

# SCHRACK MINIATURE PCB RELAY REL

# GENERAL PURPOSE LOW POWER PCB RELAYS

#### INTRODUCTION

TE Connectivity (TE)'s Miniature Power PCB Relays REL is general purpose relay designed for various types of loads (e.g., resistive, inductive) with low height. The relay is designed as 1 pole 5A with 1 form A (NO) contact and is in flux proof version. The relay is especially suited for applications white goods, consumer electronics, etc.

#### **FEATURES**

- 1 pole 5 A, 1 form A (NO) contact
- Low height 12.0mm
- Especially suited for applications white goods, consumer electronics, etc.
- Plastic materials according to IEC 60335-1 (domestic appliances)

### **APPLICATIONS**

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

#### **APPROVALS**

- VDE Cert. No. 40010579
- UL E214025

Technical data of approved types on request







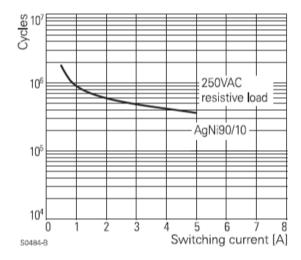
# **SCHRACK Miniature PCB Relay REL**

General Purpose Relays | Low Power PCB Relays

#### **CONTACT DATA**

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	5A
Limiting making current, max 4s, duty factor 10%	15A
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

#### **ELECTRICAL ENDURANCE**



#### **CONTACT RATINGS**

Туре	Contact	Load	Cycles	
IEC 61810				
REL34	A (NO)	5A, 250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>	
REL34	A (NO)	3A, 400VAC, cosφ=1, 85°C	400x10 <sup>3</sup>	
UL61810-1 (UL508)				
REL34	A (NO)	5A, 250VAC, resistive, 85°C	100x10 <sup>3</sup>	
Mechanical endurance		>10x10 <sup>6</sup> operations		

### **CONTACT DATA**

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

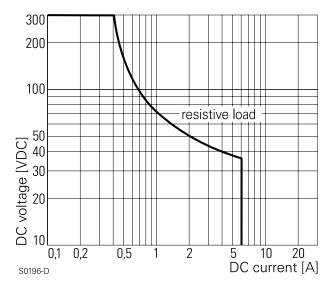
# **COIL VERSIONS, DC COIL**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%¹)	Rated coil power mW
5	5	3.75	0.5	70	357
6	6	4.5	0.6	100	360
12	12	9.0	1.2	400	360
24	24	18.0	2.4	1600	360
36	36	27.0	3.6	36001)	360
48	48	36.0	4.8	64001)	360

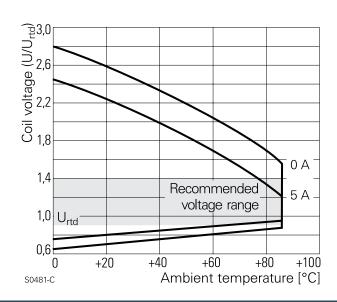
1) Coil resistance ±15%.

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

#### MAX. DC LOAD BREAKING CAPACITY



#### **COIL OPERATING RANGE DC**



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General Purpose Relays | Low Power PCB Relays

# **INSULATION DATA**

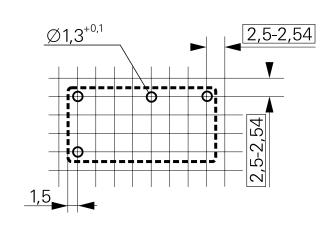
Initial dielectric strength				
Between open contacts 1000V <sub>rms</sub>				
Between contact and coil	3000V <sub>rms</sub>			
Initial insulation resistance				
Open contact circuit	>10x10 <sup>9</sup> Ω			
Coil-contact circuit $>10x10^{9}\Omega$				
Clearance/creepage				
Between contact and coil ≥4/4mi				
Material group of insulation parts	IIIa			

### **OTHER DATA**

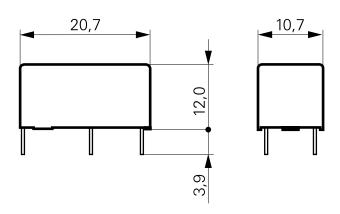
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Suppor Center at www.te.com/customersupport/ rohssupportcenter			
Resistance to heat and fire	according EN60335, par.30			
Ambient temperature	-40 to +85°C			
Category of environmental protection				
IEC 61810	RTII - flux proof			
Shock resistance (destructive)	100 g			
Terminal type	PCB-THT			
Weight	5 g			
Resistance to soldering heat THT				
IEC 60068-2-20	270°C/10s			
Packaging/unit	tube/25 pcs., box/500 pcs.			

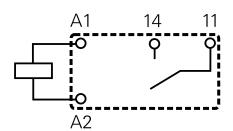
# **PCB LAYOUT / TERMINAL ASSIGNMENT**

**Bottom view on solder pins** 



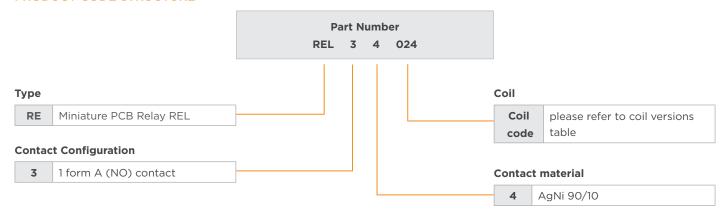
# **DIMENSIONS (UNIT: mm)**





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#### PRODUCT CODE STRUCTURE



#### **PRODUCT INFORMATION**

Product code	Version	Contacts	Contact material	Coil	TE Part Number
REL34006	flux proof 1 form A 1 NO contact		AgNi90/10	6VDC	3-1415535-5
REL34012				12VDC	3-1415535-6
REL34024				24VDC	3-1415535-7
REL34048			48VDC	3-1415535-8	

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