

# DC isolators Ex9IP

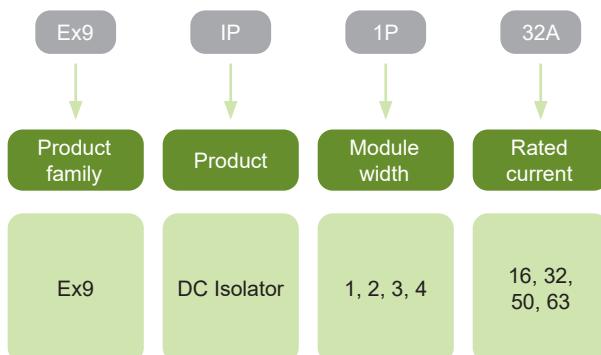


- DC modular isolators
- Non-polarized, suitable for PV systems
- Rated current up to 63 A
- Rated voltage up to 1000 V DC (250 V DC per pole/module)
- Rated short-time withstand current  $I_{cw} = 12 \times I_e, 1 \text{ s}$
- Meet requirements of IEC / EN 60947-3
- Width 1 to 4 modules
- Utilization category DC-22B
- Wide range of accessories

DC isolators Ex9IP can be used as a main switch in photovoltaic and similar applications. These switches are tested according to IEC / EN 60947-3 standards and fulfill also requirements for isolation function.

Ex9IP isolators can be also combined with wide range of accessories including auxiliary and signal contacts, shunt trip and undervoltage releases.

## Type Key



## Certification marks



# DC Isolators Ex9IP

## Accessories



Aux. or signal contacts  
**AX, AL, AXL**  
Up to 3 units

Voltage or trip releases  
**SHT, UVT**  
Up to 2 units

Isolator  
**Ex9IP**  
1, 2, 3, 4-module width

Auxiliary contacts AX31

Shunt trip releases SHT31

Undervoltage releases UVT31

All accessories are mounted to the Ex9IP isolators from the left and are same as for Ex9B circuit breakers. The undervoltage release UVT in PV system is intended e.g. for safe remote disconnection of DC part from installation.

# DC Isolators Ex9IP

## 1-module, 250 V DC



Rated current	Width	Article No.	Type	Packing
16 A	1 MU	101750	Ex9IP 1P 16A	1/12/144
32 A	1 MU	101751	Ex9IP 1P 32A	1/12/144
50 A	1 MU	101752	Ex9IP 1P 50A	1/12/144
63 A	1 MU	101753	Ex9IP 1P 63A	1/12/144

## 2-module, 500 V DC



Rated current	Width	Article No.	Type	Packing
16 A	2 MU	101754	Ex9IP 2P 16A	1/6/72
32 A	2 MU	101755	Ex9IP 2P 32A	1/6/72
50 A	2 MU	101756	Ex9IP 2P 50A	1/6/72
63 A	2 MU	101757	Ex9IP 2P 63A	1/6/72

## 3-module, 750 V DC



Rated current	Width	Article No.	Type	Packing
16 A	3 MU	101758	Ex9IP 3P 16A	1/4/48
32 A	3 MU	101759	Ex9IP 3P 32A	1/4/48
50 A	3 MU	101760	Ex9IP 3P 50A	1/4/48
63 A	3 MU	101761	Ex9IP 3P 63A	1/4/48

## 4-module, 1000 V DC



Rated current	Width	Article No.	Type	Packing
16 A	4 MU	101762	Ex9IP 4P 16A	1/3/36
32 A	4 MU	101763	Ex9IP 4P 32A	1/3/36
50 A	4 MU	101764	Ex9IP 4P 50A	1/3/36
63 A	4 MU	101765	Ex9IP 4P 63A	1/3/36

# Technical Data Ex9IP

## Modular DC isolators up to 63 A

### General parameters

Main switches with isolation function suitable for direct current and Photovoltaic applications

Non-polarized

Modular design, DIN-rail mounting

Max. number of installed accessories is 3 pcs of one contact units (AX3111) or 2 pcs of two contact units (AX3122) and 2 pcs of releases (SHT31, UVT31)

### Electrical parameters

Tested according to	IEC/EN 60947-3
Rated operating voltage $U_e$	250 (1P), 500 (2P), 750 (3P), 1000 V DC (4P)
Rated current $I_e$	16, 32, 50, 63 A
Module width	1, 2, 3, 4
Utilization category	DC-22B
Rated insulation voltage $U_i$	1000 V
Rated impulse withstand voltage $U_{imp}$	6 kV
Rated short-time withstand current $I_{cw}, 1 \text{ s}$	$12 \times I_e$
Rated short-circuit making capacity $I_{cm}$	$20 \times I_e$
Mechanical service life	20 000 operation cycles
Electrical service life	2 000 operation cycles

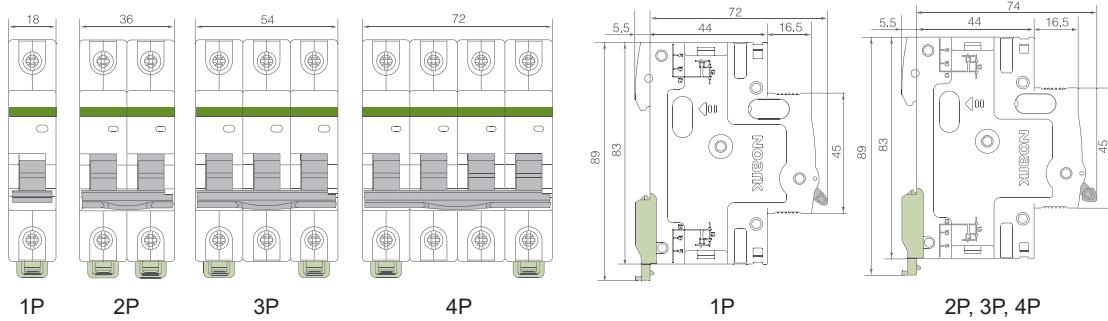
### Mechanical parameters

Device width	18 mm (per pole/module)
Device height	83 mm (89 mm including rail clip)
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP40, terminals IP20
Terminals	combined lift + open mouthed
Terminal capacity	10 — 35 mm <sup>2</sup>
Fastening torque of terminals	2 — 3.5 nm
Busbar thickness	0.8 — 2 mm
Ambient temperature	-30 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 95 %
Resistance to humidity and heat	class 2
Pollution degree	3
Installation class	III
Weight	0.12 kg (per pole/module)

# Technical Data Ex9IP

## Modular DC isolators up to 63 A

### Dimensions



### Wiring diagrams

