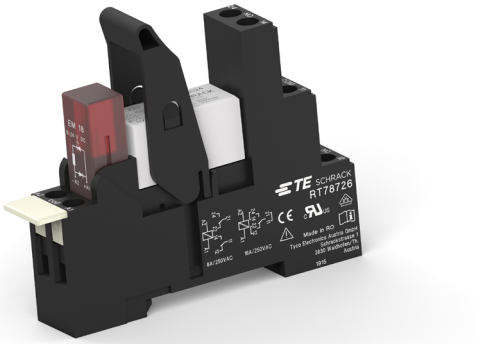
ACCESSORIES INDUSTRIAL POWER RELAY RT

GENERAL PURPOSE RELAYS ACCESSORIES

FEATURES

- For Industrial Power Relay RT pinnings 3.5 mm / 5 mm; relay height 15.7 mm
- New retainer clip with ejection function
- Easy replacement of relays on a densely packed DIN rail
- No reduction of protection class or creepage/clearance with plastic retainer
- Simple plug-in indicator- and protection modules
- White snap-on marking tags



APPROVALS

- VDE Cert. No. 40007571
- cULus E135149

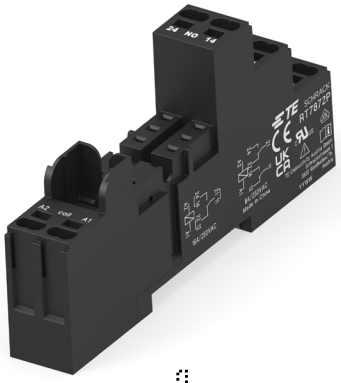
Technical data of approved types on request

PREMIUM SOCKET WITH SCREWLESS TERMINALS FOR DIN RAIL MOUNTING

RT7872P RT7872P Premium socket, logical terminal arrangement

FEATURES

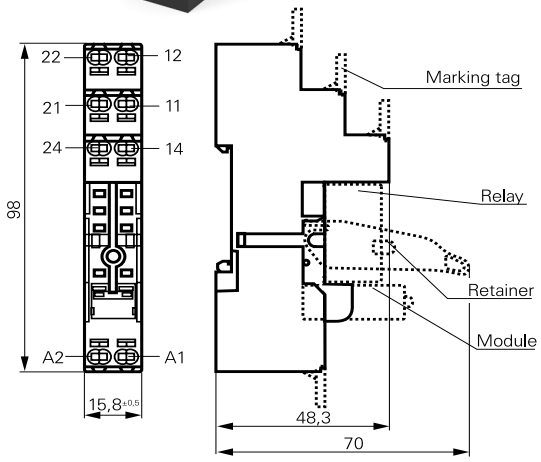
- Screwless Clamps
- Mounting of solid wires without tool
- Double Clamps per terminal
- Jumper links for interconnection
- Logical terminal arrangement



APPROVALS

- VDE Cert. No. 40007571
- cULus E135149

Technical data of approved types on request



TECHNICAL DATA

Rated voltage/Max. switching voltage AC	240/400VAC
Rated current	2 x 8 A, 16 A *)
Dielectric strength	
coil contact circuit	5000 Vrms
open contact circuit	1000 Vrms
adjacent contact circuits	2500 Vrms
Clearance / creepage	
coil contact circuit	≥ 10/10 mm
Material group of insulation parts	IIIa
Flammability class UL 94	V-0
Insulation to IEC 60664-1 Type of insulation	
coil-contact circuit	reinforced
open contact circuit	functional
adjacent contact circuits	functional
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	230 / 400 V
Over voltage category	III
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 range	
for mounting/ handling	-25 ... +70°C
in operation	-40 ... +70°C
Terminals	screwless
Wire strip length	12 mm

