

# Miniature PCB Relay RE

- 1 pole 6 A, 1NO contact
- Sensitive coil 200 mW
- 4 kV coil-contact
- Optimized height 10.6 mm
- PCB area 200 mm2
- **■** Wash tight
- Plastic materials according to IEC60335-1 (domestic appliances)



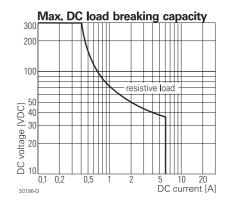
## **Applications**

PLC's, timers, temperature control, I/O cards, white goods

Approvals		
VDE REG -Nr	5063	,

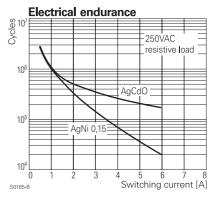
**TU**us E21<u>4025</u> Technical data of approved types on request

Contact data	
Contact configuration	1 NO
Contact set	single contact
Type of interruption	micro disconnection
Rated voltage / max. switching voltage AC	250 / 400 VAC
Rated current	6 A
Maximum breaking capacity AC	1500 VA
Limiting making capacity, max 4 s, duty factor 10%	15 A
Contact material	AgCdO
	AgNi0.15 and AgNi90/10
Rated frequency of operation with / without load	6/1200 min <sup>-1</sup>
Operate- / release time	max. 10/5 ms
Bounce time NO / NC contact	max. 4 ms



## **Contact ratings**

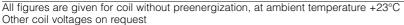
Contact	Load	Ambient	Cycles
		temp. [°C]	
810			
NO	6 A, 250 VAC, cosφ=1,	70°C	100x10 <sup>3</sup>
NO	6 A, 250 VAC, cosφ=1,	70°C	100x10 <sup>3</sup>
3			
NO	1/4 hp, 240 VAC, motor	40°C	30x10 <sup>3</sup>
NO	B300 pilot duty	40°C	6x10 <sup>3</sup>
NO	6 A, 250 VAC,general purpose,	70°C	100x10 <sup>3</sup>
NO	B300 pilot duty	40°C	6x10 <sup>3</sup>
	810 NO NO 3 NO NO	NO       6 A, 250 VAC, cosφ=1,         NO       6 A, 250 VAC, cosφ=1,         B       1/4 hp, 240 VAC, motor         NO       B300 pilot duty         NO       6 A, 250 VAC, general purpose,	temp. [°C]           810           NO         6 A, 250 VAC, cosφ=1,         70°C           NO         6 A, 250 VAC, cosφ=1,         70°C           3           NO         1/4 hp, 240 VAC, motor         40°C           NO         B300 pilot duty         40°C           NO         6 A, 250 VAC, general purpose,         70°C

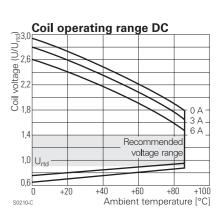


Coil data	
Rated coil voltage range DC coil	5 48 VDC
Operative range to IEC 61810	2
Coil insulation system according UI 1446	F

## Coil versions, DC-coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDČ	VDČ	VDC	Ohm	mW
005	5	3.5	0.5	125±10%	200
006	6	4.2	0.6	180±10%	200
012	12	8.4	1.2	720±10%	200
018	18	12.6	1.8	1620±10%	200
024	24	16.8	2.4	2880±15%	200
048	48	33.6	4.8	11520±15%	200







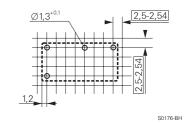
## Miniature PCB Relay RE (Continued)

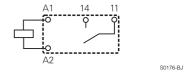
Insulation	
Insulation resistance coil-contact circuit	> 10 <sup>4</sup> MOhms
open contact circuit	> 10 <sup>4</sup> MOhms
Dielectric strength coil-contact circuit	4000 V <sub>rms</sub>
open contact circuit	1000 V <sub>rms</sub>
Clearance / creepage coil-contact circuit	≥ 4/4 mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	basic
open contact circuit	micro disconnection
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230 / 400 V
Overvoltage category	III

#### Other data >30x10<sup>6</sup> cycles Mechanical endurance Material RoHS - Directive 2002/95/EC compliant as per product date code 0352 according EN60335, par.30 Resistance to heat and fire Environment Ambient temperature range -40 ... +70°C -40 ... +85°C at 4 A Category of protection RTIII - wash-tight Processing Resistance to soldering heat wash-tight version 260°C/5s 5 g Relay weight 25 pcs Packaging unit

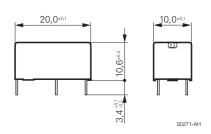
## PCB layout / terminal assignment

Bottom view on solder pins





#### **Dimensions**



Product key		Typical product key	RE	0	3	2	012
Type RE Miniature PCB Relay RE							
Version				l			
0 wash tight							
Contact configuration					•		
3 1 NO contact (1 form A)							
Contact material							
<b>1</b> AgNi 0.15	2	AgNi 0.15 gold plated					
<b>4</b> AgNi 90/10	0	AgCdO					
Coil							
Coil code: please refer to coil versions t	table						

Product key	Version	Contacts	Contact material	Coil	Part number
RE030005	wash tight	1 NO contact	AgCdO	5 VDC	1393217-1
RE030006				6 VDC	1393217-2
RE030012				12 VDC	1393217-4
RE030024				24 VDC	1393217-8
RE030048				48 VDC	1-1393217-1
RE032005			AgNi 0,15	5 VDC	1-1393217-9
RE032006			gold plated	6 VDC	2-1393217-0
RE032012				12 VDC	2-1393217-2
RE032024				24 VDC	2-1393217-4
RE032048				48 VDC	2-1393217-5
RE034005			AgNi 90/10	5 VDC	2-1416010-3
RE034006				6 VDC	2-1416010-4
RE034012				12 VDC	2-1416010-6
RE034024				24 VDC	2-1416010-7
RE034048				48 VDC	2-1416010-8

change.