

DC MCCBs Ex9MV2S-PV



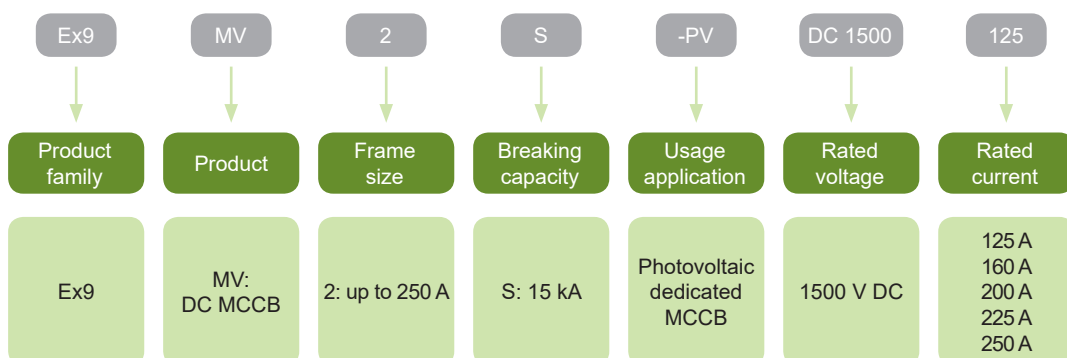
- DC Moulded Case Circuit Breakers
- Frame size M2
- Rated current up to 250 A
- Rated ultimate short circuit breaking capacity $I_{cu} = 15 \text{ kA}$, $I_{cs} = 100 \% I_{cu}$
- Rated voltage 1500 V DC
- Thermomagnetic releases
- Fixed version

DC Moulded Case Circuit Breakers Ex9MV2S-PV are intended mainly for photovoltaic applications. Testing according to IEC / EN 60947-2 standards ensures functions and reliability for wide variety of applications including isolation.

These breakers are offered with breaking capacity of 15 kA. Rated impulse withstand voltage $U_{imp} 12 \text{ kV}$ makes it possible to use them even in systems with occurrences of transient overvoltage waves of high intensity.

Utilization category A.

Type Key



Certification marks



DC MCCBs Ex9MV2S-PV

Version Ex9MV2S-PV/DC1500, $I_{cu} = 15 \text{ kA}$

- DC Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 15 \text{ kA}$ at 1500 V DC
- Fixed version
- Instantaneous release $I_i = I_n \times 10$
- Mounting screws and phase barriers in the scope of delivery



Rated current I_n	Article No.	Type	Packing
125 A	110194	Ex9MV2S-PV/DC1500 125	1/8
160 A	110195	Ex9MV2S-PV/DC1500 160	1/8
200 A	110196	Ex9MV2S-PV/DC1500 200	1/8
225 A	110197	Ex9MV2S-PV/DC1500 225	1/8
250 A	110198	Ex9MV2S-PV/DC1500 250	1/8

Technical Data Ex9MV2S

DC Moulded Case Circuit Breakers up to 250A

General parameters

Suitable for photovoltaics application

Internal accessories

Left auxiliary contact unit	AX22V	110199
	2AX22V	110200
Right auxiliary contact unit	AX22VR	110206
	2AX22VR	110207
Left alarm contact unit	AL22V	110201
Left auxiliary + alarm contact unit	AX+AL22V	110202
Right shunt trip releases	SHT22VR	110208-110210

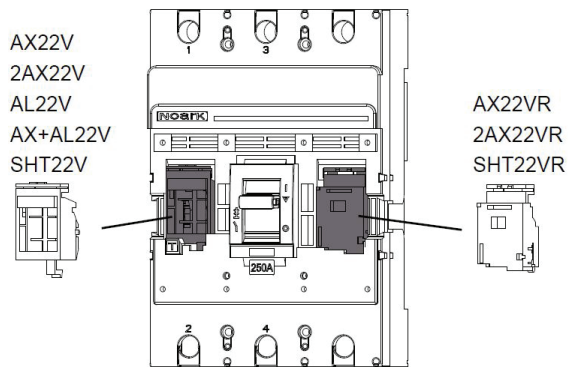
Max. number of installed internal accessories is 4 pcs of AX22, 1 pc of AL22 and 1 pc of a release SHT22

External accessories

Extended rotary handle	ERH1	110211
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Mounting screws as well as phase barriers in the scope of delivery

Accessories position



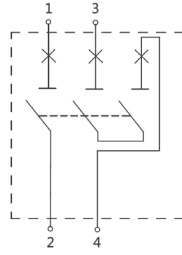
Electrical parameters

Tested according to	IEC/EN 60947-2
Rated op. voltage U_e	1500 V DC
Rated insulation voltage U_i	1500 V
Rated impulse withstand voltage U_{imp}	12 kV
Rated ultimate short-circuit breaking capacity (DC1500V, 2 poles in serie) (I_{cu})	15 kA
Rated service short-circuit breaking capacity DC1500V, (2 poles in serie) (I_{cs})	15 kA
Rated current	125 A, 160 A, 200 A, 225 A, 250 A
Utilization category	A
Mechanical service life	10 000 operation cycles
Electrical service life	2 000 operation cycles
Maximum frequency of switch. cycles	120 cycles per hour
Total disconnection time at short circuit	< 40 ms
Power loss per pole	max 32 W

