

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 ₂
Frequency of operation, with/without load	6/300min ⁻¹
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 ³
PCFN-1..H2MS	A (NO)	22A, 277VAC, cosφ=1, 85°C	30x10 ³
PCFN-1..H2MS	A (NO)	18A, 277VAC, cosφ=1, 90°C	30x10 ³
IEC 61810			
PCFN-1..H2MS	A (NO)	14A, 277VAC, resistive, 85°C	100x10 ³

Mechanical endurance, DC coil 1x10⁶ 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 ¹⁾
24	24	16,8	2,4	384	1.5 ²⁾

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 _{rms}
between contact and coil	4000V _{rms}
Clearance/creepage	
between contact and coil	6.1mm
Material group of insulation parts	III
Tracking index of relay base	PTI 175

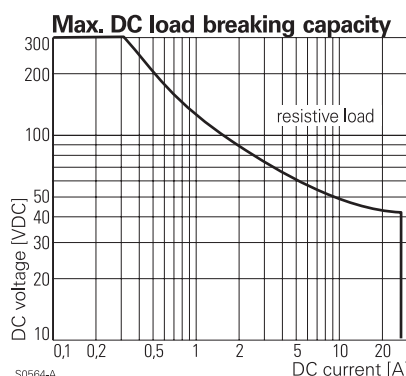
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Ambient temperature ³⁾	-25 to +75°C at 26A -25 to +85°C at 22A -25 to +90°C at 18A
-----------------------------------	---

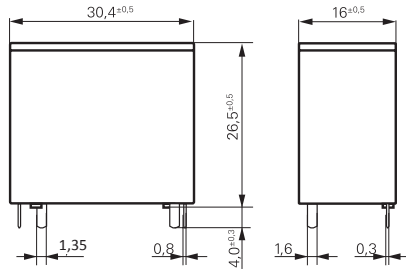
Category of environmental protection	IEC 61810	RTII - flux proof
Vibration resistance (functional)		10g
Vibration resistance (destructive)		10g
Shock resistance (destructive)		100g
Terminal type		PCB-THT
Mounting distance		≥10mm
Weight		28g
Resistance to soldering heat THT		260°C/10s
Packaging unit		tube/20 pcs., box/500 pcs.

3) Ambient temperature > 23°C requires reduction of coil voltage, see index¹⁾ and ²⁾ above.



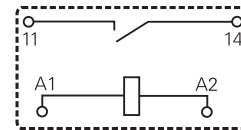
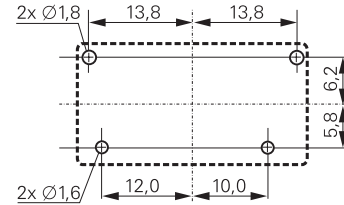
Power PCB Relay PCFN Solar, 1.8 mm contact gap (Continued)

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 ₂	12VDC	2071169-1
PCFN-124H2MS	PCB, flux tight	1 form A (NO) contact	AgSnO ₂	24VDC	2071169-2