



XT series

Interface Plug-in Relay

8 to 16 Amp, 1 or 2 Pole

File E214025
 NR B758

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approval files of the agencies/laboratories and review them to confirm the product meets the requirements for a given application.

Features

- Compact design is only 0.54" (13.7mm) wide.
- Choice of SPDT rated 16A or DPDT rated 8A.
- Plugs into same sockets as our RT series.
- Sensitive DC coil (400mW) or AC coil (0.58VA @60 Hz).
- Test lever, mechanical indicator, LED and protection diode options.
- 4kV (8mm) coil-to-contact isolation.
- RoHS Compliant (Directive 2002/95/EC).

Contact Data

Arrangements: 1 Form C (SPDT) and 2 Form C (DPDT).
Contact Set: Single contact.
Type of Interruption: Micro-disconnection.
Material: Silver-nickel 90/10.

Expected Mechanical Life: DC coil 10 million operations minimum.
 AC coil 5 million operations minimum.

Switching Frequency With / Without Load: 6 / 600 operations min⁻¹.

Ratings:

| Arrangement | 1 Form C | 2 Form C |
|---------------------------------------|----------|----------|
| Rated Current | 16A | 8A |
| Rated Voltage | 240VAC | 240VAC |
| Maximum Switching Voltage | 400VAC | 400VAC |
| Rated Breaking Capacity | 4,000VA | 2,000VA |
| Maximum Make Current (max 4s, 10% DF) | 30A | 15A |

Contact Ratings

(All are for Form C contacts, 70°C, 50% duty factor)

| Type | Load | Cycles |
|------|---|----------------------|
| XT37 | 16A, 250VAC, EN61810-1 | 30 x 10 ³ |
| XT48 | 8A, 250VAC, DC Coil, EN61810-1 | 50 x 10 ³ |
| XT48 | 8A, 250VAC, AC Coil, EN61810-1 | 30 x 10 ³ |
| XT31 | 16A, 250VAC, EN61810-1 | 30 x 10 ³ |
| XT42 | 8A, 250VAC, DC Coil, EN61810-1 | 50 x 10 ³ |
| XT42 | 8A, 250VAC, AC Coil, EN61810-1 | 30 x 10 ³ |
| XT37 | 16A, 250VAC, General Purpose, UL508 | 30 x 10 ³ |
| XT48 | 8A, 250VAC, General Purpose, DC Coil, UL508 | 50 x 10 ³ |
| XT48 | 8A, 250VAC, General Purpose, AC Coil, UL508 | 30 x 10 ³ |
| XT31 | 16A, 250VAC, General Purpose, UL508 | 30 x 10 ³ |
| XT42 | 8A, 250VAC, General Purpose, DC Coil, UL508 | 50 x 10 ³ |
| XT42 | 8A, 250VAC, General Purpose, AC Coil, UL508 | 30 x 10 ³ |

Insulation

Initial Dielectric Strength Between Open Contacts: 1,000Vrms.

Initial Dielectric Strength Between Coil and Contacts:
 5,000Vrms with socket RT78726.
 4,000Vrms with socket RT78725.

Initial Dielectric Strength Between Poles: 2,500Vrms.

Clearance / Creepage Coil-to-Contact: ≥ 8mm / 8mm.

Material Group of Insulation Parts: ≥ IIIa.

Tracking Index of Relay Base: PTI 175 V.

Insulation to IEC 60664-1

Type of insulation coil-contact circuit: Reinforced.

Type of insulation open contact circuit: Functional.

Type of insulation adjacent contact circuits: Basic.

Rated Insulation Voltage: 250V.

Pollution Degree: 3 2.

Rated Voltage System: 240V 400V.

Overvoltage Category: III.

Coil Data

Rated Coil Voltage Range: 6-110VDC; 24-230VAC.

Operative Range: 2.

Coil Insulation System (Per UL1446): Class F.

Coil Power (Typ.): DC – 400mW; AC – 0.76VA @ 50Hz. / 0.58VA @ 60Hz.

DC Coil Data @ 23°C

| Nominal Voltage VDC | DC Resistance in Ohms | Must Operate Voltage VDC | Drop-out Voltage VDC | Power for Opt. LED (mW) |
|---------------------|-----------------------|--------------------------|----------------------|-------------------------|
| 12 | 360 ±10% | 8.4 | 1.2 | 10 |
| 24 | 1,440 ±10% | 16.8 | 2.4 | 19 |
| 48 | 5,520 ±10% | 33.6 | 4.8 | 39 |
| 110 | 28,800 ±12% | 77.0 | 11.0 | 87 |

NOTE: Observe coil polarity on models with the optional protection diode. A1 is positive and A2 is negative.

AC Coil Data @ 23°C

| Nominal Voltage VAC | DC Resistance in Ohms | Must Operate Voltage (VAC) 50 Hz / 60 Hz | Drop-out Voltage VAC | Power for Opt. LED (VA) |
|---------------------|-----------------------|--|----------------------|-------------------------|
| 24 | 350 ±10% | 18.0 / 20.4 | 3.6 | 0.012 |
| 115 | 8,100 ±15% | 86.3 / 97.8 | 17.3 | 0.054 |
| 230 | 32,500 ±10% | 172.5 / 196.5 | 34.5 | 0.073 |

Operate Data

Must Operate Voltage: See Coil Data table.

