

# 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 200mm<sup>2</sup>.

#### **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

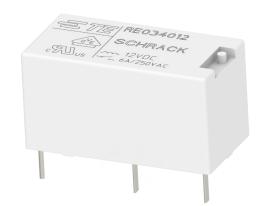
#### **APPROVALS**

- 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		

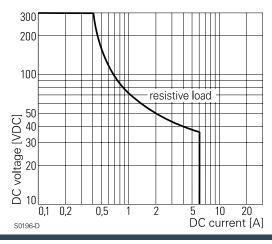
#### **CONTACT RATINGS**

Туре	Contact	Load	Cycles	
IEC 61810				
RE034	A (NO)	6A, 250VAC, cosφ=1, 70°C	100×10 <sup>3</sup>	
UL61810-1 (UL508)				
RE034	A (NO)	6A, 250VAC,general purpose, 70°C	100x10 <sup>3</sup>	
RE034	A (NO)	B300 pilot duty 40°C	6x10 <sup>3</sup>	
RE034	A (NO)	6A, 30VDC, general purpose, 70°C	100x10 <sup>3</sup>	
Mechanical endurance		>30x10 <sup>6</sup> operations		

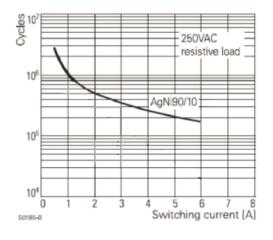
### **CONTACT DATA**

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**



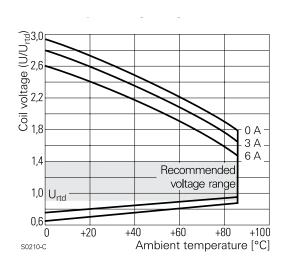
## **COIL VERSIONS, DC COIL**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10% <sup>1)</sup>	Rated coil power mW
005	5	3.5	0.5	125	200
006	6	4.2	0.6	180	200
009	9	6.3	0.9	405	200
012	12	8.4	1.2	720	200
018	18	12.6	1.8	1620	200
024	24	16.8	2.4	2880 <sup>1)</sup>	200
048	48	33.6	4.8	11520 <sup>1)</sup>	200

1) Coil resistance ±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**

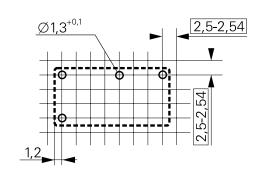
Initial dielectric strength				
Between open contacts	1000V <sub>rms</sub>			
Between contact and coil	4000V <sub>rms</sub>			
Initial insulation resistance				
Open contact circuit	>10×10°Ω			
Coil-contact circuit	>10x10 <sup>9</sup> Ω			
Clearance/creepage				
Between contact and coil	≥4/4mm			
Material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

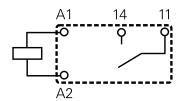
## **OTHER DATA**

Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer the Product Compliance Suppo Center at www.te.com/customersupport 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.			

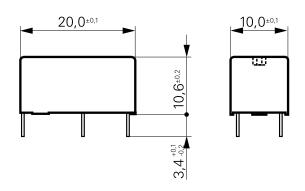
# **PCB LAYOUT / TERMINAL ASSIGNMENT**

Bottom view on solder pins



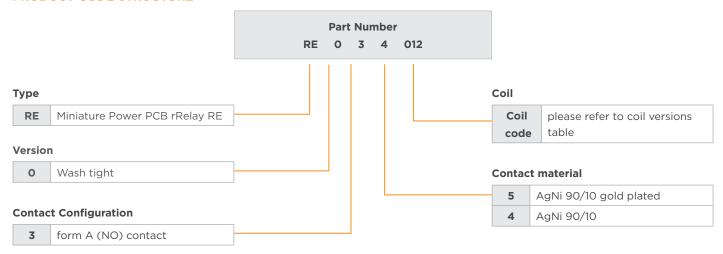


# **DIMENSIONS (UNIT: mm)**



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#### 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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