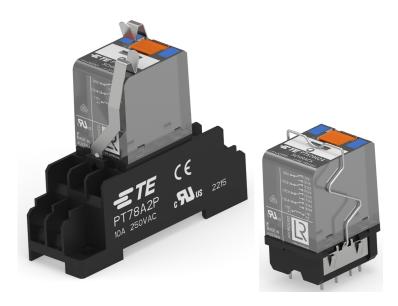


GENERAL PURPOSE RELAYS ACCESSORIES

INTRODUCTION

TE Connectivity introduces new accessories for the Miniature PT Schrack relays. These sockets are universal products and can be used in a wide range of applications rated up to 10Amps. Optional clips provide a more secure connection of the relay to the socket. For extensive PT relay accessories click here



FEATURES

- Easy replacement of relays on a densely packed DIN rail
- Safety protection against physical contact
- Metal clips can be installed to make the installation more stable
- Total height of socket-relay package is 60mm
- High quality rising clamp terminals
- Captive combination terminal screws

APPLICATIONS

- · Electrical control cabinet
- Power Conversion System (PCS)
- Machine tool
- Automatic production line

APPROVALS

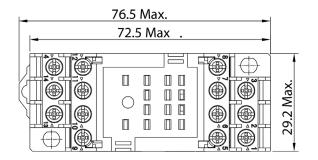
• CE and cULus E233439 for DIN Rail sockets

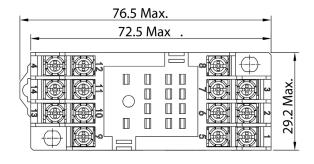


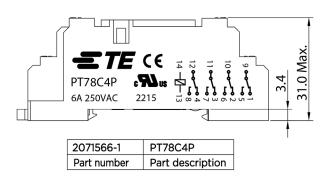
PT DIN-rail socket with screw type terminals PT78C4P, PT78A4P

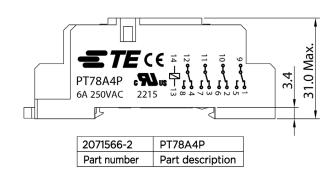








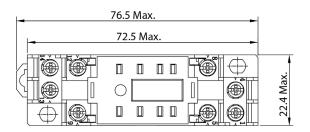


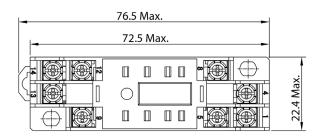


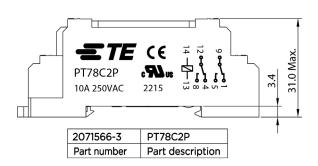
PT DIN-rail socket with screw type terminals PT78C2P, PT78A2P

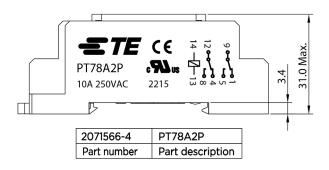












GENERAL PURPOSE RELAYS ACCESSORIES

PT DIN-rail socket with screw type terminals PT78C4P, PT78A4P, PT78C2P, PT78A2P

Technical data 2-pole Rated voltage/ Max. switching voltage 2 form C (CO) 4 form C (CO)

switching voltage	2 form C (CO)	4 form C (CO)
Rated current	10A	6A
Limiting continuous current	see derating curve	
Dielectric strength (initial value)		
Open contact circuit 1 min	1,200Vac	1,200Vac
Coil-contacts 1 min	2,500Vac	2,500Vac
Adjacent contacts 1 min	2,500Vac	2,000Vac
Clearance / creepage		
Coil-contact circuit	≥3/4mm	≥3/4mm
Adjacent contact circuits	≥3/4mm	≥1.5/2.2mm
Material group of insulation parts	IIIa	
Flammability class UL 94	V2	
Insulation to IEC 60664-1		
Type of insulation		
Coil contact circuit	Ва	asic

Functional

Basic

Open contact circuit

Adjacent contact circuits

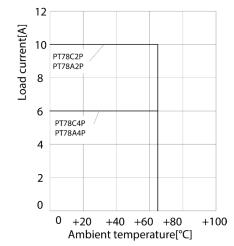
Technical data(continued)

Rated insulation voltage	250V	
Pollution degree	21)	
Rated voltage system	230/400V	
Ambient temperature range	-40+65°C	
Terminals	screw	
Terminal screw torque	0.5Nm (typical)	
acc. IEC61984	0.7Nm(max)	
Terminal Screw size	M3	
Wire strip length	8mm	
Wire cross section		
single wire	1.5 mm ²	
fine wire	1.5 mm ²	
Insertion cycles	A (10)	
Max. Insertion Force	130N	
Max pull out force	130N	
Mounting direction	Any direction with clip	
Material compliance: EU RoHS/ELV, China		

RoHS, REACH, Halogen content refer to the Product Compliance Support Center at

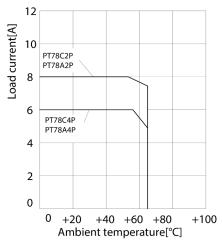
www.te.com/customersupport/rohssupportcenter

Derating curve according to UL508



The derating curve was defined and measured by PT socket and PT relay together.

