

Power PCB Relay PCFN Solar

- 1 pole, 26 A, 1 NO Contact
- Contact gap > 1.5 mm
- 200 mW hold power
- Ambient temperature up to 75°C, 85°C at 22 A
- The appliance is able to meet VDE V0126-1-1



F_PCFN_B

Applications

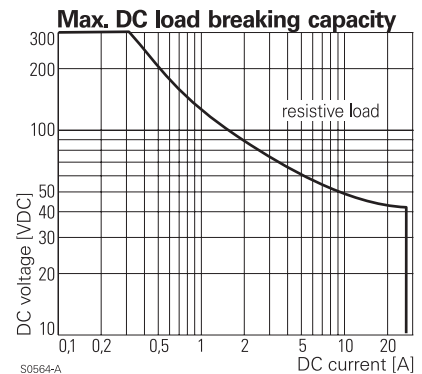
Photovoltaic inverter

Approvals

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

Contact data

Contact configuration	1 NO
Contact set	single contact
Contact gap	> 1.5 mm
Rated voltage	277 VAC
Rated current	26 A
Maximum breaking capacity AC	7200 VA
Contact material	AgSnO ₂
Rated frequency of operation with / without load	6 / 300 min ⁻¹
Operate- / release time	max 20 / 10 ms
Bounce time	max 3 ms



Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
PCFN-1..H2MG	NO	26 A, 277 VAC, cosφ=1	75°C	30x10 ³
PCFN-1..H2MG	NO	22 A, 250 VAC, cosφ=1	85°C	30x10 ³
PCFN-1..H2MG	NO	14 A, 250 VAC, cosφ=1	85°C	100x10 ³
UL 508				
PCFN-1..H2MG	NO	26 A, 277 VAC, resistive	75°C	30x10 ³
PCFN-1..H2MG	NO	22 A, 277 VAC, resistive	85°C	30x10 ³

Coil data

Rated coil voltage	12 VDC
Coil insulation system according UL 1446	class F

Coil version, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power W
12	12	7.8	1.2	96±10%	1.5 ¹⁾

All figures are given for coil without preenergization, at ambient temperature +23°C
 Hold voltage ≥ 4.4 V at ambient temperature ≤ 85°C

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

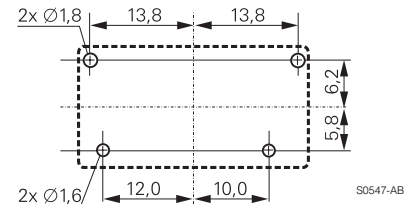
Power PCB Relay PCFN Solar (Continued)

Insulation

Dielectric strength coil-contact circuit	4000 V _{rms}
open contact circuit	2500 V _{rms}
Clearance / creepage coil-contact circuit	6.1 / 6.1 mm
Material group of insulation parts	III
Tracking index of relay base	PTI 175
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	basic
open contact circuit	full disconnection 1.5 mm
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	230 / 400 V
Overvoltage category	III

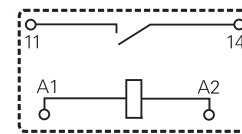
PCB layout / terminal assignment

Bottom view on solder pins



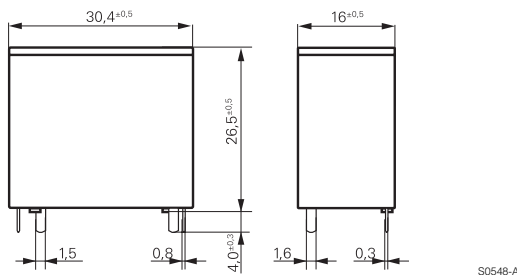
Other data

Mechanical endurance	1x10 ⁶ cycles
Material	
RoHS - Directive 2002/95/EC	compliant
Environment	
Ambient temperature range ¹⁾	-25...+75°C -25...+85°C at 22 A
Vibration resistance (function)	10 g
Shock resistance (function)	10 g
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Processing	
Mounting	pcb
Mounting position	any
Mounting distance	≥ 10 mm
Resistance to soldering heat	260°C / 5 s
Relay weight	28 g
Packaging unit	20 / 500



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

Dimensions



Product key	Version	Contact configuration	Contact material	Coil	Part number
PCFN-112H2MG	PCB, flux tight	1 NO contact	AgSnO ₂	12 VDC	1721929-1