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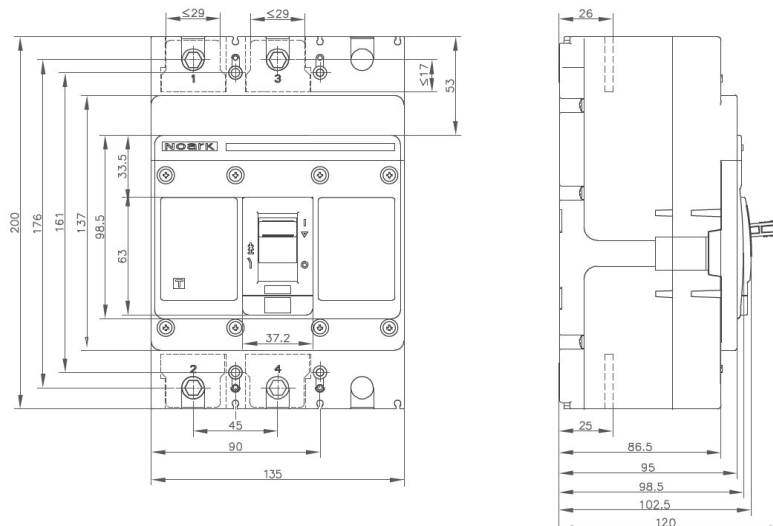
Wiring diagram



Mechanical parameters

Device width	135 mm			
Device height	200 mm			
Device depth	103 mm			
Mounting	onto panel			
Degree of protection	IP20			
Terminals	M10 screws			
Busbar thickness	≤ 4 mm			
Busbar width	≤ 29 mm			
Cable lug width	≤ 50 mm			
Fastening torque of terminals	25 Nm			
Ambient temperature	-40 — +70 °C			
Altitude	2000 m	3000 m	4000 m	5000 m
Rated operational current I_n	$1 \times I_n$	$0.97 \times I_n$	$0.93 \times I_n$	$0.89 \times I_n$
Rated operational voltage U_e	1500 V DC	1350 V DC	1200 V DC	1050 V DC
Rated insulation voltage U_i	1500 V	1500 V	1500 V	1500 V
Dielectric properties	3110 V DC	2890 V DC	2700 V DC	2500 V DC
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % at 20 °C			
Pollution degree	3			
Weight	3.3 kg			
Mounting position	vertical, can be rotated by 90° in each axis			

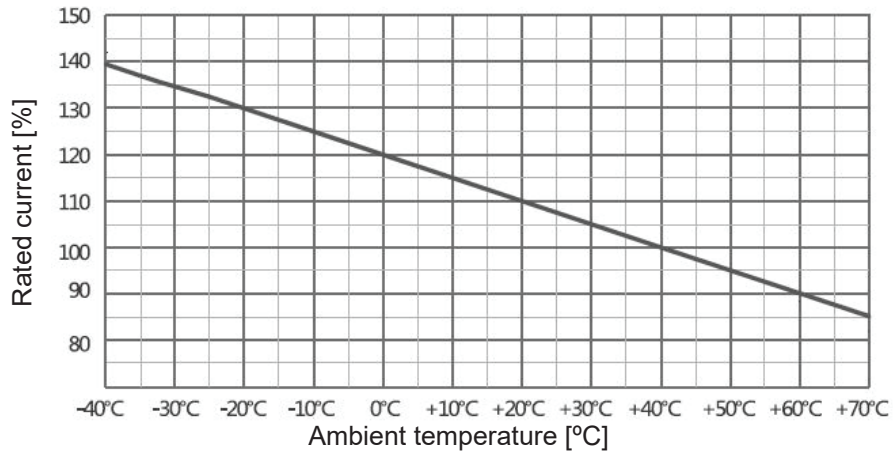
Dimensions



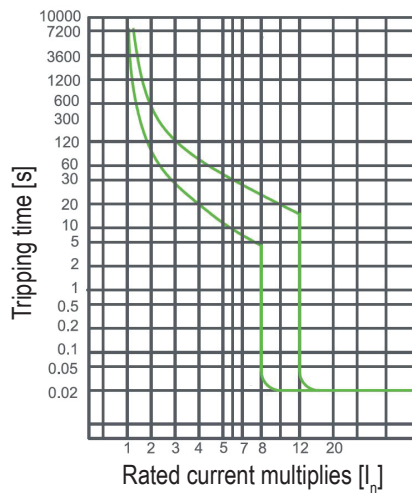
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Temperature derrating curve



Tripping characteristics



Installation space

