Miniature PCB Relay PE bistable

- **1pole 5 A, polarized bistable version**
- **1 CO contact**
- **Sensitive version with 200 mW coil**
- **4 kV coil-contact, Insulation according to IEC 255**
- **Ambient temperature 70 °C**
- **Low height 10.0 mm**
- **RoHS compliant (Directive 2002/95/EC) as per product date code 0352**

Applications

Room thermostats, electricity meters, domotic devices, white goods, battery powered controls

F0221-A

Approvals

VDE REG.-Nr. 6656, cULus E214025
Technical data of approved types on request

Contact data

Contact configuration	1 CO contact
Contact set	single contact
Type of interruption	micro disconnection
Rated current	5 A
Rated voltage / max.switching voltage AC	240/400 VAC
Maximum breaking capacity AC	1250 VA
Contact material	AgNi90/10
Mechanical endurance	$5x10^6$ cycles
Rated frequency of operation with / without load	6 / 1200 min^{-1}

Contact ratings

Type	Load	Cycles
PE014	5 A, 250 VAC, 85°C,resistive load, 6 min^{-1}, 50% df, EN61810-1	$1x10^5$
PE014	5 A, 240 VAC resistive load, on NO or NC contact, UL508	$1x10^5$
PE014	5 A, 30 VDC resistive, 85°C, 6 min^{-1}, 50% duty factor, EN61810-1	$1x10^5$

Coil data

Rated coil voltage range	2,2...48 VDC
Coil power	typ. 200 mW
Operative range	2
Reset voltage maximum, % of rated coil voltage	120% at -40°C
Minimum energization duration	20 ms
Information on reduced pulse duration with higher energization voltages on demand	
Maximum energization duration	1 min at <10% duty factor

Coil versions, bistable, 1 coil

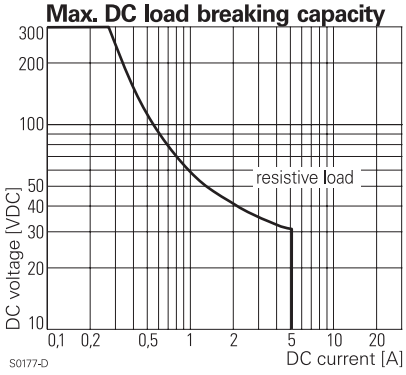
Coil code *)		Rated voltage VDC	Operate voltage VDC	Reset voltage VDC	Coil resistance Ohm	Rated coil power VA
F02	H02	2.2	1.65	1.65	22±10%	220
F03	H03	3	2.25	2.25	41±10%	220
F05	H05	5	3.75	3.75	125±10%	200
F06	H06	6	4.5	4.5	180±10%	200
F12	H12	12	9.0	9.0	650±10%	222
F24	H24	24	18.0	18.0	2750±10%	209

All figures are given for coil without preenergization, at ambient temperature +23°C
*) Coil codes F.. and H..have opposite polarity; refer to coil operation table
Other coil voltages on request

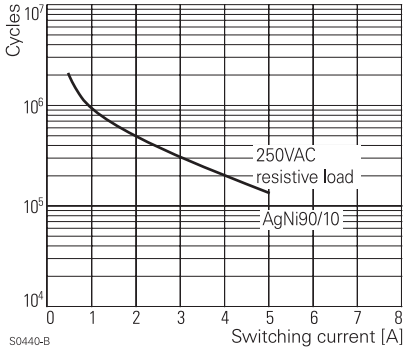
Coils - operation

Version	F..		H..	
Coil terminals	A1	A2	A1	A2
Operate	+	-	-	+
Reset	-	+	+	-
Contact position not defined at delivery				

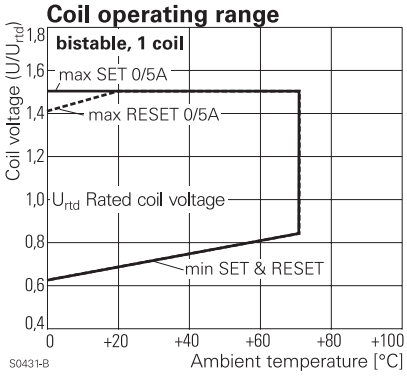
Max. DC load breaking capacity



Electrical endurance



Coil operating range



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www.tycoelectronics.com
www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' at schrackrelays.com in the 'Schrack' section.

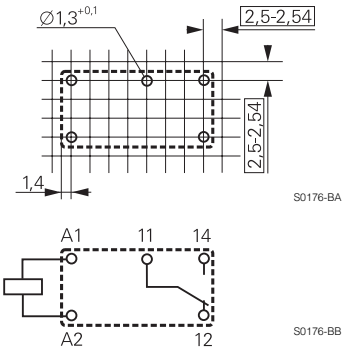
Specifications subject to change.

Miniature PCB Relay PE bistable (Continued)

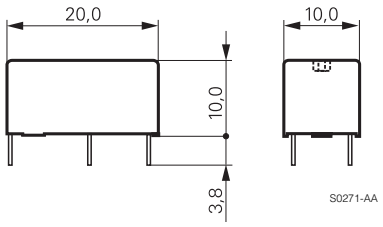
Insulation		
Dielectric strength coil-contact circuit	4000 V_{rms}	
open contact circuit	1000 V_{rms}	
Clearance / creepage coil-contact circuit	≥ 3,2 / 4 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI 250	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit	basic	
open contact circuit	functional	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	230 V	400 V
Overvoltage category	III	

Other data	
RoHS - Directive 2002/95/EC	compliant as per product date code 0352
Flammability class according to UL94	V-0
Ambient temperature range	-40...85°C, 70°C at 100% duty factor
Shock resistance (destruction)	> 100 g
Category of protection	RTII - flux proof (RTIII - wash tight on request)
Resistance to soldering heat flux-proof version	270°C / 10 s
Relay weight	5 g
Packaging unit	25/500 pcs

PCB layout / terminal assignment
Bottom view on solder pins



Dimensions



Product key

P	E	0	1	4			

Type
Version
0 flux proof
Contact configuration
1 1 CO contact
Contact material
4 AgNi 90/10
Coil
Coil code: please refer to coil versions table

Product key	Version	Contacts	Contact material	Coil	Coil	Part number
PE014F02	flux proof	1 CO contact	AgNi 90/10	bistable	2.2 VDC	9-1415389-1
PE014F03				1-coil	3 VDC	0-1415390-1
PE014F05				polarity F	5 VDC	1-1415390-1
PE014F06				200 mW	6 VDC	2-1415390-1
PE014F12					12 VDC	3-1415390-1
PE014F24					24 VDC	5-1415390-1
PE014H02				bistable	2.2 VDC	7-1415390-1
PE014H03				1-coil	3 VDC	8-1415390-1
PE014H05				polarity H	5 VDC	9-1415390-1
PE014H06				200 mW	6 VDC	0-1415391-1
PE014H12					12 VDC	1-1415391-1
PE014H24					24 VDC	2-1415391-1

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