

4-1415540-2 Product Details



4-1415540-2
(XT3S4R24)

TE Internal Number: 4-1415540-2

 [Active](#)

Industrial Relays (General Purpose)

 [Always EU RoHS/ELV Compliant \(Statement of Compliance\)](#)

Product Highlights:

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

Documentation & Additional Information

Product Drawings:

- None Available

Catalog Pages/Data Sheets:

- None Available

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files:

- None Available

Additional Information:

- [Product Line Information](#)

Related Products:

- [Tooling](#)

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

Product Type Features:

- Series = XT Package
- Terminal Type = Screw Terminals

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 = 500V to 1000V Class
- Insulation - Initial Dielectric Between Open Contacts (V rms) = 5000
- Insulation - Initial Dielectric Between Contacts and Coil (V rms) = 1000
- Contact - Rated Voltage (VAC) = 240
- Contact - Switching Voltage Max. (VAC) = 400
- Contact - Limiting Short-Time Current (A) = 16
- 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 = Tracking Index of Relay Base PTI175

Dimensions:

- Mechanical - Length Class = >60mm Class
- Length (mm [in]) = 77.00 [3.031]
- Mechanical - Width Class = 12mm to 16mm Class
- Width (mm [in]) = 15.80 [0.622]
- Mechanical - Height Class = >50mm Class
- Height (mm [in]) = 69.00 [2.716]
- Insulation - Clearance Between Contact and Coil (mm [in]) = 8 [0.315]
- Insulation - Creepage Between Contact and Coil (mm [in]) = 8 [0.315]

Body Features:

- Mount Type = DIN Rail
- Weight (g [oz]) = 56.00 [1.977]

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 = LED, Electrical Indicator

Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- RoHS/ELV Compliance History = Always was RoHS compliant
- Approved/Registered Standards = cULus, VDE

Environmental:

- Environmental - Category of Protection = RTI
- Environmental - Ambient Temperature, Max. (°C [°F]) = 70 [158]
- Environmental - Ambient Temperature Class = 50°C to 70°C Class

Packaging Features:

- Packaging Method = Box

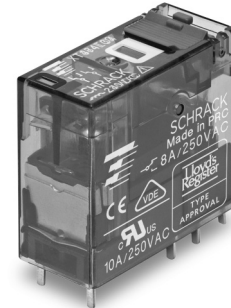
Other:

- Brand = Schrack
- Additional Features = Manual Operation

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-B



Approvals

VDE REG.-Nr. 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 10%	30A	15A
Limiting short-time current, 30ms	300A	300A
Switching power	4000VA	2000VA
Contact material	AgNi90/10	
Min. recommended contact load	12V at 10mA	
Initial voltage drop	30mV at 100mA/6VDC	
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

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
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	DC-coil A (NO)	8A, 250VAC, cosφ=1, 70°C	100x10 ³
UL 508			
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
Mechanical 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 versions, DC coil

Coil code	Rated	Operate	Release	Coil	Rated coil	
STD	LED & PD ³⁾	voltage VDC	voltage VDC	resistance $\Omega_{\pm 10\%}^{1)}$	power 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%

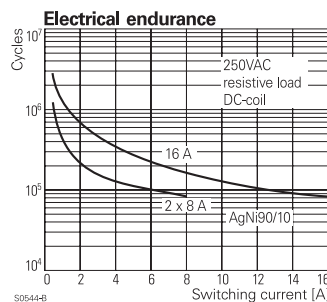
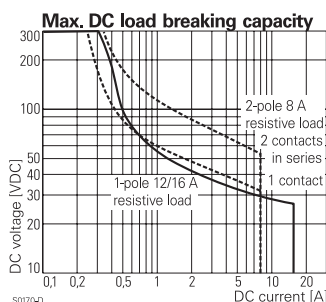
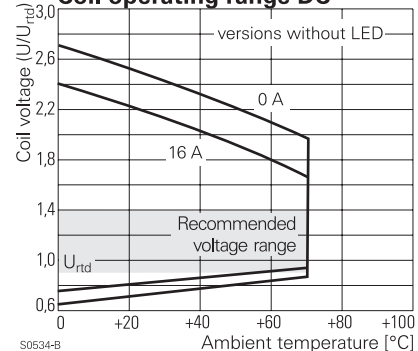
3) Protection diode PD; standard polarity: +A1 / -A2

4) Coil power/optional LED power

All figures are given for coil without pre-energization, at ambient temperature +23°C

Other coil voltages on request

Coil operating range DC



Interface Plug-in Relay XT (Continued)

Coil Data (continued)

