INTRODUCTION FLYER

Power PCB Relay RTX

The RTX is designed to meet the requirements of IEC 60669-1, a standard characterized by high inrush currents and make/break capacities up to 16A/250VAC. Requirements for this switching capability may be found in lighting controls, home automation and security systems, energy management and similar applications.

The inrush capability is achieved using an innovative dual contact system that incorporates a TE flip-flop spring and a tungsten pre-make contact set to switch inrush currents up to 320A (peak). The RTX has a newly designed bistable magnetic system. Either the one- or two-coil model provides a high level of energy efficiency. The relay's actuator design has contact opening features built-in to help open possible microwelds for an extended relay life.

With only 29.1x12.7x16mm, the RTX is approximately half the size of conventional solutions, offering a space-saving advantage. It is VDE approved and UL recognized and RoHS compliant.

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TE connectivity RELAY PRODUCTS

Power PCB Relay RTX

KEY FEATURES

- 320A peak inrush
- 16A/250VAC make and break capacity acc. to IEC 60669-1
- 1 pole 16A, 1 form A (NO) contact
- Innovative dual contact system with TE flip-flop spring
- Newly designed bistable magnetic one or two coil sytem provides a high level of energy efficiency
- Tungsten pre-make and silver tin oxide carry/break contact
- Dimensions 29.1x12.7x16mm
- Bistable DC coil system
- Typical 5mm footprint
- Reinforced insulation
- RoHS compliant, cadmium free
- VDE approved, UL recognized

MORE INFORMATION

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Data Sheet Link

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Tyco Electronics AMP GmbH certified acc. ISO 14001 and ISO/TS 16949:2002

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APPLICATIONS

- Lighting control systems
- Movement sensors (e.g. passive infrared sensors)
- Home automation applications (bus systems, remote switching)
- Electronic switches for fixed installations

CONTACT DATA

- Contact arrangement: 1 form A (NO) contact
- Rated voltage: 250VAC
- Rated current: 16A
- Limiting making current incandescent lamps max. 20ms: 200A peak, fluorescent lamps, max 1.2ms: 320A peak
- Contact style and material: W pre-make contact and $AgSnO_2$
- Mechanical endurance: $>10^5$ operations

COIL DATA

- Magnetic system: DC, polarized, bistable
- Rated coil voltage / power: 3 to 48VDC / 650mW with 1 coil, 950mW with 2 coils

INSULATION DATA

- Initial dielectric strength
  - between open contacts: 1250Vrms, after test with 250VAC: 500Vrms.
  - between contact and coil: 5000Vrms
- Clearance creepage between contact and coil: ≥6/6mm
- Distance through solid insulation: <2mm

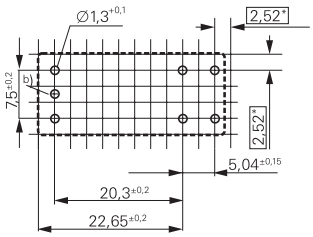
OTHER DATA

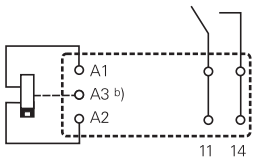
- Ambient temperature: -40 to +70°C
- Category of environmental protection IEC 61810: RTII – flux proof
- Mounting and terminal type: PCB, THT

LAYOUT AND DIMENSIONS

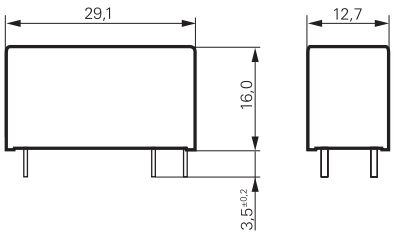
PCB layout / terminal assignment
Bottom view on solder pins

16A, pinning 5mm, 1 form A (NO) contact





a) Indicated contact position during or after coil energization with reset voltage.
b) or 2 coil version only



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