

**Power Relay 41083 3mm**

- 1 pole 16A, 1 form X, double make, bridging contact
- Contact gap >3mm
- Switching capacity 4000VA
- Coil power 360mW
- 4kV/8mm coil-contact, insulation to VDE 0631 and 0700
- Ambient temperature 85°C; max. 105° at 10A
- Quick connect terminals for load side
- Materials in accordance to IEC 60335-1



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

**Approvals**

VDE REG.-Nr. 40001454, UL E214025  
Technical data of approved types on request.

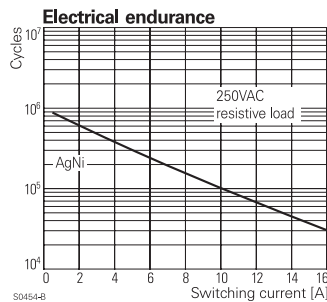
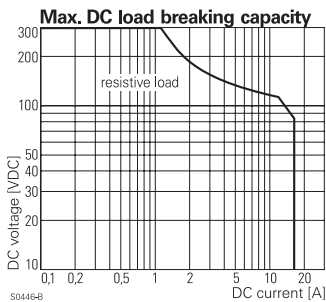
**Contact Data**

Contact arrangement	1 form X, double make (NO)
Contact gap	>3mm/full disconnection
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	16A
Limiting making current, max. 4s, duty factor 10%	20A
Breaking capacity max.	4000VA
Contact material	AgNi
Contact style	single contact, bridging contact
Frequency of operation, with/without load	600/36000h <sup>-1</sup>

**Contact ratings**

Type	Contact	Load	Cycles
<b>IEC 61810</b>			
410 83	A (NO)	16A, 250VAC resistive, 85°C	30x10 <sup>3</sup>
410 83	A (NO)	10A, 250VAC resistive, 105°C	100x10 <sup>3</sup>
410 83	A (NO)	10A, 400VAC resistive, 105°C	100x10 <sup>3</sup>

Mechanical endurance >1x10<sup>6</sup> operations



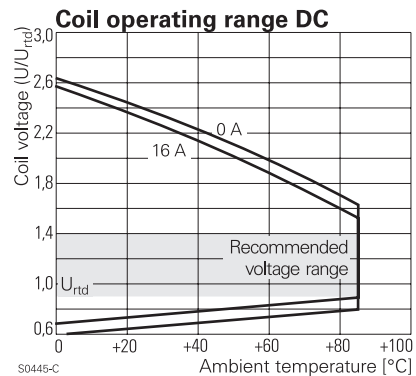
**Coil Data**

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

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>
Initial surge withstand voltage	
between contact and coil	8000V (1.2/50µs)
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI250V

**Power Relay 41083 3mm** (Continued)

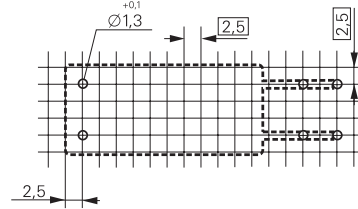
**Other Data**

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)

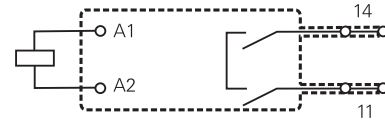
Resistance to heat and fire	
WG version	according EN60335-1, par.30
Ambient temperature	-20 to +85°C max. +105°C at 10A
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional), form A (NO), 10 to 500Hz	10g
Shock resistance (destructive)	100g
Terminal type	PCB-THT, quick connect for load side
Weight	24g
Resistance to soldering heat THT	
IEC 60068-2-20, flux proof version	270°C/10s
Packaging/unit	tray/75 pcs., box/1050 pcs.

**PCB layout / terminal assignment**

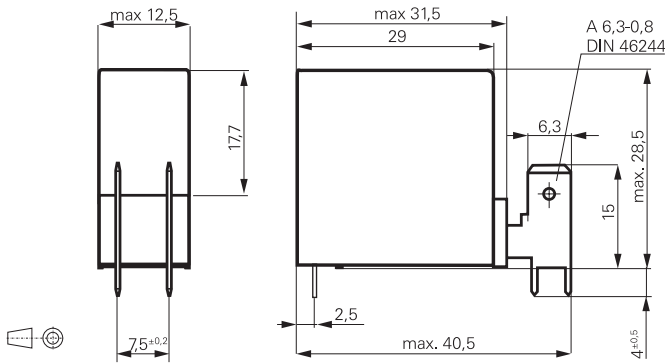
Bottom view on solder pins



1 form X, double make contact



**Dimensions**



**Product code structure**

Typical product code **041083 050 001 WG**

<b>Type</b>	<b>41083</b> Power Relay 410 83 3 mm
<b>Coil</b>	Coil code: please refer to coil versions table
<b>Version</b>	<b>001</b> 1 form X. double make (NO) contact
<b>Version</b>	<b>WG</b> Product in accordance with IEC 60335-1 (domestic appliances)

Other types on request.

Product code	Contact arrangement	Contact material	Coil	Version	Part Number
0410 83 046 001	1 form X	AgNi	24VDC	Standard	4-1415410-8
0410 83 046 001WG	double make (NO)			IEC60335-1 compliant	8-1415536-6
0410 83 050 001WG	3mm contact gap		12VDC		8-1415536-7
0410 83 053 001WG			9VDC		8-1415536-8
0410 83 054 001WG			6VDC		8-1415536-9

This list represents the most common types and does not show all variants covered by this datasheet.  
Other types on request.