Coil versions, AC coil

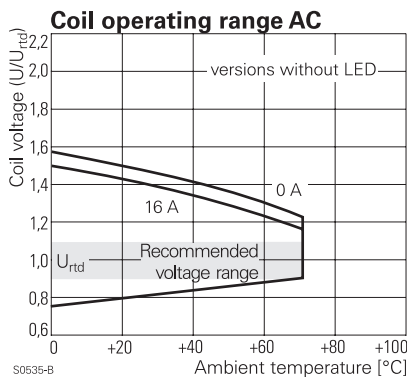
Coil code		Rated voltage	Operate voltage	Release voltage	Coil resistance	Rated coil power
STD	LED		50/60Hz	50/60Hz		50/60Hz
		VAC	VAC	VAC	$\Omega \pm 10\%^{(2)}$	VA ⁽⁵⁾
524	R24	24	18.0/19.2	3.6	350	0.76/0.58
615	S15	115	86.3/92.0	17.3	8100 ⁽²⁾	0.76/0.58
730	T30	230	172.5/184.0	34.5	32500 ⁽²⁾	0.74/0.58

2) Coil resistance $\pm 15\%$

5) Power for optional LED: 24VAC: 12mVA, 115VAC: 54mVA, 230VAC: 73mVA

All figures are given for coil without pre-energization, at ambient temperature $+23^\circ\text{C}$

Other coil voltages on request



Insulation Data

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 (1,2/50 μs)
Clearance/creepage	
between contact and coil	$\geq 8/8\text{mm}$
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 175V

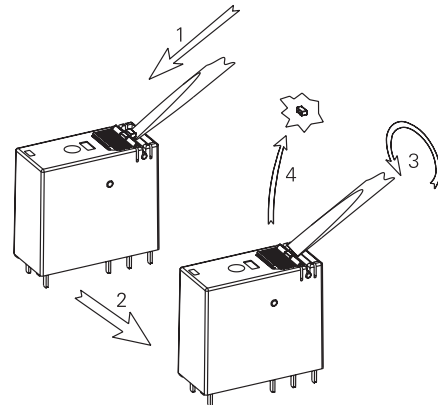
Other Data

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

Ambient temperature	-40 to $+70^\circ\text{C}$
Cold storage, IEC 60068-2-1	$-40^\circ\text{C}/16\text{h}$
Dry heat, IEC 60068-2-2	$85^\circ\text{C}/16\text{h}$
Damp heat cyclic	
IEC 60068-2-30, Db, Variant 1	$25/55^\circ\text{C}$ 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	plug-in
Cover retention	
pull force	100 N
push force	100 N
Mounting distance	$\geq 4.5\text{mm}$, corresponds to dense packing of sockets
Manual operation	testing and locking position ⁽⁶⁾
Weight	16g
Packaging unit	10/250 pcs.

⁽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

For details see datasheet [Accessories Interface Plug-in Relay XT](#)

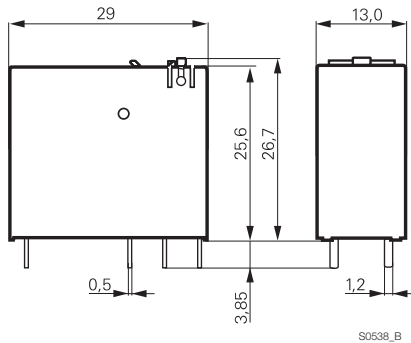
Note: Indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

Product Sets

Complete sets consisting of a relay mounted on a socket
see [Package XT](#)

Interface Plug-in Relay XT (Continued)

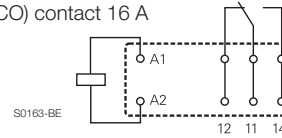
Dimensions



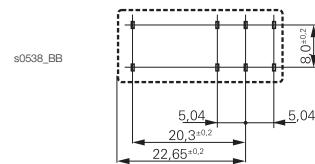
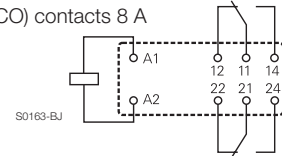
Terminal assignment

Bottom view on pins

1 form C (CO) contact 16 A



2 form C (CO) contacts 8 A



Product code structure

Typical product code **XT 3 7 4 T30**

Type	XT Interface Plug-in Relay XT
Version	3 1 pole, 16A, pinning 5mm 4 2 pole, 8A, pinning 5mm
Contact configuration	1 1 form C contact (1 CO) 2 2 form C contacts (2 CO) 7 1 form C contact (1 CO) with test button and mechanical indicator 8 2 form C contacts (2 CO) with test button and mechanical indicator
Contact material	4 AgNi90/10
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, mechanical	AC coil	24VAC	1887113-3
XT374T30	16A			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