

RE030005 Product Details



RE030005

TE Internal Number: 1393217-1



Industrial Relays (General Purpose)

 [Converted to EU RoHS but not ELV Compliant](#)
(Statement of Compliance)

Product Highlights:

- RE Series
- Contact - Current Class = 5A to 10A Class, Less Than 16A
- Contact - Rated Current = 6 A
- Terminal Type = PCB-THT
- Contact - Arrangement = 1 Form A (NO)

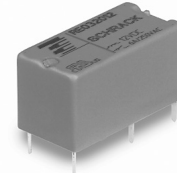
Documentation & Additional Information	
Product Drawings: • None Available Catalog Pages/Data Sheets: • Miniature PCB Relay RE (PDF, English) Product Specifications: • None Available Application Specifications: • None Available Instruction Sheets: • None Available CAD Files: (CAD Format & Compression Information) • 2D Drawing (DXF, Version SHK1) • 3D Model (IGES, Version SHK1) • 3D Model (STEP, Version SHK1)	Additional Information: • Product Line Information Related Products: • Tooling

Product Features (Please use the Product Drawing for all design activity)	
Product Type Features: • Series = RE • Terminal Type = PCB-THT Electrical Characteristics: • Contact - Current Class = 5A to 10A Class, Less Than 16A • Contact - Rated Current (A) = 6 • Contact - Limiting Continuous Current (A) = 6 • Contact - Limiting Making Current (A) = 15 • Contact - Limiting Breaking Current (A) = 6 • Insulation - Initial Dielectric Between Coil/Contact Class = 3500V to 4000V Class • Insulation - Initial Dielectric Between Open Contacts (V rms) = 1000 • Insulation - Initial Dielectric Between Contacts and Coil (V rms) = 4000 • Contact - Rated Voltage (VAC) = 250 • Contact - Switching Voltage Max. (VAC) = 400 • Contact - Limiting Short-Time Current (A) = 6 • Coil - Rated Voltage (VDC) = 5 • Coil - Resistance (Ω) = 125 • Coil - Rated Power, DC (mW) = 200 • Coil - Rated Power Class = 150mW to 200mW Class • Insulation - Initial Insulation Resistance (MΩ) = 1000000 • Insulation - Creepage Class = 3mm to 5.5mm Class • Insulation - Clearance Class = 2.5mm to 4mm Class • Insulation - Special Features = Tracking Index of Relay Base PTI250 Dimensions: • Mechanical - Length Class = 16mm to 20mm Class • Length (mm [in]) = 20.00 [0.787] • Mechanical - Width Class = 8mm to 10mm Class • Width (mm [in]) = 10.00 [0.394]	Body Features: • Mount Type = PCB • Weight (g [oz]) = 5.00 [0.1764] Contact Features: • Contact Material = AgCdO • Contact - Number of Poles = 1 Configuration Features: • Contact - Arrangement = 1 Form A (NO) • Coil - Magnetic System = Monostable, DC • Coil - Special Features = UL Coil Insulation Class F Industry Standards: • RoHS/ELV Compliance = RoHS/Not ELV Compliant • Lead Free Solder Processes = Wave solder capable to 240°C, Wave solder capable to 260°C • RoHS/ELV Compliance History = Converted to comply with RoHS not ELV directives • Approved/Registered Standards = VDE, cULus Environmental: • Environmental - Category of Protection = RTIII • Environmental - Ambient Temperature, Max. (°C [°F]) = 70 [158] • Environmental - Ambient Temperature Class = 50°C to 70°C Class Packaging Features: • Packaging Method = Tube Other: • Brand = Schrack

- | | |
|--|--|
| <ul style="list-style-type: none">• Mechanical - Height Class = 10mm to 11mm Class• Height (mm [in]) = 10.60 [0.417]• Insulation - Clearance Between Contact and Coil (mm [in]) = 4 [0.157]• Insulation - Creepage Between Contact and Coil (mm [in]) = 4 [0.157] | |
|--|--|

Miniature PCB Relay RE

- 1 pole 6 A, 1 form A (NO) contact
- Sensitive coil 200 mW
- 4 kV coil-contact
- Optimized height 10.6mm
- PCB area 200mm²
- Wash tight
- Product in accordance to IEC 60335-1 (domestic appliances)



