

1887113-3 Product Details



(XT374R24)

TE Internal Number: 1887113-3



Industrial Relays (General Purpose)

Always EU RoHS/ELV Compliant (Statement of

Compliance)

Product Highlights:

- XT Series
- Contact Current Class = 10A to 20A Class, Greater Than 16A
- Contact Rated Current = 16 A
- Terminal Type = Plug-in
- Contact Arrangement = 1 Form C (CO)

Documentation & Additional Information

Product Drawings:

Catalog Pages/Data Sheets:

Interface Plug-in Relay XT (PDF, English)

Product Specifications:

None Available

Application Specifications:

None Available

Instruction Sheets:

None Available

CAD Files: (CAD Format & Compression Information)

- 2D Drawing (DXF, Version SHK1) • 3D Model (IGES, Version SHK1)
- 3D Model (STEP, Version SHK1)

Additional Information:

Related Products:

Tooling

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- Series = XT
- Terminal Type = Plug-in

Electrical Characteristics:

- Contact Current Class = 10A to 20A Class, Greater Than 16A
- Contact Rated Current (A) = 16
- Contact Limiting Continuous Current (A) = 16
- Contact Limiting Making Current (A) = 30
- Contact Limiting Breaking Current (A) = 16
- Insulation Initial Dielectric Between Coil/Contact Class = >4000V Class
- Insulation Initial Dielectric Between Open Contacts (V rms) = 1000
- Insulation Initial Dielectric Between Contacts and Coil (V rms) = 5000
- Contact Rated Voltage (VAC) = 240
- Contact Rated Voltage (VDC) = 400
- Contact Limiting Short-Time Current (A) = 300
- Contact Switching Recommended Load, Min. = 10mA at 12V
- Coil Rated Voltage (VAC) = 24
- Coil Resistance (Ω) = 350
- Coil Rated Power, AC (VA) = 1.00
- Coil Rated Power Class = 0.5VAW to 1.0VA Class
- Insulation Creepage Class = 5.5mm to 8mm Class
- Insulation Clearance Class = 5mm to 8mm Class
- Insulation Special Features = 5000V Initial Surge Withstand Voltage between Contacts and Coil, Tracking Index of Relay Base PTI175

Dimensions:

- Mechanical Length Class = 25mm to 30mm Class
- Length (mm [in]) = 29.00 [1.142]
- Mechanical Width Class = 12mm to 16mm Class

- Mount Type = Socket
- Weight (g [oz]) = 16.00 [0.565]

Contact Features:

- Contact Material = AgNi90/10
- Contact Number of Poles = 1

Configuration Features:

- Contact Arrangement = 1 Form C (CO)
- Coil Magnetic System = Monostable, AC
- Coil Special Features = Electrical Indicator, LED, UL Coil Insulation Class F

Industry Standards:

- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Not relevant for lead free
- RoHS/ELV Compliance History = Always was RoHS compliant
- Approved/Registered Standards = cULus, LLOYDs, VDE

Environmental:

- Environmental Category of Protection = RTII
- Environmental Ambient Temperature, Max. (°C [°F]) = 70
- Environmental Ambient Temperature Class = 50°C to 70°C Class

Packaging Features:

• Packaging Method = Tube

Other:

- Brand = Schrack
- Accessories/Socket Type = DIN-rail Socket
- Additional Features = Manual Operation, Mechanical Indicator

- Width (mm [in]) = 13.00 [0.512]
- Mechanical Height Class = 25mm to 30mm Class
- Height (mm [in]) = 26.70 [1.051]
- Insulation Clearance Between Contact and Coil (mm [in]) = 8
 [0.315]
- Insulation Creepage Between Contact and Coil (mm [in]) = 8 [0.315]

