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

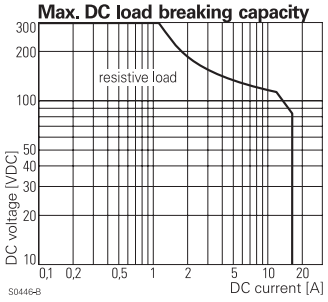
Contact arrangement	1 form X, double make (NO)
Contact gap	>3mm/full disconnection
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	16A
Limiting making current, max. 4s, duty factor 10%	20A
Breaking capacity max.	4000VA
Contact material	AgNi
Contact style	single contact, bridging contact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

Contact ratings

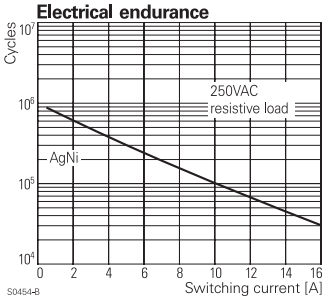
Type	Contact	Load	Cycles
IEC 61810			
410 83	A (NO)	16A, 250VAC resistive, 85°C	30x10^3
410 83	A (NO)	10A, 250VAC resistive, 105°C	100x10^3
410 83	A (NO)	10A, 400VAC resistive, 105°C	100x10^3

Mechanical endurance >1x10^6 operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

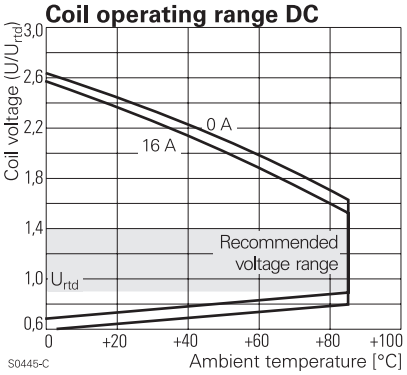
Coil voltage range	6 to 60VDC
Operative range, IEC 61810	1
Coil insulation system according UL1446	class F

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.

Coil operating range DC



Insulation Data

Initial dielectric strength	
between open contacts	2500V$_{rms}$
between contact and coil	4000V$_{rms}$
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

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Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

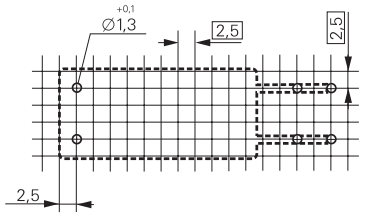
Power Relay 41083 3mm (Continued)

Other Data

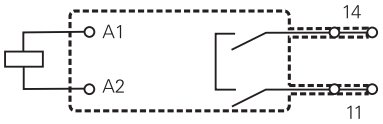
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Resistance to heat and fire WG version	according EN60335-1, par.30
Ambient temperature	-20 to +85°C max. +105°C at 10A
Category of environmental 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

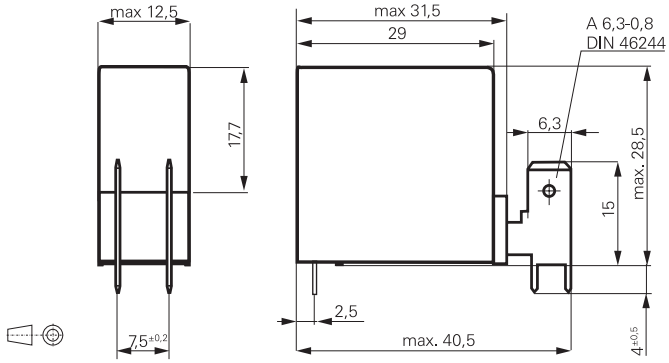
Bottom view on solder pins



1 form X, double make contact



Dimensions



Product code structure

Typical product code: **041083 050 001 WG**

Type
41083 Power Relay 410 83 3 mm

Coil
Coil code: please refer to coil versions table

Version
001 1 form X. double make (NO) contact

Version
WG 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.

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