

Power Relay 410 83 3 mm

- 1 pole 16 A, 1 NO bridging contact
- Contact gap > 3 mm
- Switching capacity 4000 VA
- Coil power 360 mW
- 4 kV / 8 mm coil-contact, insulation to VDE 0631 and 0700
- Ambient temperature up to 85°C
- Quick connect terminals for load side
- Materials in accordance to IEC 60335-1



F0248-BB

Applications

Washing machines, tumble dryers, absolute safe power supply disconnection in other domestic applications

Approvals

VDE REG.-Nr. 6198, cULus E214025
 Technical data of approved types on request

Contact data

Contact configuration	1NO
Contact set	single contact, bridging contact
Type of interruption	full disconnection
Rated voltage / max. switching voltage AC	250 / 400 VAC
Rated current	16 A
Maximum breaking capacity AC	4000 VA
Limiting making capacity, max 4 s, duty factor 10%	20 A
Contact material	AgNi
Contact gap	>3 mm
Rated frequency of operation with / without load	10 / 600 min ⁻¹

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
410 83	NO	16 A, 250 VAC, cosφ=1	85°C	30x10 ³
410 83	NO	10 A, 250 VAC, cosφ=1	105°C	100x10 ³
410 83	NO	10 A, 400 VAC, cosφ=1	105°C	100x10 ³

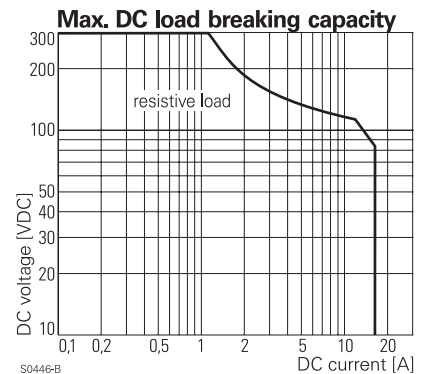
Coil data

Rated coil voltage range DC coil	6...60 VDC
Operative range to IEC 61810	1
Coil insulation system according UL1446	Class F

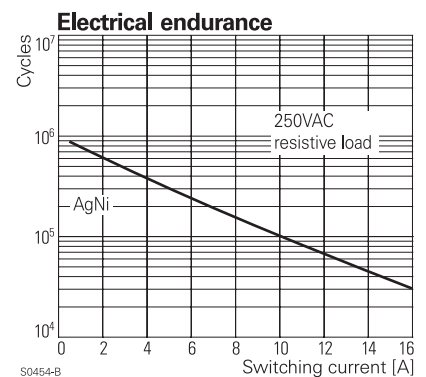
Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
053	9	5.9	0.68	230±10%	360
054	6	3.9	0.45	100±10%	360
050	12	7.9	0.9	400±10%	360
046	24	15.8	1.8	1600±10%	360
043	48	31.6	3.6	6400±10%	360
042	60	39.5	4.5	10000±10%	360

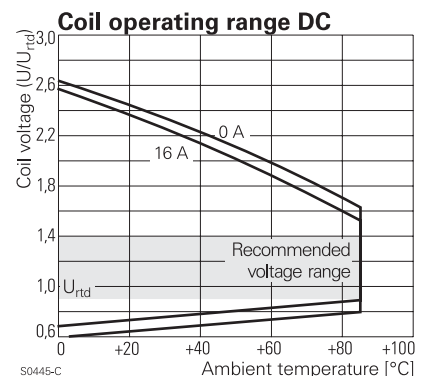
All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request



S0446-B



S0454-B



S0445-C

Power Relay 410 83 3 mm (Continued)

Insulation

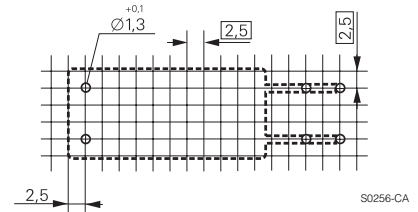
Dielectric strength coil-contact circuit	4000 V _{rms}
open contact circuit	2000 V _{rms}
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm
Material group of insulation parts	≥ IIIa
Tracking index of relay base	PTI 250
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	full disconnection ≥ 3 mm
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230 / 400 V
Overvoltage category	III

Other data

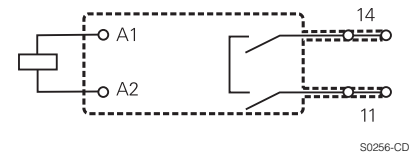
Mechanical endurance	1x10 ⁶ cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0349
Resistance to heat and fire, WG version	according EN60335, par.30
Environment	
Ambient temperature range	-20...+85°C
Vibration resistance (function) NO (10...500Hz)	10 ms
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Processing	
Mounting	pcb
Resistance to soldering heat	270°C / 10 s
Relay weight	24 g
Packaging unit	1050 pcs

PCB layout / terminal assignment

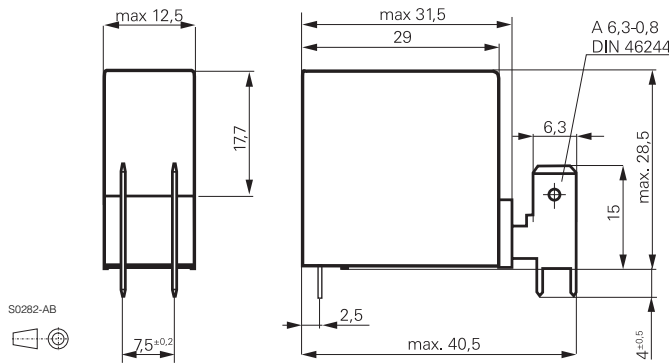
Bottom view on solder pins



1 NO bridging contact



Dimensions



Product key

Typical product key

041083 050 001 WG

Type

41083 Power Relay 410 83 3 mm

Coil

Coil code: please refer to coil versions table, preferred types in bold print

Version

001 1 NO contact (1 form A)

Version

WG Product in accordance with IEC 60335-1 (domestic appliances)

Other types on request

Product key	Version	Cont. material	Cont.configuration	Coil	Part number
0410 83 050 001 WG	standard	AgNi	1 NO contact	12 VDC	8-1415536-7
0410 83 053 001 WG	PCB/quick connect			9 VDC	8-1415536-8
0410 83 046 001 WG				24 VDC	8-1415536-6