# DC MINIATURE CIRCUIT BREAKERS



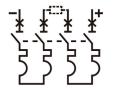




# **Miniature circuit breakers**



P1MD4PB...



#### Order code n° of DIN Wt le Qty per module pkg n° n° [A] [kg] Miniature circuit breakers for DC - B curve characteristics. P1MD4PB16 16 0.505 P1MD4PB20 20 0.505 4 3 P1MD4PB25 25 0.505 4 3 P1MD4PB50 50 0.505 4 3

#### General characteristics

The miniature circuit breakers for photovoltaic applications type P1MD... are designed to protect against overloads and short circuits the cables located between the photovoltaic panel strings and the inverter.

In addition to photovoltaic applications, these devices can be used for other DC-1 loads, such as non-inductive or slightly inductive loads.

Main features include:

- Rated current from 16A to 50A
- IEC breaking capacity Icu 5kA 1000VDC
- Contact status with flag indicator
- Tripping characteristic: curve type B Accessories available: auxiliary contacts, shunt trips and undervoltage releases.

#### **Operational chacteristics**

- Rated insulation voltage Ui: 1000V
- Rated impulse voltage Uimp: 4kV
- Mechanical life: 20.000 cycles
- Mounting on 35mm DIN rail (IEC/EN/BS 60715)
- Mounting position: any
- Utilization category: A.

#### Compliance

Compliant with standard IEC/EN/BS 60947-2.

## Add-on blocks for miniature circuit breakers



Order code	Description	Qty per MCB	Qty per pkg	Wt
		n°	n°	[kg]
Auxiliary contact.				
P1X1011	1 changeover contact	1	12	0.040
Indicator contact for thermal-magnetic trip.				
P1X1311	1 changeover contact	1	12	0.040
Undervoltage trip release.				
P1X14230	230VAC 50/60Hz	1	8	0.070
Shunt trip release.				
P1X16230	110415VAC 50/60Hz	1	8	0.070
P1X16024	1224VAC/DC 50/60Hz	1	8	0.070

#### **General characteristics**

- Auxiliary and indicator contact width: 9mm/0.35" (0.5 module)
- Undervoltage and shunt trip release width: 18mm/0.71" (1 module)
- Maximum combination: 3 add-on blocks on MCB left side only ot which 1 undervoltage or shunt release directly on MCB side and then 2 contacts of which 1 auxiliary, contact and 1 indicator contact.

### **Operational characteristics**

- IEC rated impulse voltage Uimp: 4kV IEC rated operational current in AC: 6A 230V; 3A 400V (auxiliary contacts).

Compliant with standard IEC/EN/BS 60947-5-1.