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Interface Plug-in Relay XT

- 1 pole 16 A, 2 pole 8 A, 1 form C (1 CO) contact or 2 form C (2 CO) contacts
- DC or AC coil, sensitive coil 400 mW
- Reinforced insulation, protection class II (VDE 0700)
- 4kV/8mm dielectric strength between coil and contact
- Manual test tab, optionally lockable
- Version with mechanical and/or electrical indicator optional
- Suitable for use in Tyco Electronics' standard RT sockets
- **■** Recycleable packaging

Typical applications
Panel boards, mechanical engineering



F0289-R

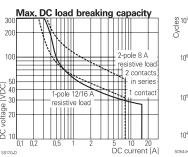


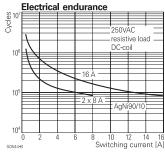
Approvals	
VDE REGNr. B758, UL E214025 , Lloyds 08/20067(E1)	
Technical data of approved types on request	

Contact Data	XT 1pole	XT 2pole					
Contact arrangement	1 form C (CO)	2 form C (CO)					
Rated voltage	240VAC	240VAC					
Max. switching voltage	400VAC	400VAC					
Rated current	16A	8A, UL: 10A					
Limiting making current, max 4s, df 109	% 30A	15A					
Limiting short-time current, 30ms	300A	300A					
Switching power	4000VA	2000VA					
Contact material	AgNi	90/10					
Min. recommended contact load	12V a	t 10mA					
Initial voltage drop	30mV at 10	00mA/6VDC					
Frequency of operation, with/without lo	Frequency of operation, with/without load 360/36000h ⁻¹						
Operate time, DC coil	typ. 8ms	typ. 10ms					
Release time, DC coil, without PD	typ. 6ms	typ. 5ms					
Bounce time,							
form A/form B, DC coil	typ. 4/6ms	typ. 4/9ms					

Co	nta	ct	rati	ings

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Type	Contact	Load	Cycles	
IEC 61	1810			
XT3	C (CO)	16A, 250VAC, cosφ=1, 70°C	30x10 ³	
XT3	A (NO)	16A, 250VAC, cosφ=1, 70°C	50x10 ³	
XT4	C (CO)	8A, 250VAC, cosφ=1, 70°C	$50x10^3$	
XT4 D	C-coil A (NO)	8A, 250VAC, cosφ=1, 70°C	100x10 ³	
UL 50	8	•		
XT3	C (CO)	16A, 250VAC, general purpose, 70°C	30x10 ³	
XT4	C (CO)	10A, 250VAC, general purpose, 70°C	20x10 ³	
XT4	C (CO)	8A, 250VAC, general purpose, 70°C	30x10 ³	
Mecha	nical endurance	-		
DC coil		10x10 ⁶ operations		
AC coil		5x10 ⁶ operations		

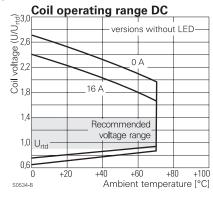




Coil Data		
Coil voltage range	6 to 110VDC	
	24 to 230VAC	
Operative range, IEC 61810	2	
Coil insulation system according UL	class 155 (F)	

Coil v	ersions,	DC coil				
Coil c	code	Rated	Operate	Release	Coil	Rated coil
STD	LED &	voltage	voltage	voltage	resistance	power
	$PD^{3)}$	VDC	VDC	VDC	$\Omega \pm 10\%^{1)}$	mW ⁴⁾
012	LB2	12	8.4	1.2	360	400/10
024	LC4	24	16.8	2.4	1440	400/19
048	LE8	48	33.6	4.8	5520	417/39
110	MB0	110	77.0	11.0	28800 ¹⁾	420/87

- 1) Coil resistance ±12%
- 3) Protection diode PD; standard polarity: +A1 / -A2 $\,$
- 4) Coil power/optional LED power
- All figures are given for coil without pre-energization, at ambient temperature $+23^{\circ}$ C Other coil voltages on request





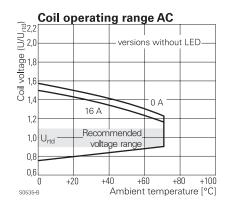
Interface Plug-in Relay XT (Continued)

