



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

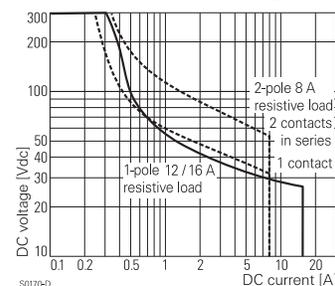
Flammability Class (per UL94): V-0.

Category of Protection: RTII.

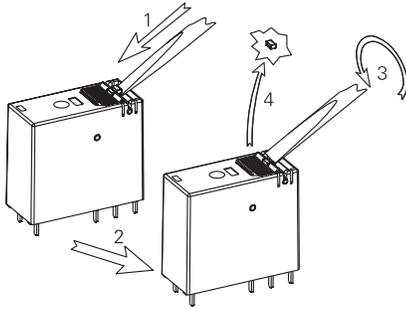
Mounting Distance: 4.5mm, dense packing of sockets.

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

Max. DC Load Breaking Capacity (resistive load)



Conversion of Test Lever to Locking Capability

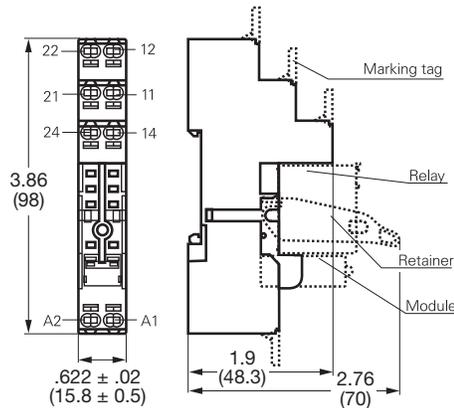


A standard XT series relay with a test lever is delivered with the locking function of the test lever disabled. In this state, a small plastic nib is designed to interfere with the lever moving to the locking position in normal operation; however, if the test lever is moved too forcefully, it may bypass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

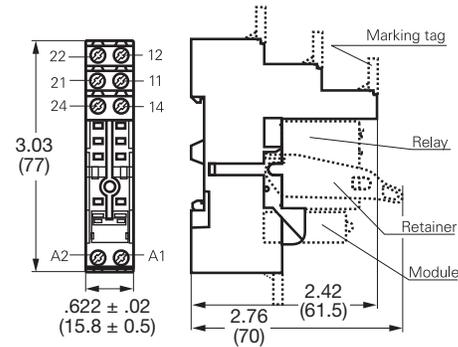
To enable the locking function, please remove the small plastic nib as illustrated in the drawing at left. The lever may then move to its locking position with no undue force required.

Available Sockets & Accessories for use with XT Series Relays

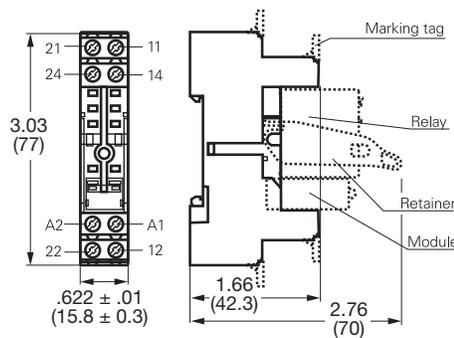
**RT7872P
DIN Rail Socket with Poke In Terminals, Logical Arrangement**



**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.