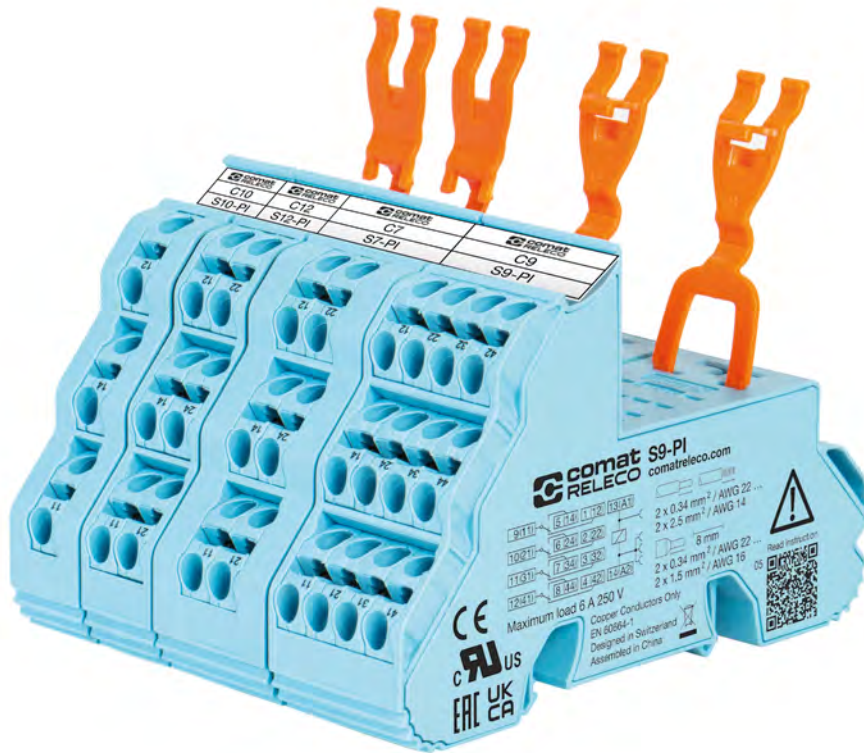




Push-in relay socket family



User Manual

Important information

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This user manual contains important information for the commissioning, operation, maintenance and disposal of the device. You will also receive information and important tips for your safety and help with any issues. The user manual must be made physically or electronically available with the equipment and must be included in the supply when the equipment is transferred. It is also available on the ComatReleco web portal.

Disclaimer

ComatReleco has made every effort to make these instructions as clear, complete, and correct as possible. The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any user or integrator to perform the appropriate and complete risk analysis, evaluation, and testing of the products with respect to the relevant specific application or use thereof. Neither ComatReleco nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information that is contained herein. Contact us if you have any suggestions for improvements or amendments or have found errors in this publication. This documentation is subject to technical changes without prior notice.

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1 Introduction



1.1 Validity

This user manual is valid for the following push-in socket series

General Industrial application	Railway application
<p>S7-PI</p> 	<p>S7-PIR</p> 
<p>S9-PI</p> 	<p>S9-PIR</p> 
<p>S10-PI</p> 	<p>S10-PIR</p> 
<p>S12-PI</p> 	<p>S12-PIR</p> 

1.2 Product conformity

	<p>EU Declaration of conformity</p> <p>This device complies with the provisions of the following EU directives:</p> <ul style="list-style-type: none">• Low Voltage Directive 2014/35/EU• RoHS Directive 2011/65/EU <p>and complies with the requirements of the following harmonized standards:</p> <ul style="list-style-type: none">• EN 60947-1• EN 63000 <p>EU Authorized Representative: Comat Releco GmbH Dieselstraße 1A 21465 Reinbek Germany Phone +49 40 67045391 www.comatreleco.de kontakt@comatreleco.de</p> <p>Manufacturer: ComatReleco AG Bernstrasse 4 3076 Worb Switzerland Phone +41 31 838 55 77 www.comatreleco.com info@comatreleco.com</p>
	<p>UKCA Declaration of conformity</p> <p>This device complies with the provisions of the following UK Regulations:</p> <ul style="list-style-type: none">• Electrical Equipment (Safety) Regulations 2016• Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 <p>and complies with the requirements of the following harmonized standards:</p> <ul style="list-style-type: none">• BS EN IEC 60947-1• BS EN IEC 63000 <p>Manufacturer: ComatReleco AG Bernstrasse 4 3076 Worb Switzerland Phone +41 31 838 55 77 www.comatreleco.com info@comatreleco.com</p>






	<p>Meets the requirements of Technical Regulations of the Customs Union on safety of low voltage equipment TR CU 004/2011</p>
	<p>The product has been investigated by UL in accordance with the following standards:</p> <ul style="list-style-type: none"> • UL 508 Standard For Industrial Control Equipment • CSA C22.2 NO. 14-18 Industrial Control Equipment

1.3 Contact details





Manufacturer's address		
<p>ComatReleco AG Bernstrasse 4 3076 Worb Switzerland Phone +41 31 838 55 77 E-mail support@comatreleco.com Web www.comatreleco.com</p>	<p>Comat Releco GmbH Dieselstraße 1a 21465 Reinbek Germany Phone +49 40 - 67045391 E-mail kontakt@comatreleco.de Web www.comatreleco.de</p>	<p>Comat Releco do Brasil Rua Machado de Assis 120 09580-310 Sao Caetano do Sul Brasil Phone +55 11 2639 6053 E-Mail contato@comatreleco.com.br Web www.comatreleco.com.br</p>