Derating curve according to IEC61984



The derating curve was defined and measured by PT socket and PT relay together.

¹⁾ with inserted relay pollution degree 1 in region of contact pin/socket inlets



PT28D00 PT28D01

PT sockets

Туре	Description	Part Number
PT78C4P	DIN-rail socket with screw type terminals 4 pole, with safety protection	2071566-1
PT78A4P	DIN-rail socket with screw type terminals 4 pole	2071566-2
PT78C2P	DIN-rail socket with screw type terminals 2 pole, with saftey protection	2071566-3
PT78A2P	DIN-rail socket with screw type terminals 2 pole	2071566-4

Accessories for

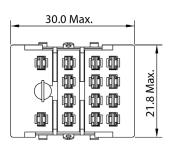
Туре	Description	Part Number
PT28D00	Metal retaining clip for DIN rail socket, 29 mm height relay (PT)	2071566-7
PT28D01	Metal retaining clip for DIN rail socket, 36 mm height relay	2071566-9

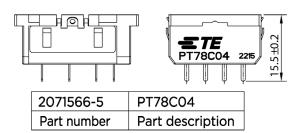
GENERAL PURPOSE RELAYS ACCESSORIES

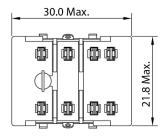
PT PCB socket PT78C02,PT78C04

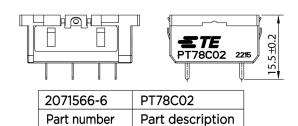












GENERAL PURPOSE RELAYS ACCESSORIES

PT PCB socket PT78C02,PT78C04

Rated voltage/ Max. switching voltage Rated current 8A 6A Limiting continuous current Dielectric strength (initial value) Open contact circuit 1 min Coil-contacts 1 min Adjacent contacts 1 min Adjacent contact circuit Adjacent contact circuits Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic Open contact circuit Functional	Technical data	2-pole	4-pole
Limiting continuous current Dielectric strength (initial value) Open contact circuit 1 min Coil-contacts 1 min Adjacent contacts 1 min Adjacent contact circuit Adjacent contact circuits Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit See derating curve 1,200Vac 1,200Vac 2,500Vac 2,500Vac 2,000Vac 23/4mm ≥3/4mm ≥3/4mm ≥1.5/2.2mm Illa Flammability class UL 94 V2 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic		2 form C (CO)	4 form C (CO)
Dielectric strength (initial value) Open contact circuit 1 min Coil-contacts 1 min Adjacent contacts 1 min Adjacent contact circuit Adjacent contact circuit Adjacent contact circuit Adjacent contact circuit Adjacent contact circuits Elammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Dielectric strength 1,200Vac 1,200Vac 2,500Vac 2,000Vac 2,000Vac 2,000Vac 2,500Vac 2,500Vac 2,500Vac 2,500Vac 2,000Vac 2,500Vac 2,000Vac Elammability ≥3/4mm ≥1.5/2.2mm Illa Flammability class UL 94 V2 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Rated current	8A	6A
(initial value) Open contact circuit 1 min Coil-contacts 1 min Adjacent contacts 1 min Adjacent contact circuit Adjacent contact circuit Adjacent contact circuit Adjacent contact circuit Adjacent contact circuits Elammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Imin 1,200Vac 1,200Vac 2,500Vac 2,000Vac 2,000Vac 23/4mm ≥3/4mm ≥1.5/2.2mm Illa V2 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Limiting continuous current	see dera	ting curve
Coil-contacts 1 min Adjacent contacts 1 min Coil-contacts 1 min 2,500Vac 2,500Vac 2,000Vac Clearance / creepage Coil-contact circuit Adjacent contact circuits ≥3/4mm ≥3/4mm ≥1.5/2.2mm Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	_		
Adjacent contacts 1 min 2,500Vac 2,500Vac 2,000Vac Clearance / creepage Coil-contact circuit Adjacent contact circuits ≥3/4mm ≥3/4mm ≥1.5/2.2mm Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Open contact circuit 1 min	1,200Vac	1,200Vac
Clearance / creepage Coil-contact circuit ≥3/4mm ≥3/4mm Adjacent contact circuits ≥3/4mm ≥1.5/2.2mm Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Coil-contacts 1 min	2,500Vac	2,500Vac
Coil-contact circuit ≥3/4mm ≥3/4mm Adjacent contact circuits ≥3/4mm ≥1.5/2.2mm Material group of insulation parts Flammability class UL 94 V2 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Adjacent contacts 1 min	2,500Vac	2,000Vac
Adjacent contact circuits ≥3/4mm ≥1.5/2.2mm Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Clearance / creepage		
Material group of insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Coil-contact circuit	≥3/4mm	≥3/4mm
insulation parts Flammability class UL 94 Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic	Adjacent contact circuits	≥3/4mm	≥1.5/2.2mm
Insulation to IEC 60664-1 Type of insulation Coil contact circuit Basic Basic		IIIa	
Type of insulation Coil contact circuit Basic Basic	Flammability class UL 94	V2	
Coil contact circuit Basic Basic	Insulation to IEC 60664-1		
	Type of insulation		
Open contact circuit Functional Functional	Coil contact circuit	Basic	Basic
	Open contact circuit	Functional	Functional
Adjacent contact circuits Basic Functional	Adjacent contact circuits	Basic	Functional
Rated insulation voltage 250V 250V	Rated insulation voltage	250V	250V
Pollution degree 2 2	Pollution degree	2	2
Rated voltage system 230/400V 230/400V	Rated voltage system	230/400V	230/400V