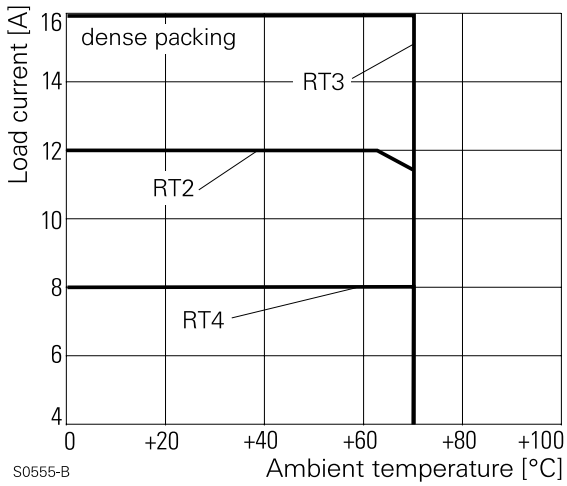
*) For 1 pole relays (16 A) the relay terminals 11-21, 12-22 and 14-24 have to be bridged.

Wire cross section	
solid wire	1x0.75/1/1.5mm² 2x0.75/1mm²
with stand. isolation (no oversize isolation)	2x1.5mm²
stranded wire	
without bootlace crimp	1x0.75/1/1.5mm² 2x0.75/1mm²
without bootlace crimp with stand. isolation	2x1.5mm²
with bootlace crimp	1x0.75/1mm² 2x0.75mm²
with bootlace crimp without isolation or min 18 mm long	1x1.5mm²

For stranded wires with braids 0.05 mm or smaller the use of bootlace crimps is recommended. When using stranded wires without bootlace crimp the clamp must be opened during insertion.

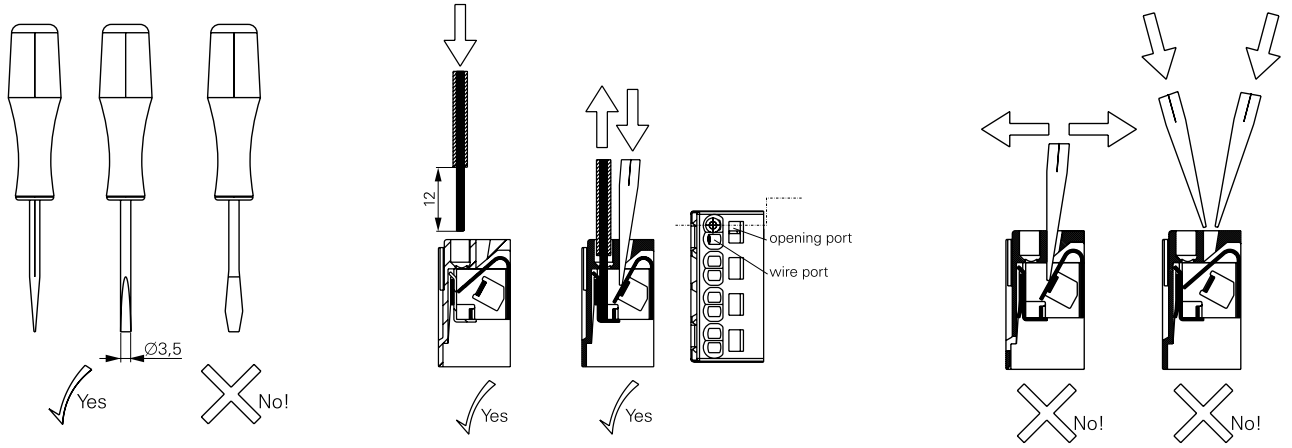
Insertion cycles	A (10)
Max. Insertion Force total	100 N
Mounting distance	≥ 0, dense packing
Weight	36 g
Packaging unit	10 pcs

DERATING CURVE RT7872P

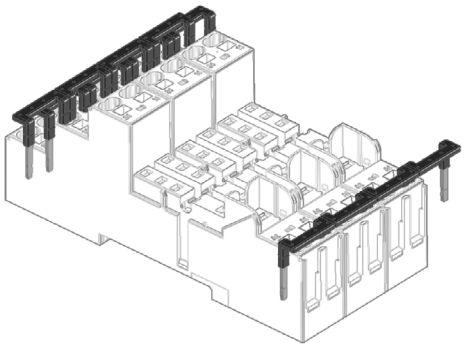


Not suitable for bistable relays with 2 coils!