Operate Time (DC Coil): 9 ms typical, at nom. voltage.

Release Time (DC Coil): 6 ms typical, at nom. voltage.

Bounce Time (DC Coil) NO / NC: 4 ms / 12 ms.

Environmental Data

Temperature Range:

Operating: -40°C to +70°C.

Vibration Resistance (functional): 20g N/O, 5g N/C, 30 to 500 Hz.

Shock Resistance (destruction): 100g.

Mechanical Data

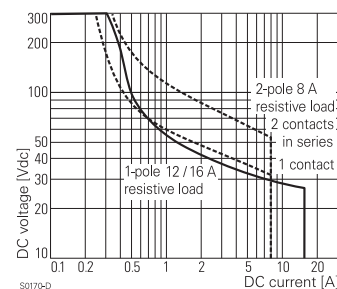
Flammability Class (per UL94): V-0.

Category of Protection: RTII.

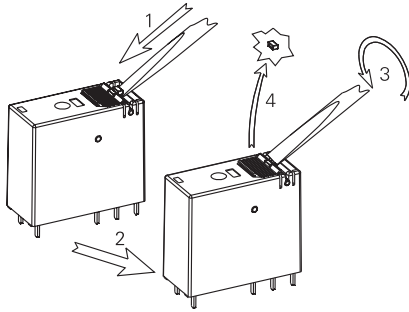
Mounting Distance: 4.5mm, dense packing of sockets.

Relay Weight: .56 oz. (16 g) approximately.

Max. DC Load Breaking Capacity (resistive load)



Conversion of Test Lever to Locking Capability

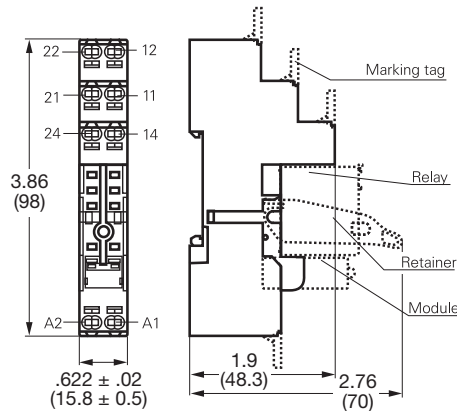


A standard XT series relay with a test lever is delivered with the locking function of the test lever disabled. In this state, a small plastic nib is designed to interfere with the lever moving to the locking position in normal operation; however, if the test lever is moved too forcefully, it may bypass the normal test position and go to the locked position.

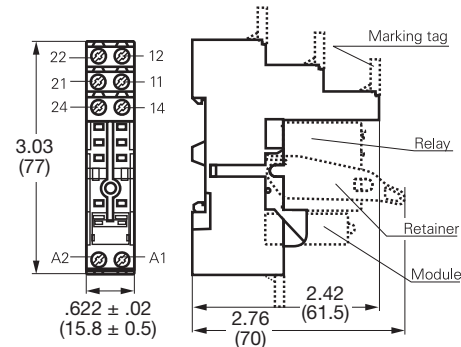
To enable the locking function, please remove the small plastic nib as illustrated in the drawing at left. The lever may then move to its locking position with no undue force required.

Available Sockets & Accessories for use with XT Series Relays

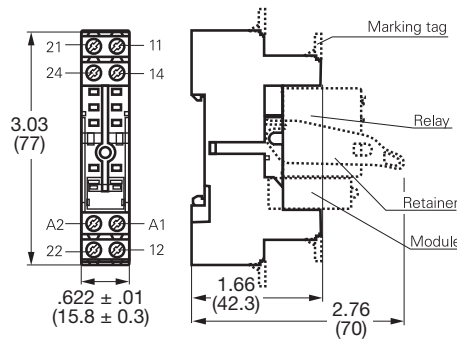
**RT7872P
DIN Rail Socket with Poke In Terminals, Logical Arrangement**



**RT78726
DIN Rail Socket with Screw Terminals, Logical Arrangement**



**RT78725
DIN Rail Socket with Screw Terminals, Conventional Arrangement**



Socket Selection Table

| Socket Part No. | Termination | Mounting Style |
|-----------------|--|----------------|
| RT78725 | Screw Terminals, Conventional Arrangement | DIN-rail |
| RT78726 | Screw Terminals, Logical Arrangement | DIN-rail |
| RT7872P | Poke-in (screwless) Terminals, Logical Arrangement | DIN-rail |

Accessory Selection Table

| Accessory Part No. | Description |
|--------------------|--|
| RT17017 | Plastic Retaining Clip |
| RT17040 | Plastic Snap-on Marking Tag |
| RT170P1 | Jumper Bar (for use with Socket RT170P1) |
| PTM... (various) | LED and Protection Modules* |

* Consult factory for details concerning various available modules.

NOTE: All part numbers listed above are RoHS compliant.