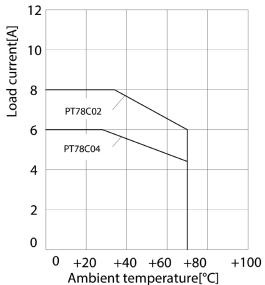
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at

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	Technical	data(Continued)	2-pole	4-pole
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Ambient temperature range	-40+70°C	
Terminals	PCB terminals	
Insertion cycles	A (10)	
Resistance against solder heat	270°C/10s	
Max. Insertion Force	130N	
Max pull out force	130N	
Mounting direction	Any direction with clip	
Mounting distance	≥5mm	
Weight	6g 7g	

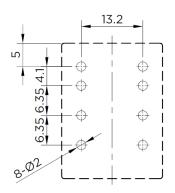
Derating curve according to IEC61984



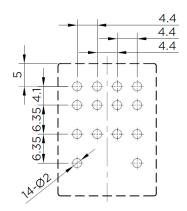
The derating curve was defined and measured by PT socket and PT relay together.

Footprint

2P PCB socket footprint



4P PCB socket footprint





PT28P00

PT sockets

Туре	Description	Part Number
PT78C04	Socket with PCB terminals, 4 pole	2071566-5
PT78C02	Socket with PCB terminals, 2 pole	2071566-6

Accessories for

Туре	Description	Part Number
PT28P00	Metal retaining clip for PCB socket, 29 mm height relay (PT)	2071566-8

Combination of relay and socket, insulation requirements and thermal characteristics

The relay standard IEC 61810-1 has an important impact on the combination of a relay and the respective socket. The relay sockets have to comply with the requirements of IEC 61984 and the insulation requirements of the IEC 61810-1. Even if the socket alone fullfills or exceeds the insulation requirements as clearance/creepage for the relay, the combination of a relay with a socket may reduce the creepage and lead to a lower rated insulation voltage. Hence restrictions for the combination relay-socket may be the consequence, e.g. a reduction of the voltage range or of the pollution degree. Especially for miniature multi-pole relay and respective sockets with small distance between the contact circuits, these restrictions have a big impact.

Apart from the insulation properties, the thermal characteristics of the combination relay and socket are of utmost importance (see > 'Derating curves'). Especially the operations conditions like multiple heat up and cool down cycles could have significant impact on the long-term stability of the contact resistance of the combination contact tulip and terminal, and may thereby cause risk of overheating and fire hazard. It is strongly recommended that such conditions are considered in the design and usage of the device and that the devices are thoroughly tested under real conditions.

As sockets from different sources are not directly comparable, the compliance with the technical specification can only be informed for an approved combination relay-socket. As design details and characteristics for non TE products are beyond our control, confirmations for technical parameters and characteristics regarding such combinations is not possible. Risks as reduced dielectric strength, fire hazard, etc. due to use based on unclear or omitted data, limitations or restrictions must not be underestimated.

NOTE: We only confirm the characteristics and parameters for the approved combinations of relays and sockets as indicated in the catalog and datasheets.

Important Notes:

- 1. Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.
- 2. Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions.
- 3. Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change

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