HOW TO USE, PRECAUTIONS



JUMPER LINK



SOCKET WITH SCREWLESS TERMINALS FOR DIN RAIL MOUNTING

Type	Description	Part Number
RT7872P	Premium socket, logical terminal arrangement Socket with screwless terminals pinning 5 mm for DIN rail mounting	1860200-1

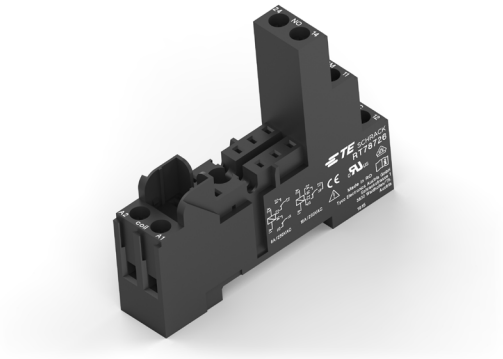
ACCESSORIES
FOR RT7872P

Type	Description	Part Number
RT17017	Plastic retaining clip, relay height 29 mm	2022103-1
RT17040	Metal retaining clip PT, relay height 29 mm	2-1415038-1
RT170P1	Marking tag	1860211-1

SOCKET WITH SCREW TYPE TERMINALS FOR DIN RAIL MOUNTING

RT78724 Socket with screw-type terminals, pinning 3.5 mm for DIN rail mounting

RT78726 Socket with screw-type terminals, pinning 5 mm for DIN rail mounting, logical terminal arrangement



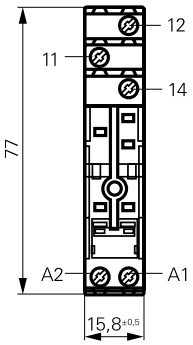
FEATURES

- DIN-rail socket with logical setup of connections (input/output)
- High quality rising clamp terminals
- Captive combination terminal screws
- Jumper bars for interconnection

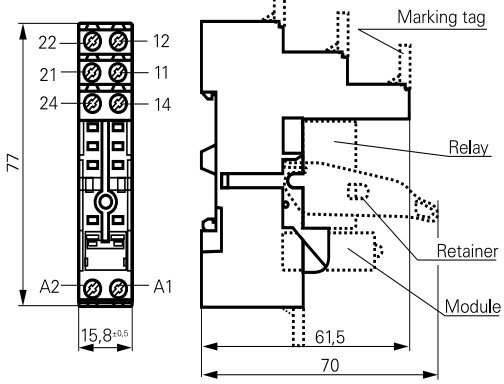
APPROVALS

- VDE Cert. No. 40017832
- cULus E135149

RT78724



RT78726



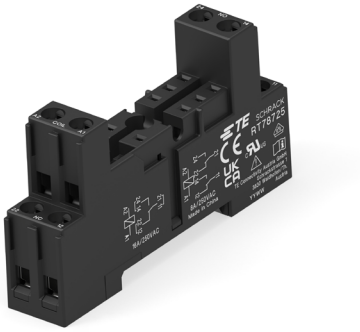
RT78725 Socket with screw-type terminals, conventional terminal arrangement

