

Power PCB Relay PCFN Solar

- 1 pole 26A, 1 form A (NO) contact
- Contact gap >1.5mm
- 200mW hold power
- Ambient temperature up to 75°C, 85°C at 22A
- The appliance is able to meet VDE V 0126-1-1

Typical applications
Photovoltaic Inverter



F_PCEN_B



Approvals

VDE REG.-Nr.A951, cULus E58304
Technical data of approved types on request

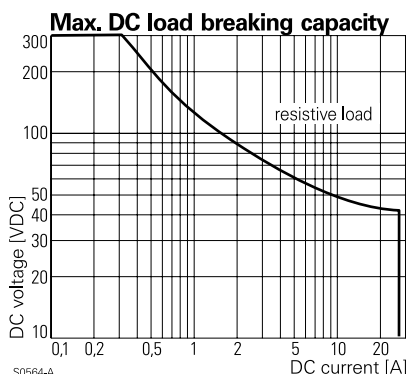
Contact Data

Contact arrangement	1 form A (NO)
Contact gap	>1.5mm
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			
PCFN-1..H2MG	A (NO)	26A, 277VAC, cosφ=1, 75°C	30x10 ³
PCFN-1..H2MG	A (NO)	22A, 250VAC, cosφ=1, 85°C	30x10 ³
PCFN-1..H2MG	A (NO)	14A, 250VAC, cosφ=1, 85°C	100x10 ³
UL 508			
PCFN-1..H2MG	A (NO)	26A, 277VAC, resistive, 75°C	30x10 ³
PCFN-1..H2MG	A (NO)	22A, 277VAC, resistive, 85°C	30x10 ³

Mechanical endurance, DC coil 1x10⁶ operations



Coil Data

Rated coil voltage	12VDC
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 power mW
12	12	7,8	1,2	96	1,5 ¹⁾

1) Ambient temperature > 23°C requires reduction of coil voltage to 4.4 to <6V after 100ms.
Hold voltage >=4.4V at ambient temperature ≤85°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	6.1/6.1mm
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.tycoelectronics.com/customersupport/rohssupportcenter

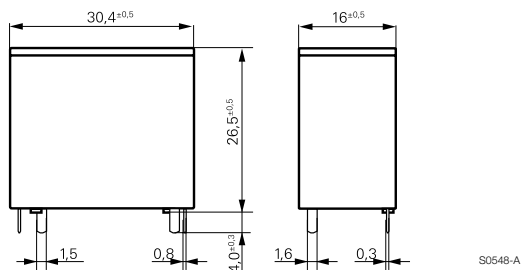
Ambient temperature -25 to +75°C¹⁾
-25 to +85°C at 22A

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/5s
Packaging unit	tube/20 pcs., box/500 pcs.

1) Ambient temperature > 23°C requires reduction of coil voltage to 4.4 to <6V after 100ms.

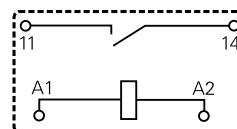
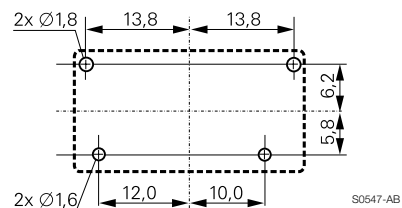
Power PCB Relay PCFN Solar (Continued)

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-112H2MG	PCB, flux tight	1 form A (NO) contact	AgSnO ₂	12VDC	1721929-1