2 Safety instructions

2.1 Meaning of symbols

<p>DANGER</p> 	<p>Indicates a hazard with high risk potential. Failure to observe the safety measures could result in serious injury or death.</p>
<p>WARNING</p> 	<p>Indicates a hazard with medium risk potential. Failure to observe the safety measures could result in serious injury or damage to property.</p>
	<p>Indicates thermal stress.</p>
<p>INFORMATION</p> 	<p>Here you will find further information and helpful hints.</p>
<p>DISPOSAL</p> 	<p>Observe the special disposal regulations for electronic and electrical devices.</p>

2.2 General Safety Instructions

	<ul style="list-style-type: none"> • Read this document and understand it entirely before using the product. Failure to do so can result in serious injury or death. • The installation of the device must only be carried out by qualified electricians and shall be installed in a lockable electric cabinet to protect end users. Failure to do so can result in serious injury or death. • Wiring/re-wiring the socket or installing/replacing a relay only when the installation is disconnected from power supply. • The device must be installed and operated according to national regulations and specifications. • This device is not suitable for use in wet areas, explosive atmospheres (e.g. in areas where the air contains high concentrations of flammable chemicals, vapours or particles such as grain, dust or metal powder). • It is forbidden to disassemble or modify the product. • When placing test probes for measuring, the user must NOT press the probes completely into the opening and in the wrong angle. Failure to do so can release the cable and result in serious injury or death.
	<ul style="list-style-type: none"> • If the relay is operated with very high switch frequency and/or high current and/or high ambient temperature, the integrator must take care for sufficient cooling of the relay and socket. The device can get very hot.
	<ul style="list-style-type: none"> • Before installation check the product for damages. If damaged, replace it. • Install the device in an environment according to the indicated IP class. • Check all cables are installed correctly before operation. • Operate the product within the limits stated in the technical data sheet. • For save operation, use ComatReleco relays only with this product. ComatReleco rejects any warranty or liability if other relays brands are used with this product.
	<ul style="list-style-type: none"> • Pay attention for sharp edges when installing the label strip

2.3 User groups / personal qualification

Device installation

All installation, assembly and wiring work must only be carried out by qualified electricians who are familiar with the applicable standards, regulations and safety provisions for installation and automation technology.

2.4 Intended use

The push-in family sockets provide the electrical and mechanical interface

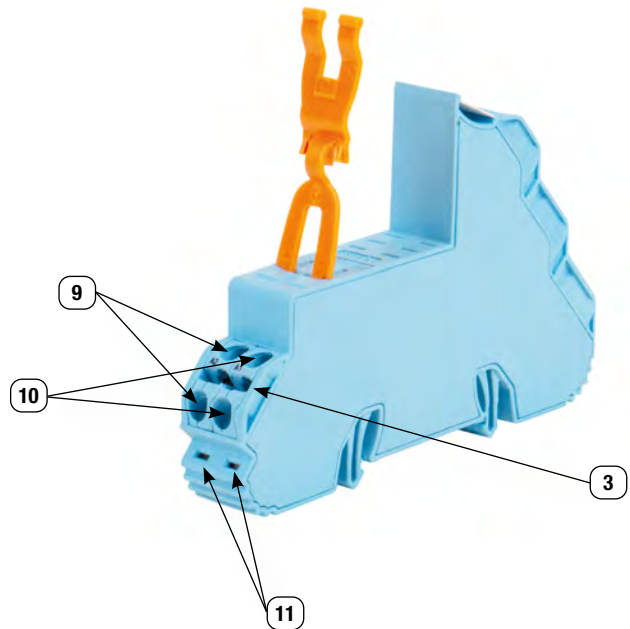
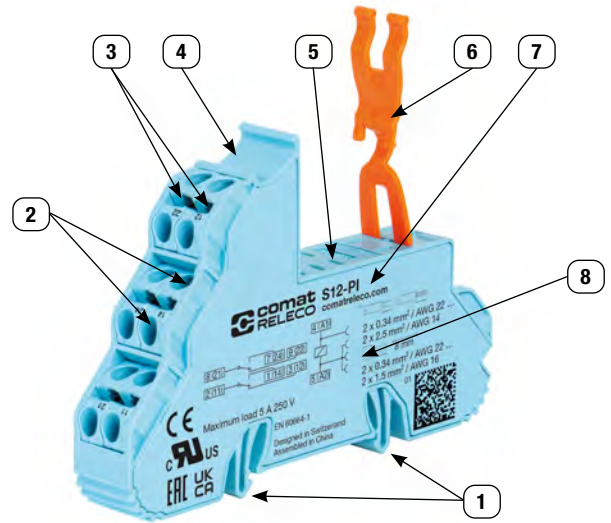
- between a relay and external load and control circuits
- to mount a relay socket assembly to DIN rail fixations. Ideally the socket shall be mounted in a vertical position

The socket relay assembly is IP20 rated and hence must be mounted and operated in a sheltered environment (e.g switch board cabinet) that provides adequate ingress protection according to the specific environmental conditions of the field application.

3 Product description

3.1 Overview

1. DIN rail hooks
2. Terminals for cables, potential bridge bars Sxx-BBPI2 and Sxx-BBPI4 and voltage test probes
3. Tool openings and for voltage test probe
4. Groove for marking strip
5. Plug for relay
6. Clip for relay
7. Product type designation
8. Technical data for cable types/size, wiring diagram, approvals
9. Terminals for A2
10. Terminals for A1
11. Terminals for bridges A2 Sxx-BBPI