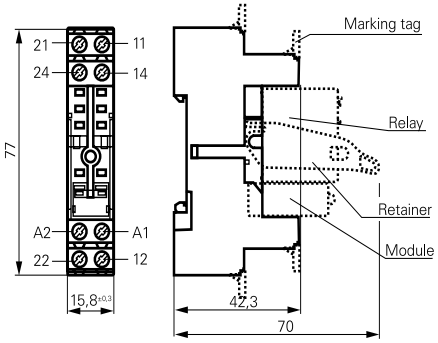
FEATURES

- Conventional terminal arrangement

APPROVALS

- VDE Cert. No. 40017832
- cULus E135149





TECHNICAL DATA

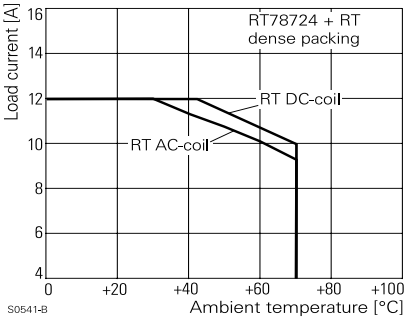
	RT78724/ RT78726	RT78725
Rated voltage/Max. switching voltage AC	240/400VAC	
Rated current	12A 2 x 8A, 16 A*)	
Dielectric strength		
coil-contact circuit	5000 Vrms	4000 Vrms
open contact circuit	1000 Vrms	1000 Vrms
adjacent contact circuits	2500 Vrms	2500 Vrms
Clearance / creepage		
coil-contact circuit	≥ 10/10 mm	≥ 4.7/4.7 mm
Material group of insulation parts	IIIa	
Flammability class UL 94	V-0	
Insulation to IEC 60664-1 Type of insulation		
coil-contact circuit	Reinforced	Basic
open contact circuit	Functional	
adjacent contact circuits	Functional	
Rated insulation voltage	250 V	
Pollution degree	2	
Rated voltage system	230 / 400 V	
Overvoltage category	III	
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 range		
for mounting/handling	-20...+70 ° C	
in operation	-40...+70 ° C	
Terminals	screw	
Terminal screw torque acc. IEC 61984 max.	0.5 Nm 0.7 Nm	
Terminal Screw size	M3	
Wire strip length	8 mm	

*) For 1 pole relays (16 A) the relay terminals 11-21, 12-22 and 14-24 have to be bridged.
For 1 pole relays (12 A) the relay terminals 11-12-14 have to be connected to the socket
terminals 21-12-14.

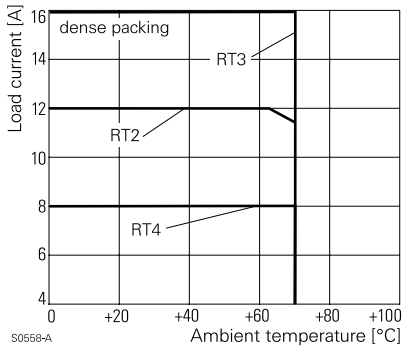
	RT78724/ RT78726	RT78725
Wire cross section		
single wire	2 x 2.5 mm²	
fine wire	2 x 2.5 mm²	
with bootlace crimp (DIN 46228/1)	2 x 1.5 mm²	
Insertion cycles	A (10)	
Max. Insertion Force total	100 N	
Mounting distance	≥ 0, dense packing	
Weight	36 g	
Packaging unit	10 pcs	

Not suitable for bistable relays with 2 coils!

