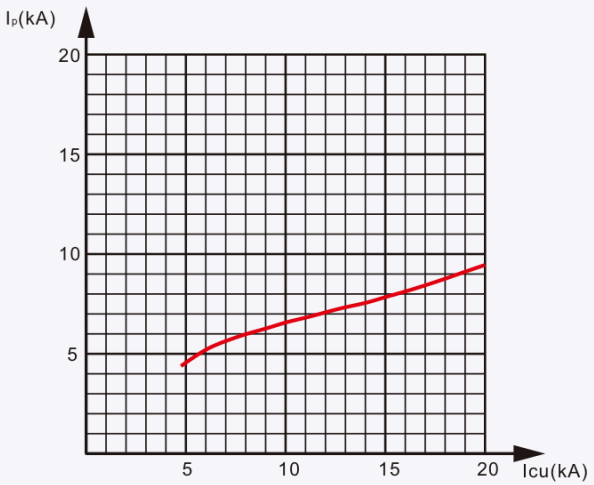
Parameter

D series PV DC MCCB						
Type		D-125	D-250			
Pole		4P	4P			
Max Rated Current		125A	250A			
Electrical Characteristics						
Rated Working Voltage	Ue	1000V DC	1000V DC			
Rated Current	In(A)	63/80 100/125	125	160	200	250
Rated Insulated Voltage	Ui	1000V DC				
Rated Impulsed Voltage	Uimp	8KV				
1 Min Power Frequency Withstand Voltage		3.8 KV	3.8 KV			
Ultimate Breaking Capacity	Icu	20 KA	20 KA			
Run Breaking Capacity	Ics	15 KA	15 KA			
4D Wiring Resistance			0.025mΩ	0.020mΩ	0.015mΩ	0.011mΩ
4D Power loss	I²R(W)		0.39	0.51	0.6	0.69
Protection						
Tripping Type		Thermal Magnetic Type				
Control And Indication						
Control Mode	Manual	Direct (RHD)	Optional			
		Extended(ERH)	Optional			
	MOD		Optional			
Shunt Release (SHT)		Optional				
Auxiliary Release		Optional				
Terminal End Cover		Yes				
Interphase Barriers		Yes				
Service Life/Cycle Operation						
Mechanical		14000	14000			
Electrical		2000	2000			
Size (L x W x H)		150.5x122x92.5	165x140x88			
Ingress Protection		All Sides IP40 ,Connection Terminal IP20				
Installation Environment						
Comply With		IEC60947-2/GB14048.2				
Storage Temperature		-40°C~+85°C				
Wire size (min.-max.)		16mm² – 50mm²	50mm²–120mm²			

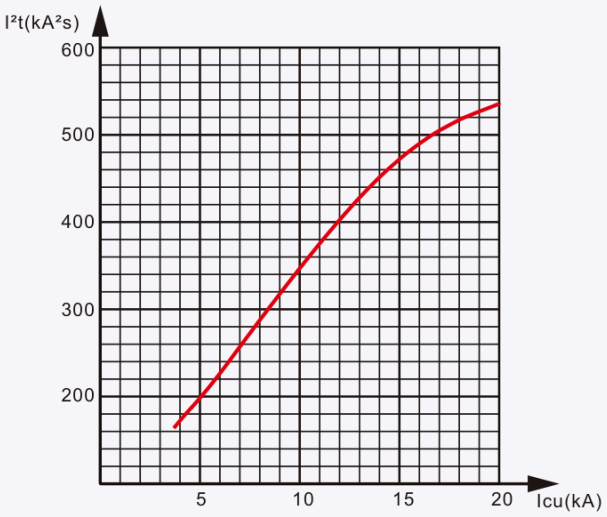
Characteristic Curve



Peak limit current curve



Thermal Stress

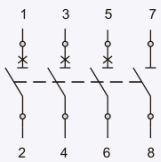
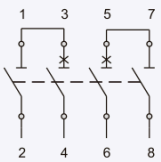
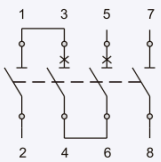
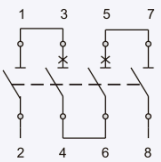
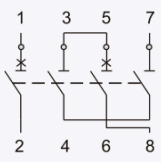


Test Data

D-250/4P Ue=1000V In=250A T=10ms

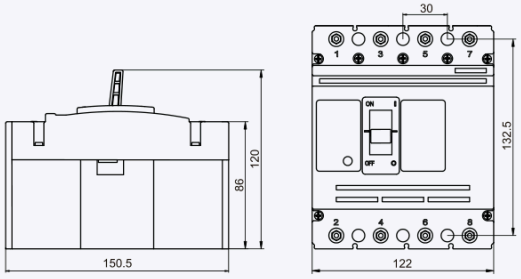
Icu	5kA	10kA	15kA	20kA
Ip	4.5kA	6.5kA	7.8kA	8.5kA
I²t	195kA²s	352kA²s	472kA²s	544kA²s

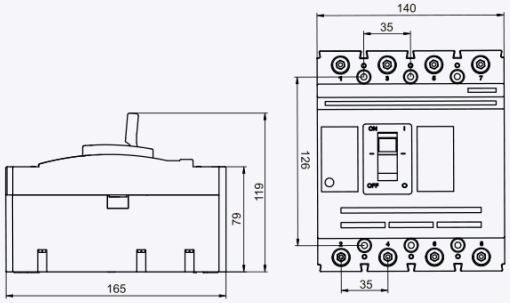
Type	D-125	D-250
Picture		

Type Code	4A	4B	4C	4D	4S
Contacts Wiring graph					

Dimensions(mm)

125A	250A

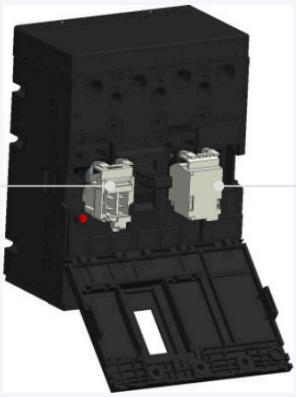




Type Instruction

CDM3-250 → Auxiliary contact

CM3-250 → Shunt trip releases



- **Auxiliary contacts synchronnous with main contacts of device**
- **Auxiliary Contacts is mounted on the left**
- **According to IEC/EN 62019**

- **Shunt Release for installation devices D-250**
- **Shunt Release is mounted on the right**
- **According to IEC/EN 62019**

Auxiliary contact unit

Electrical parameters

		CDM3-250
Contacts		1 changeover (CO)
Contact function		auxiliary
Tested according to		IEC/EN 62019
Rated op. voltage	AC 13	Ie=3A Ue=250V
	AC 15	Ie=2A Ue=250V
	DC 12	Ie=0.5A Ue=110V
Min. op. current per contact I_{min}		10 mA
Min. op. voltage per contact U_{min}		11V DC
Rated frequency		50/60 Hz

Shunt trip releases

Electrical parameters

		CM3-250
Contacts		1 changeover (CO)
Contact function		Shunt trip releases
Tested according to		IEC/EN 62019
Rated op. voltage	AC	Ie=2A Ue=220/415V
		Ie=2A Ue=24/48V
	DC	Ie=2A Ue=24/48V
Min. op. voltage		8.4 V
Min. op. current		1A
Max. op. voltage		26.4 V
Max. op. current		2A
Rated frequency		50/60 Hz

Dimensions(mm)