3.2 Transport and storage

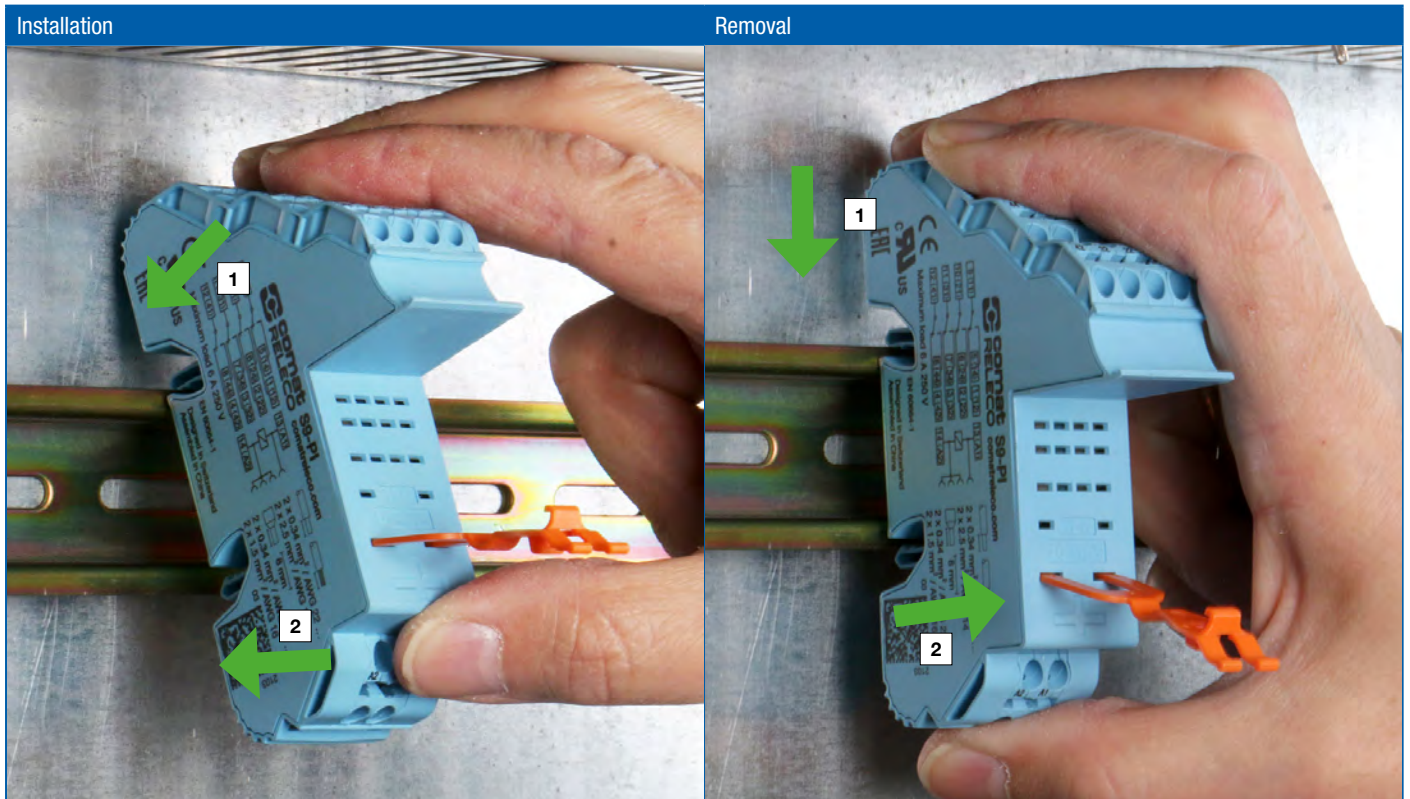
The device is delivered in a cardboard packaging and is therefore protected as well as possible during transport. If you do not use the device, store it at room temperature in a clean and dry place.

3.3 Included in the delivery

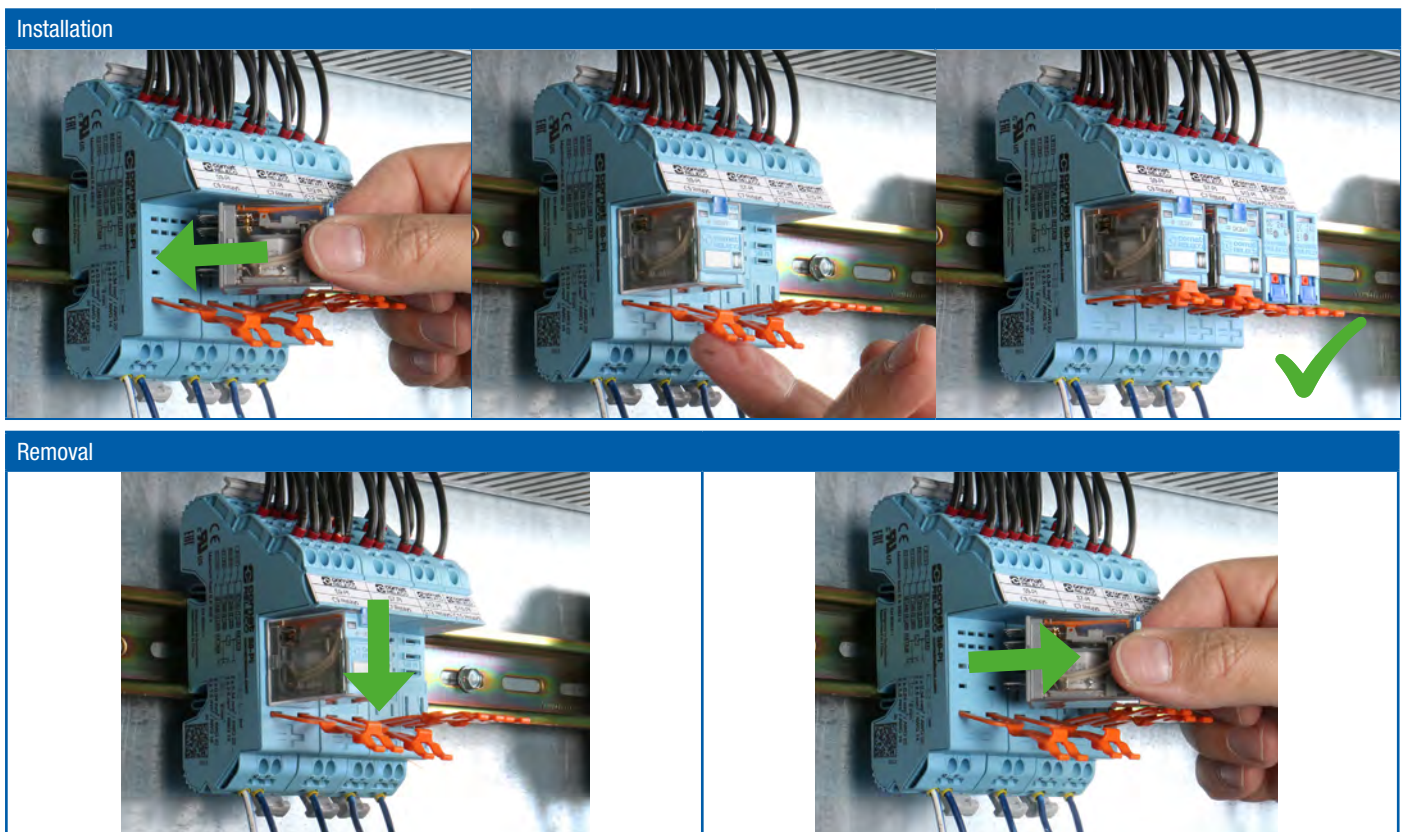
Delivery comprises push-in socket and clip for relay. If you discover a defect or missing parts on receipt, contact your seller immediately. Please refer to the ComatReleco web portal for the delivery conditions and information regarding the return of goods.

