# DC MINIATURE CIRCUIT BREAKERS





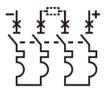
**ENERGY AND AUTOMATION** 



## Miniature circuit breakers **1000VDC**



P1MD4PB...



## Add-on blocks for miniature circuit breakers



P1X1011

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

#### General characteristics

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.

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).

#### Compliance

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



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