

SCHRACK MINIATURE PCB RELAY RE

GENERAL PURPOSE LOW POWER PCB RELAYS

INTRODUCTION

TE Connectivity (TE)'s miniature power PCB relays RE is general purpose relay designed for various types of loads (e.g., resistive, inductive) with optimized height. The relay is designed as 1 pole 6A with 1 form A (NO) contact with sensitive coil (200mW) and is in wash tight version.

Other advantages include: high initial dielectric strength, PCB area is only 200mm².

FEATURES

- 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)

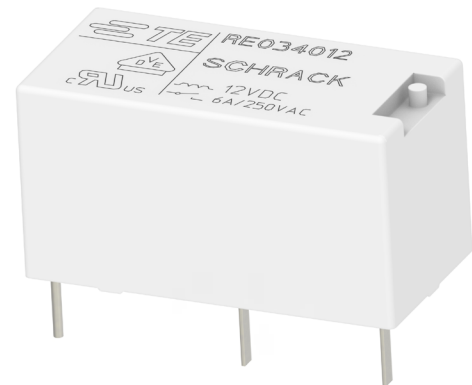
APPLICATIONS

- PLC's
- Timers
- Temperature control
- I/O cards
- White goods

APPROVALS

- VDE Cert. No. 40010578
- UL E214025

Technical data of approved types on request



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General Purpose Relays | Low Power PCB Relays

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	AgNi 90/10
Frequency of operation, with/without load	360/72000 ops./h
Operate/release time max.	10/5ms
Bounce time max.	4ms

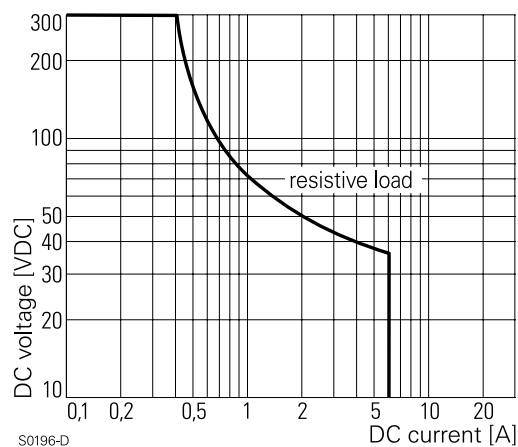
CONTACT RATINGS

Type	Contact	Load	Cycles
IEC 61810			
RE034	A (NO)	6A, 250VAC, $\cos\phi=1$, 70°C	100x10 ³
UL61810-1 (UL508)			
RE034	A (NO)	6A, 250VAC, general purpose, 70°C	100x10 ³
RE034	A (NO)	B300 pilot duty 40°C	6x10 ³
RE034	A (NO)	6A, 30VDC, general purpose, 70°C	100x10 ³
Mechanical endurance		>30x10 ⁶ operations	

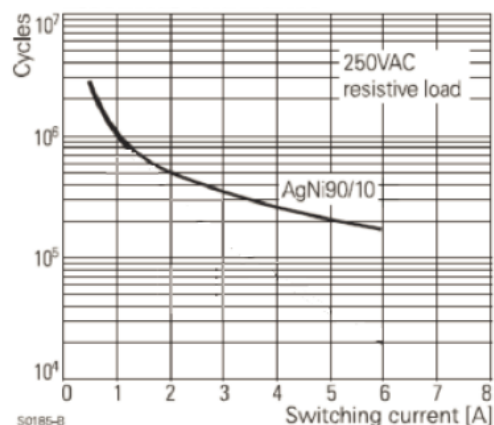
CONTACT DATA

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

MAX. DC LOAD BREAKING CAPACITY



ELECTRICAL ENDURANCE



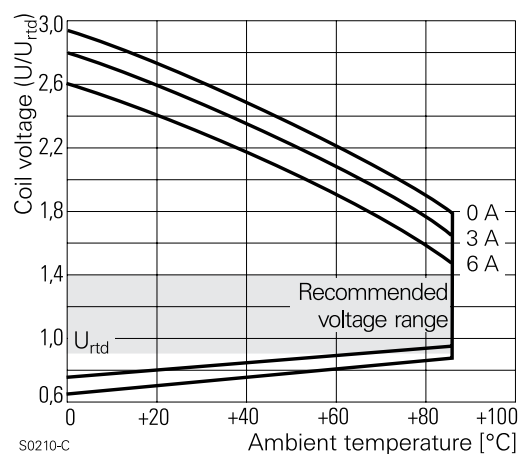
COIL VERSIONS, DC COIL

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$ ¹⁾	Rated coil power mW
5	5	3.5	0.5	125	200
6	6	4.2	0.6	180	200
9	9	6.3	0.9	405	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 $\pm 15\%$.