4 Installing and wiring the device

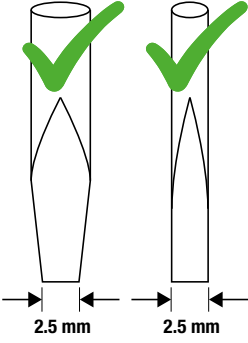
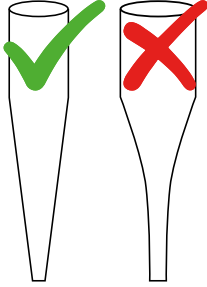


4.1 Installation and removal of socket on DIN rail (EN 60715)



4.2 Installation and removal of a relay

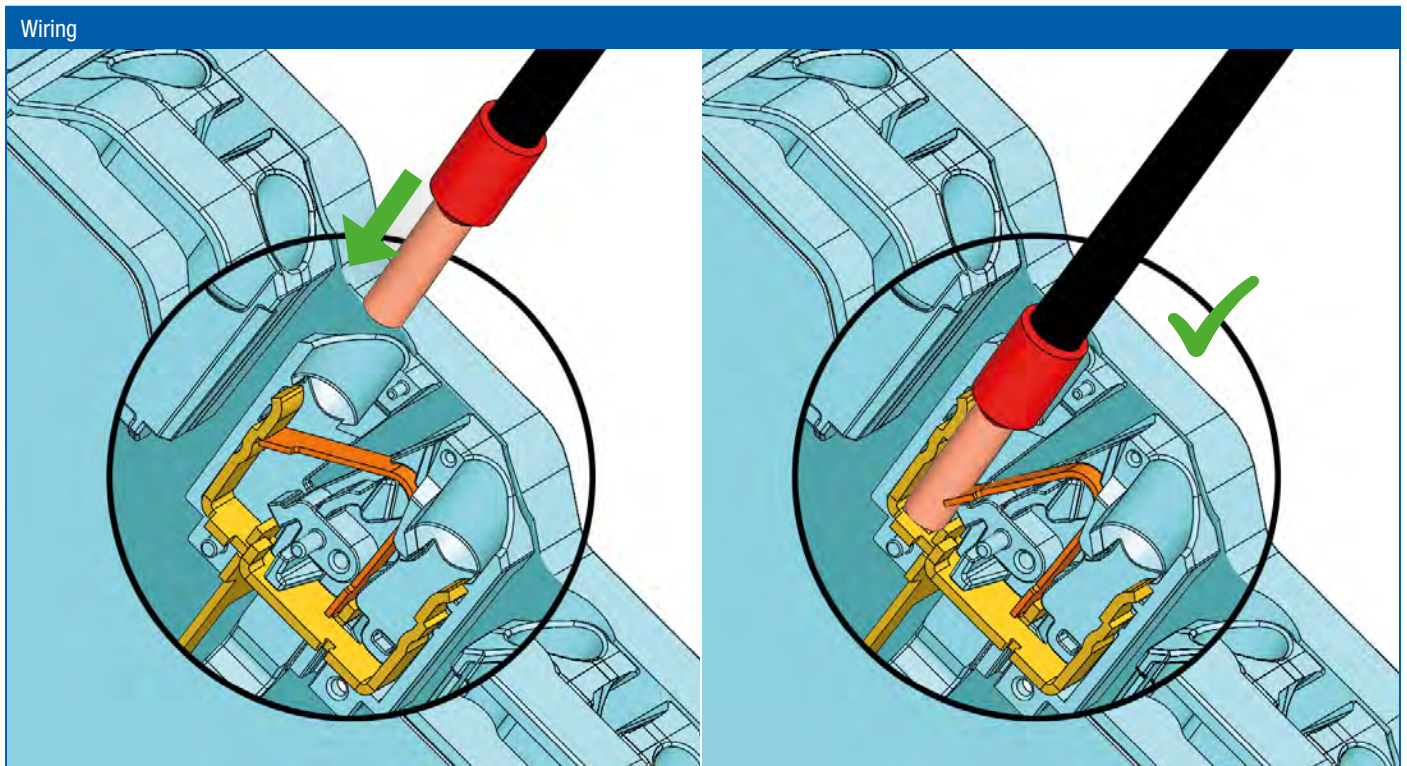