F0141-B

Typical applications

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



Approvals

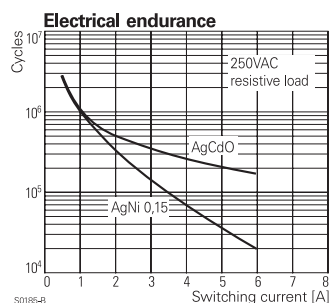
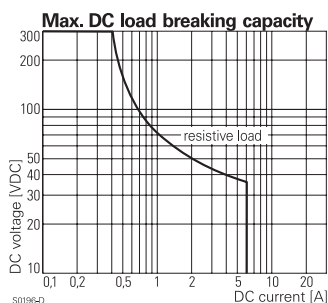
VDE REG.-Nr. 5063, UL E214025
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	6A
Limiting making current, max 4s, duty factor 10%	15A
Breaking capacity max.	1500VA
Contact material	AgCdO, AgNi 0.15, AgNi 90/10
Frequency of operation, with/without load	360/72000 ops./h
Operate/release time max.	10/5ms
Bounce time max.	4ms

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
RE030	A (NO)	6A, 250VAC, cosφ=1, 70°C	100x10 ³
RE034	A (NO)	6A, 250VAC, cosφ=1, 70°C	100x10 ³
UL 508			
RE030	A (NO)	1/4 hp, 240VAC, motor 40°C	30x10 ³
RE030	A (NO)	B300 pilot duty 40°C	6x10 ³
RE034	A (NO)	6A, 250VAC, general purpose, 70°C	100x10 ³
RE034	A (NO)	B300 pilot duty 40°C	6x10 ³
Mechanical endurance		>30x10 ⁶ ops.	



Coil Data

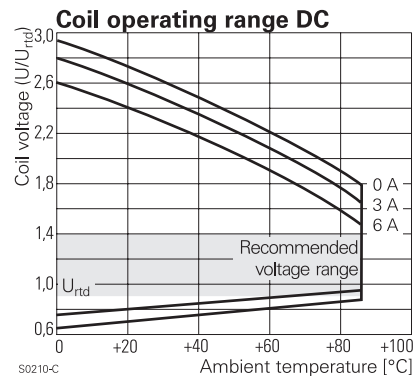
Coil voltage range	5 to 48 VDC
Operative range, IEC 61810	2
Coil insulation system according UL1446	F

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10% ¹⁾	Rated coil power mW
5	5	3.5	0.5	125	200
6	6	4.2	0.6	180	200
12	12	8.4	1.2	720	200
18	18	12.6	1.8	1620	200
24	24	16.8	2.4	2880 ¹⁾	200
48	48	33.6	4.8	11520 ¹⁾	200

¹⁾ Coil resistance ±15%.

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	1000V _{rms}
between contact and coil	4000V _{rms}
Initial insulation resistance	
open contact circuit	>10x10 ⁹ Ω
coil-contact circuit	>10x10 ⁹ Ω
Clearance/creepage	
between contact and coil	≥4/4mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI250V

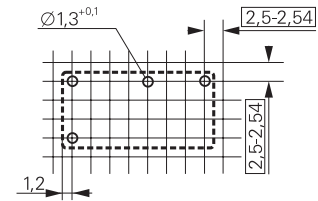
Miniature PCB Relay RE (Continued)

Other Data

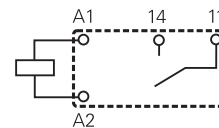
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Resistance to heat and fire	according EN 60335, par.30
Ambient temperature	-40 to +70°C
	-40 to +85°C at 4A
Category of environmental protection	IEC 61810
	RTIII - wash tight
Vibration resistance (functional)	10g
Terminal type	PCB-THT
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	tube/25 pcs.

PCB layout / terminal assignment

Bottom view on solder pins

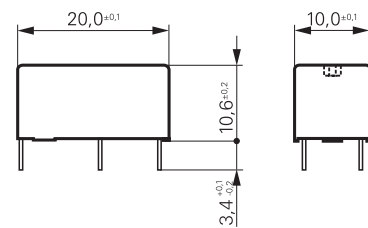


S0176-BH



S0176-BJ

Dimensions



S0271-AH

Product code structure

Typical product code **RE 0 3 2 012**

Type

RE Miniature PCB Relay RE

Version

0 Wash tight

Contact configuration

3 1 form A (NO) contact

Contact material

1 AgNi 0.15 **2** AgNi 0.15 gold plated
4 AgNi 90/10 **0** AgCdO

Coil

Coil code: please refer to coil versions table

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