Coil Data (continued)

Coil v	ersions,	AC coil				
Coil c	ode	Rated	Operate	Release	Coil	Rated coil
STD	LED	voltage	voltage	voltage	resistance	power
			50/60Hz	50/60Hz		50/60Hz
		VAC	VAC	VAC	$\Omega \pm 10\%^{2)}$	VA ⁵⁾
524	R24	24	18.0/19.2	3.6	350	0.76/0.58
615	S15	115	86.3/92.0	17.3	8100 ²⁾	0.76/0.58
730	T30	230	172.5/184.0	34.5	32500 ²⁾	0.74/0.58

2) Coil resistance ±15%

5) Power for optional LED: 24VAC:12mVA, 115VAC: 54mVA, 230VAC: 73mVA All figures are given for coil without pre-energization, at ambient temperature +23°C Other coil voltages on request



Insulation Data

modiation bata	
Initial dielectric strength	
between open contacts	1000Vrms
between contact and coil	
in combination with socket RT78726	5000Vrms
in combination with socket RT78725	4000Vrms
between adjacent contacts	2500Vrms
Initial surge withstand voltage	
between contact and coil	5000V (1,2/50µs)
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI 175V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Ambient temperature -40 to +70°C Cold storage, IEC 60068-2-1 Dry heat, IEC 60068-2-2 -40°C/16h 85°C/16h Damp heat cyclic

IEC 60068-2-30, Db, Variant 1 25/55°C for 12/12h (2 cycles)

Category of environmental protection

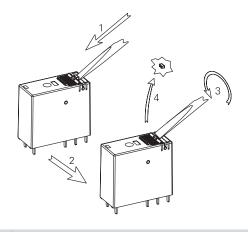
IEC 61810 RTII - flux proof Vibration resistance (functional),

form A (NO)/form B (NC) 20/5g (30 to 500Hz) Shock resistance (destructive) 100g Terminal type plua-in Cover retention pull force 100 N push force 100 N Mounting distance ≥4.5mm, corresponds to dense packing of sockets Manual operation testing and locking position⁶⁾

Weight 16g 10/250 pcs. Packaging unit

6) Locking function description

If the test button is pulled out too forcefully, it may bypass the momentary testing position and go straight into the locked position. Delivery status is with testing possibility only, to reach locking position please remove the locking plastic pip according drawing.



Accessories

Accessories Interface Plug-in Relay XT For details see datasheet Note: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

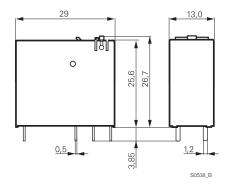
Product Sets

Complete sets consisting of a relay mounted on a socket Package XT see



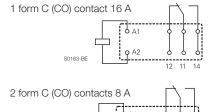
Interface Plug-in Relay XT (Continued)

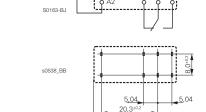
Dimensions



Terminal assignment

Bottom view on pins





Product code structure

AgNi90/10

XT 3 T30 Typical product code Туре XT Interface Plug-in Relay XT Version 1 pole, 16A, pinning 5mm 2 pole, 8A, pinning 5mm Contact configuration 1 1 form C contact (1 CO) 1 form C contact (1 CO) with test button and mechanical indicator 2 2 form C contacts (2 CO) 2 form C contacts (2 CO) with test button and mechanical indicator **Contact material**

Coil

Coil code: please refer to coil versions table

Product key	Contacts	Cont. material	Coil	Coil	Part number
XT374LC4	1 form C	AgNi90/10	DC coil	24VDC	1887112-1
XT374R24	1 CO contact	test button,	AC coil	24VAC	1887113-3
XT374T30	16A	mechanical		230VAC	1887113-1
XT484LC4	2 form C	and electrical	DC coil	24VDC	1887212-1
XT484R24	2 CO contacts	indicator	AC coil	24VAC	1887213-3
XT484T30	8A			230VAC	1887213-1

Other types on request