4.3 Tools for cable installation

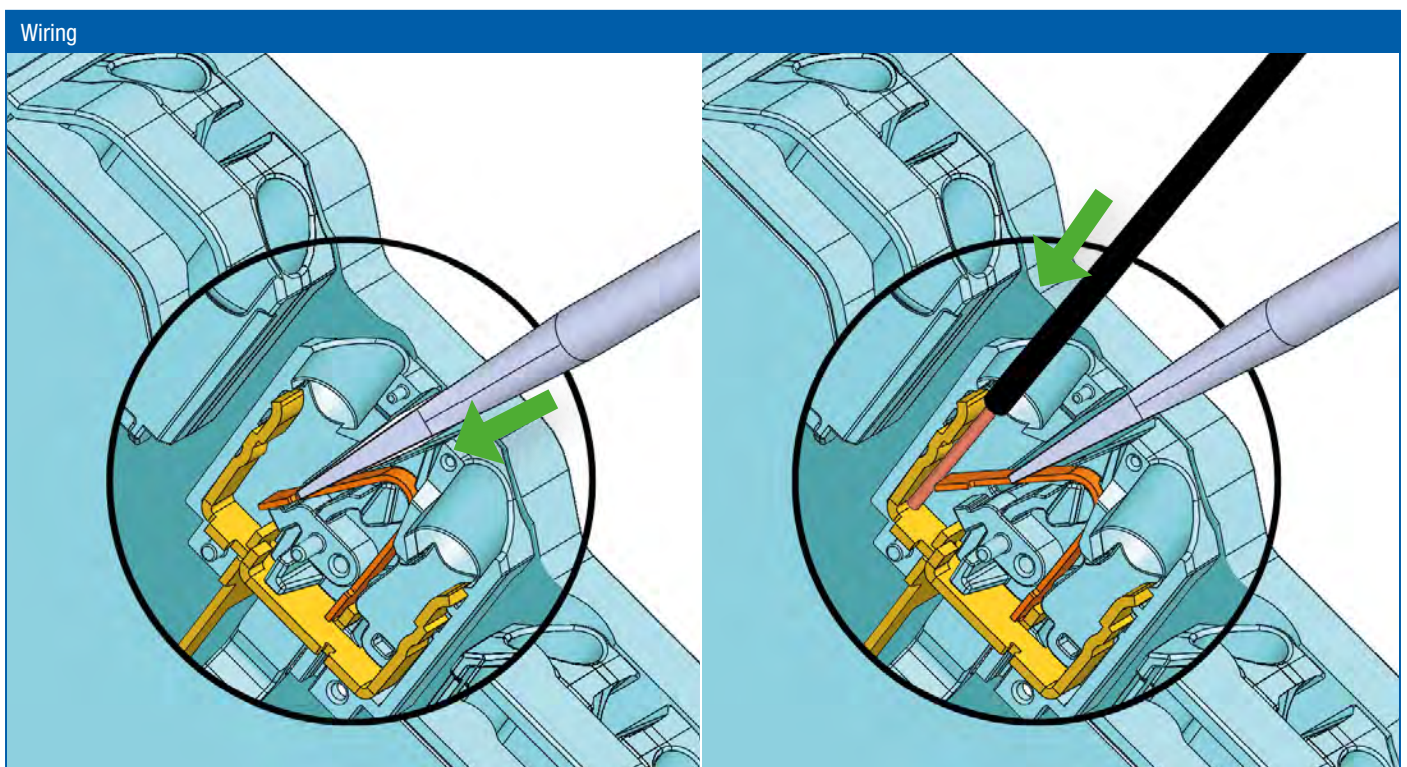
<p>Screw driver front view</p>  <p>2.5 mm 2.5 mm</p>	<p>Screw driver side view</p>  <p>Shape A Shape B ISO 2380-1</p>
 <p>ComatReleco OT-PI kit</p>	 <p>Electrical test probe is not a tool to install cables!</p>