All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

COIL OPERATING RANGE DC



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INSULATION DATA

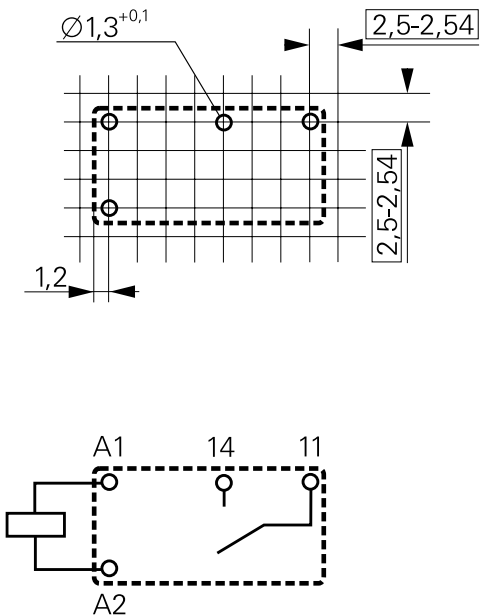
Initial dielectric strength	
Between open contacts	1000V _{rms}
Between contact and coil	4000V _{rms}
Initial insulation resistance	
Open contact circuit	>10x10 ⁹ Ω
Coil-contact circuit	>10x10 ⁹ Ω
Clearance/creepage	
Between contact and coil	≥4/4mm
Material group of insulation parts	IIIa
Tracking index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

OTHER DATA

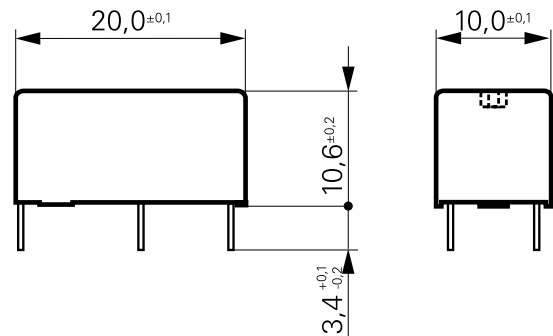
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter
Ambient temperature	-40 to +70°C -40 to +85°C at 4A
Category of environmental protection	
IEC 61810	RTIII - wash tight
Vibration resistance (functional)	10g
Terminal type	PCB-THT
Weight	8 g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	tube/25 pcs., box/500 pcs.

PCB LAYOUT / TERMINAL ASSIGNMENT

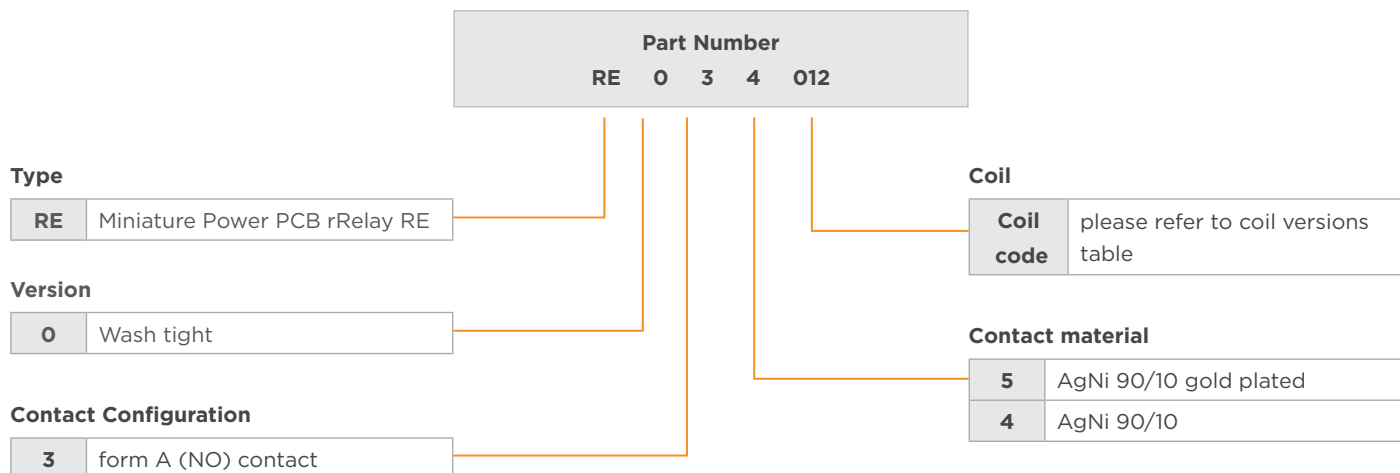
Bottom view on solder pins



DIMENSIONS (UNIT: mm)



PRODUCT CODE STRUCTURE



PRODUCT INFORMATION

Product code	Version	Contacts	Contact material	Coil	TE Part Number
RE034005	wash tight	NO contacts	AgNi 90/10	5 VDC	2-1416010-3
RE034006	wash tight	NO contacts	AgNi 90/10	6 VDC	2-1416010-4
RE034009	wash tight	NO contacts	AgNi 90/10	9 VDC	2-1416010-5
RE034012	wash tight	NO contacts	AgNi 90/10	12 VDC	2-1416010-6
RE034018	wash tight	NO contacts	AgNi 90/10	18 VDC	3-1416010-2
RE034021	wash tight	NO contacts	AgNi 90/10	21 VDC	1956220-7
RE034024	wash tight	NO contacts	AgNi 90/10	24 VDC	2-1416010-7
RE035005	wash tight	NO contacts	AgNi 90/10 gold plated	5 VDC	1956226-3
RE035006	wash tight	NO contacts	AgNi 90/10 gold plated	6 VDC	1956226-5
RE035009	wash tight	NO contacts	AgNi 90/10 gold plated	9 VDC	1956226-7
RE035012	wash tight	NO contacts	AgNi 90/10 gold plated	12 VDC	1956226-1
RE035018	wash tight	NO contacts	AgNi 90/10 gold plated	18 VDC	1956226-9
RE035021	wash tight	NO contacts	AgNi 90/10 gold plated	21 VDC	1-1956226-1
RE035024	wash tight	NO contacts	AgNi 90/10 gold plated	24 VDC	1956226-2
RE035048	wash tight	NO contacts	AgNi 90/10 gold plated	48 VDC	1-1956226-3

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