

**Power PCB Relay PCFN Solar, 1.8 mm contact gap**

- 1 pole 26A, 1 form A (NO) contact
- Contact gap >1.8mm
- 200mW hold power
- Ambient temperature up to 75°C at 26A, 85°C at 22A, 90°C at 18A
- Product in accordance to VDE 0126-1-1 and IEC 62109-2

Typical applications  
Photovoltaic Inverter, charging stations, ...



Contact Data			
Contact arrangement	1 form A (NO)		
Contact gap	>1.8mm		
Rated voltage	277VAC		
Rated current	26A		
Breaking capacity max.	7200VA		
Contact material	AgSnO <sub>2</sub>		
Frequency of operation, with/without load	6/300min <sup>-1</sup>		
Operate/release time max.	20/10ms		
Bounce time max., form A	3ms		
Contact ratings			
Type	Contact	Load	Cycles
IEC 61810 / UL 508			
PCFN-1..H2MS	A (NO)	26A, 277VAC, cosφ=1, 75°C	30x10 <sup>3</sup>
PCFN-1..H2MS	A (NO)	22A, 277VAC, cosφ=1, 85°C	30x10 <sup>3</sup>
PCFN-1..H2MS	A (NO)	18A, 277VAC, cosφ=1, 90°C	30x10 <sup>3</sup>
IEC 61810			
PCFN-1..H2MS	A (NO)	14A, 277VAC, resistive, 85°C	100x10 <sup>3</sup>
Mechanical endurance, DC coil		1x10 <sup>6</sup> operations	

Coil Data	
Rated coil voltage	12/24 VDC
Coil insulation system according UL	Class F

Coil versions, DC coil					
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power W
12	12	8,4	1,2	96	1,5 <sup>1)</sup>
24	24	16,8	2,4	384	1,5 <sup>2)</sup>

- 1) Ambient temperature > 23°C requires reduction of coil voltage to 4.4 to <6V after 100ms. Hold voltage >=4.4V at ambient temperature ≤90°C.
- 2) Ambient temperature > 23°C requires reduction of coil voltage to 8.8 to <12V after 100ms. Hold voltage >=8.8V at ambient temperature ≤90°C.

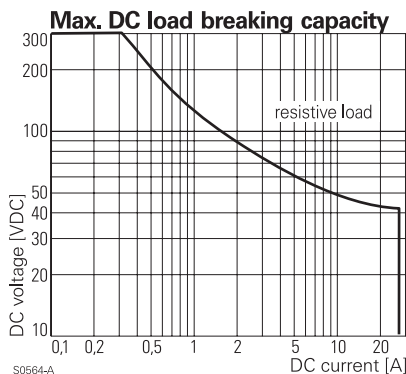
All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

Insulation Data	
Initial dielectric strength	
between open contacts	2500V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	6.1mm
Material group of insulation parts	III
Tracking index of relay base	PTI 175

**Other Data**  
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

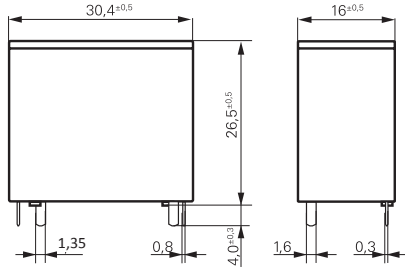
Ambient temperature <sup>3)</sup>	-25 to +75°C at 26A -25 to +85°C at 22A -25 to +90°C at 18A
Category of environmental protection	RTII - flux proof
IEC 61810	
Vibration resistance (functional)	10g
Vibration resistance (destructive)	10g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Mounting distance	≥10mm
Weight	28g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/10s
Packaging unit	tube/20 pcs., box/500 pcs.

3) Ambient temperature > 23°C requires reduction of coil voltage, see index<sup>1)</sup> and <sup>2)</sup>above.



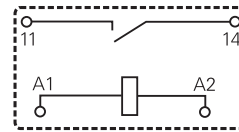
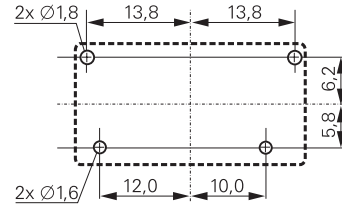
**Power PCB Relay PCFN Solar, 1.8 mm contact gap** (Continued)

**Dimensions**



**PCB layout / terminal assignment**

Bottom view on solder pins



NOTE: it is recommended to connect the grid (phase or neutral line) to pin 11 of the PCFN Solar.

Product code	Version	Contact arrangement	Contact material	Coil	Part number
PCFN-112H2MS	PCB, flux tight	1 form A (NO) contact	AgSnO <sub>2</sub>	12VDC	2071169-1
PCFN-124H2MS	PCB, flux tight	1 form A (NO) contact	AgSnO <sub>2</sub>	24VDC	2071169-2