4.4 Wiring - how it works

4.4.1 Wiring without tool

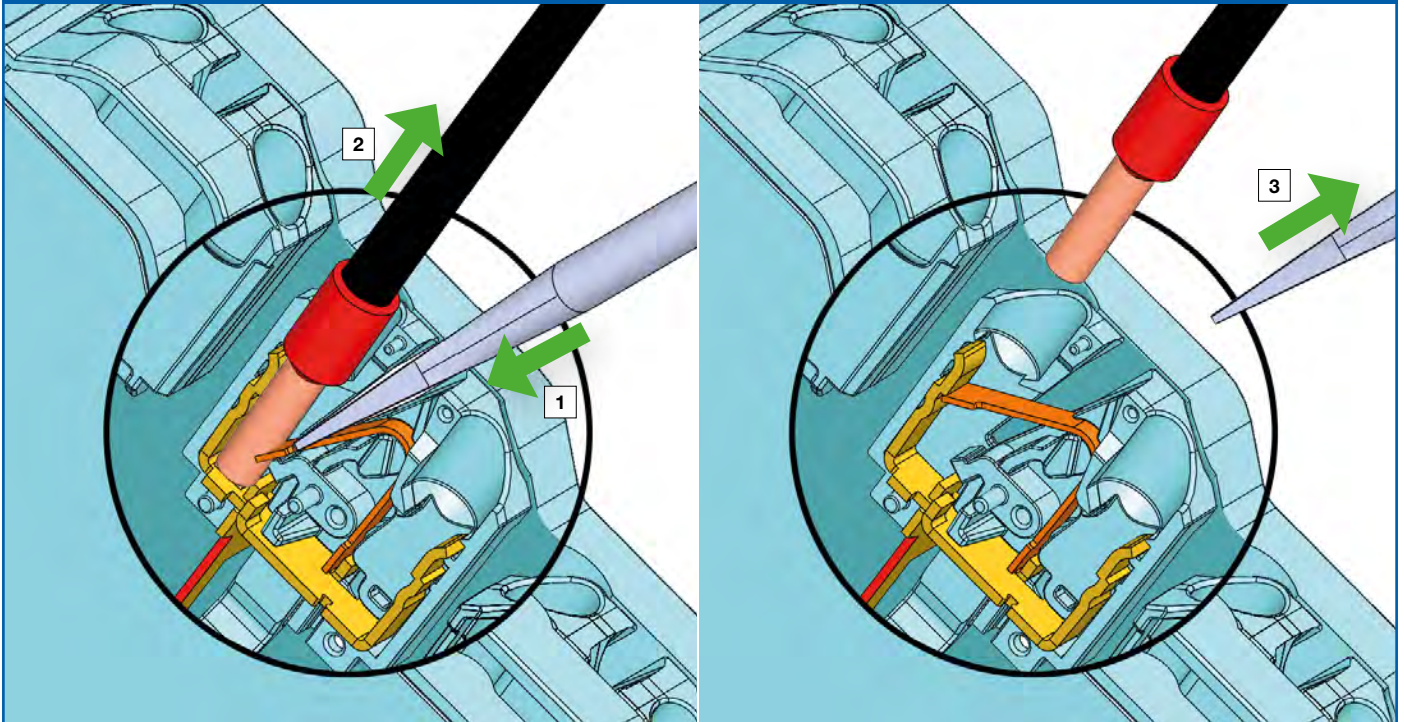



4.4.2 Wiring with tool





4.4.3 Wiring removal

Wiring removal with screwdriver or OT-PI kit



 **Single (solid) wire**
2 x 0.34 mm² / AWG 22 ... 2 x 2.5 mm² / AWG 14

 **Stranded wire with wire ferrules/crimp sleeve**
2 x 0.34 mm² / AWG 22 ... 2 x 1.5 mm² / AWG 16