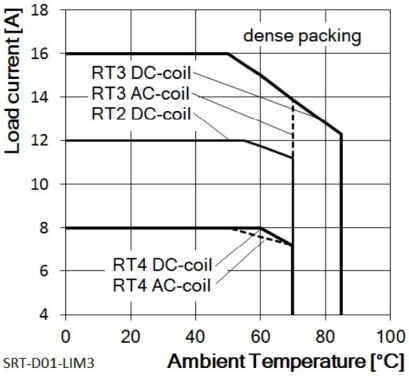
DERATING CURVE RT78724



DERATING CURVE RT78725

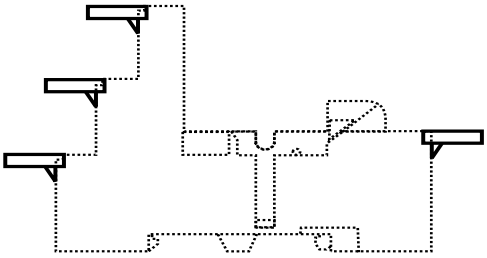


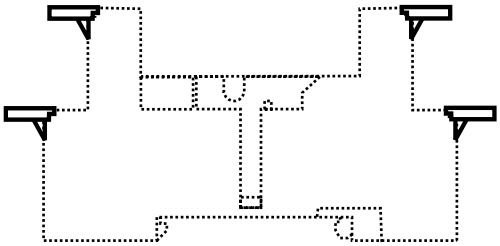
DERATING CURVE RT78726



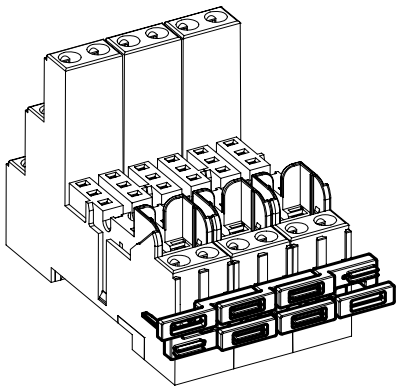
MARKING TAGS

- White marking area 15.5 x 6 mm
- Snaps on socket in up to 4 positions





JUMPER BAR



SOCKET WITH SCREW TYPE TERMINALS FOR DIN RAIL MOUNTING

Type	Description	Part Number
RT78724	Socket with screw-type terminals, pinning 3.5 mm for DIN rail mounting, logical terminal arrangement	8-1415035-1
RT78726	Socket with screw type terminals, pinning 5 mm for DIN rail mounting, logical terminal arrangement	6-1415035-1
RT78725	Socket with screw type terminals, pinning 5 mm for DIN rail mounting, wconventional terminal arrangement	1860306-1

ACCESSORIES

FOR FOR RT78724, RT78725, RT78726

Type	Description	Part Number
RT17017	Plastic retaining clip, relay height 15.7 mm	2022103-1
RT28816	Metal retaining clip, relay height 15.7 mm	1415540-8
RT17040	Marking tag	2-1415038-1
RT170R8	Jumper bar, max load 12 A for connection of up to 8 RT sockets	1860517-8

LED- AND PROTECTION MODULES

FOR RT7872P, RT78724, RT78725, RT78726

- Easy insertion of module into the socket.
- Wiring in parallel to the coil.

Type		Description	Part Number
PTMT00A0	EM09	Protection diode (standard, A1+,A2-)	9-1415036-1
PTMT00L0	EM01	Protection diode (A1-, A2+)	1415037-1
PTMU0524	EM02	RC-network 6...60 VAC	1-1415037-1
PTMU0730	EM03	RC-network 110...230 VAC	2-1415037-1
PTMV0524	EM04	Varistor 24 VAC	3-1415037-1
PTMV0615	EM13	Varistor 115 VAC	6-1415365-1
PTMV0730	EM05	Varistor 230 VAC	4-1415037-1
PTMD0730	EM31	Residual current bypass RC 110...230 VAC	1415037-2
PTMR0730	EM29	Residual current bypass resistor 110...230 VAC	1-1415539-2

LED

Type	Description		Part Number
PTML0024	EM18	Red LED 6...24 VDC w. prot. diode (std, A1+, A2-)	5-1415036-1
PTMG0024	EM12	Green LED 6...24 VDC w. prot. diode (std, A1+, A2-)	2-1415036-1
PTML1024	EM08	Red LED 6...24 VDC w. prot. diode (A1-, A2+)	8-1415036-1
PTML0060	EM16	Red LED 24...60 VDC w. prot. diode (std, A1+, A2-)	5-1415539-3
PTMG0060	EM25	Green LED 24...60 VDC w. prot. diode (std, A1+, A2-)	7-1415539-7
PTML0110	EM19	Red LED 60...110 VDC w. prot. diode (A1+, A2-)	2-1415392-1
PTMG0110	EM26	Green LED 60...110 VDC w. prot. diode (A1+, A2-)	1-1415539-7
PTML0220	EM27	Red LED 110...220 VDC w. prot. diode (A1+, A2-)	1-1415539-4
PTMG0220	EM28	Green LED 110...220 VDC w. prot. diode (A1+, A2-)	1-1415539-6
PTML0524	EM07	Red LED 6...24 VDC/VAC	6-1415036-1
PTMG0524	EM11	Green LED 6...24 VDC/VAC	3-1415036-1
PTML0560	EM14	Red LED 24...60 VDC/VAC	1-1415539-3
PTMG0560	EM30	Green LED 24...60 VDC/VAC	1-1415539-5
PTML0730	EM06	Red LED 110...230 VAC	7-1415036-1
PTMG0730	EM10	Green LED 110...230 VAC	4-1415036-1

RELAY PACKAGES

Complete packages consisting of a relay mounted on a socket: see Relay Package RT

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 strenght, 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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