 **Stranded wire without crimp sleeve**
2 x 0.34 mm² / AWG 22 ... 2 x 2.5 mm² / AWG 14

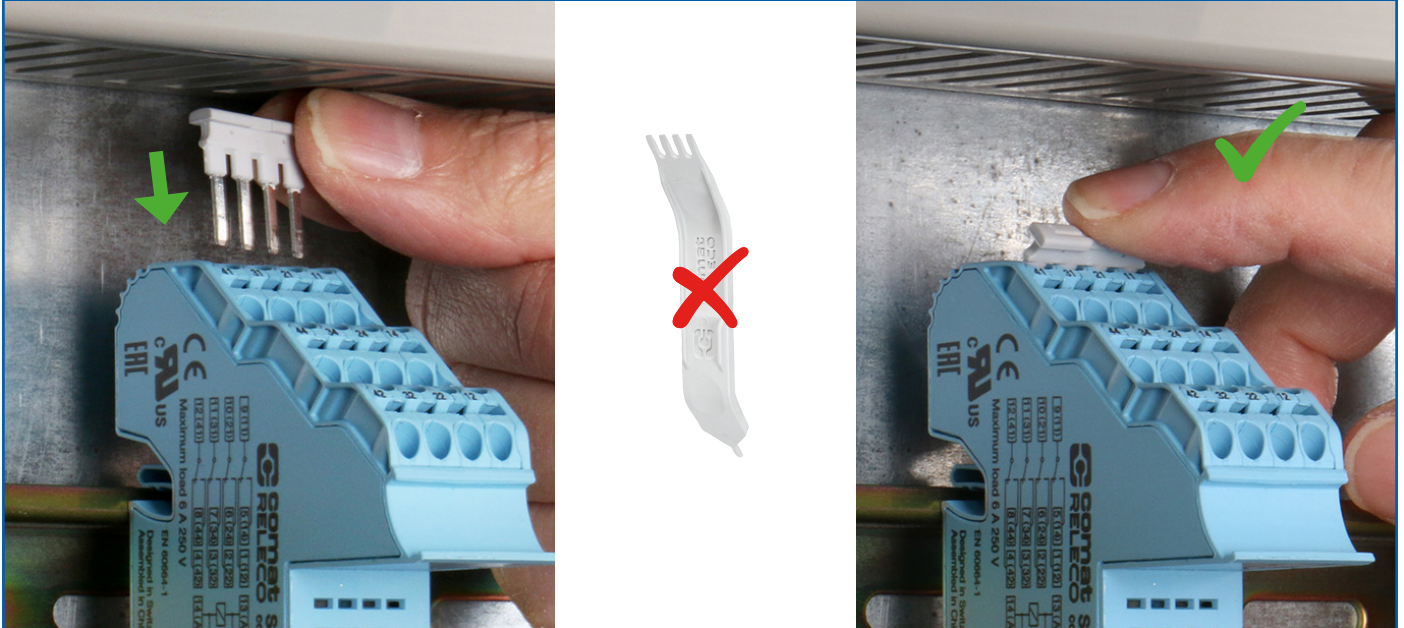
4.5 Tool placement

Tool openings

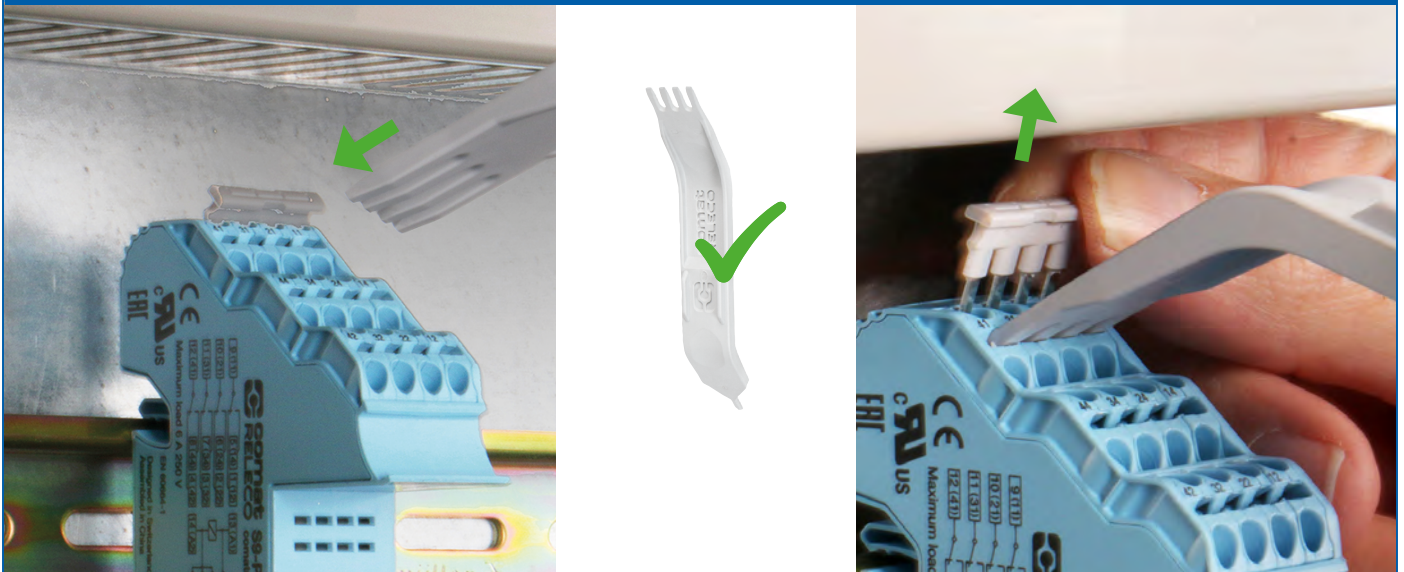


4.6 Installation and removal of bridge bars

Plug in of potential bridge bars without tool

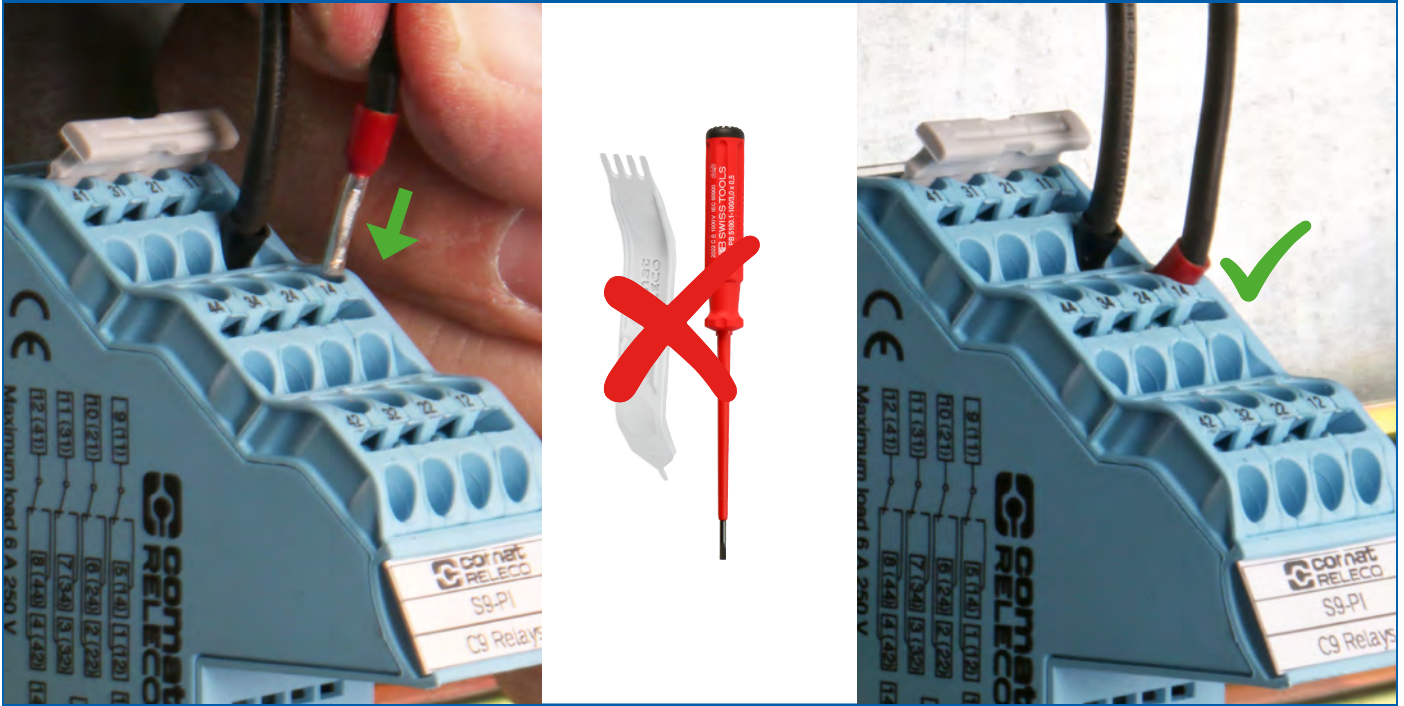


Removal of potential bridge bars with ComatReleco OT-PI kit

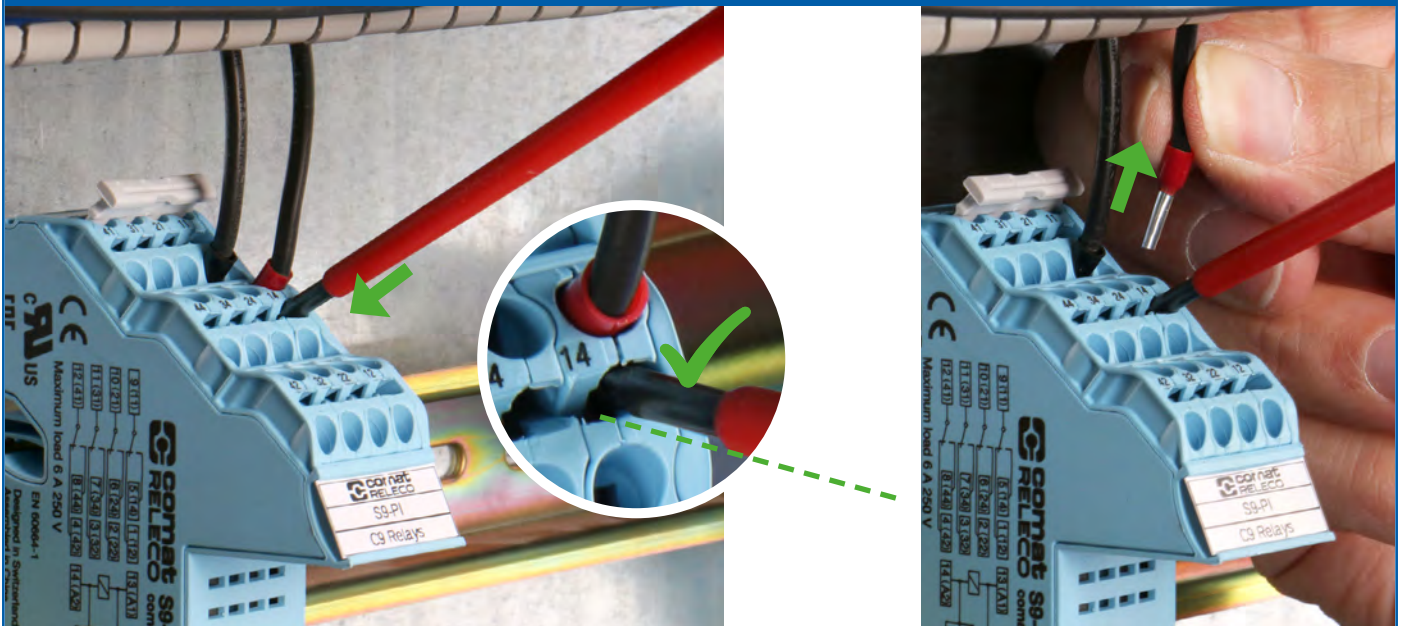


4.7 Wiring and wiring removal

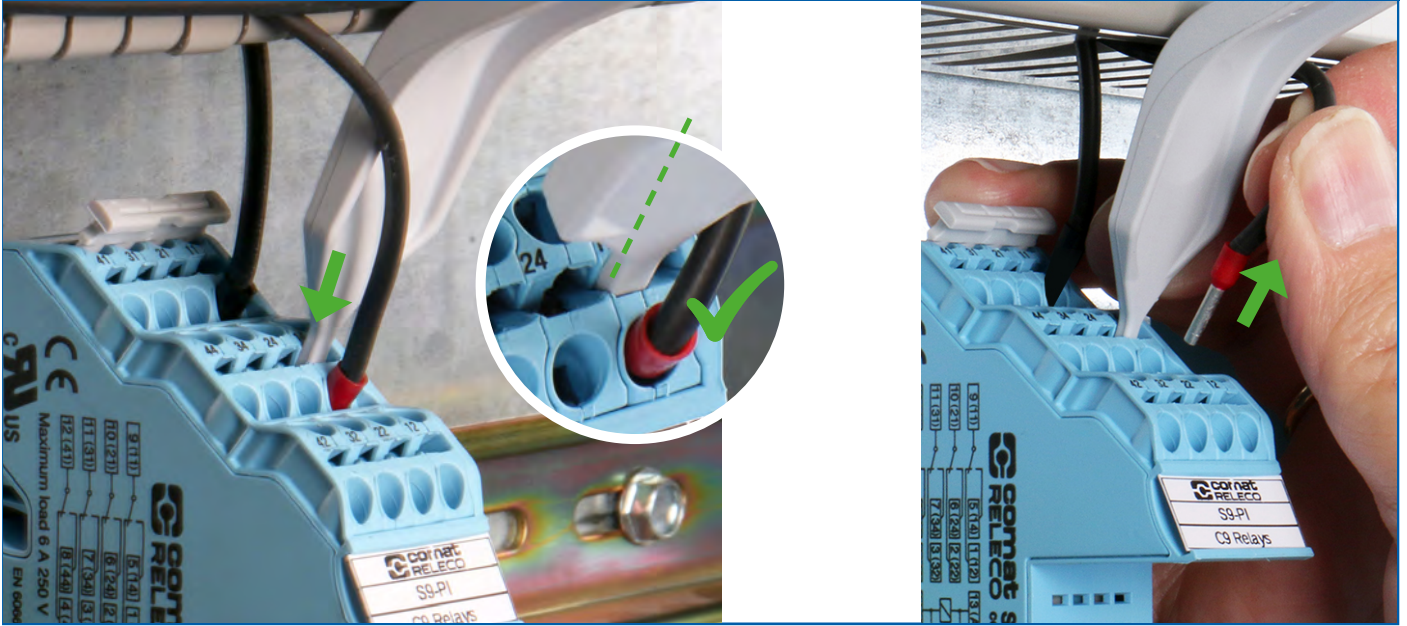
Wiring without tool



Wiring removal with screwdriver



Wiring removal with OT-PI kit



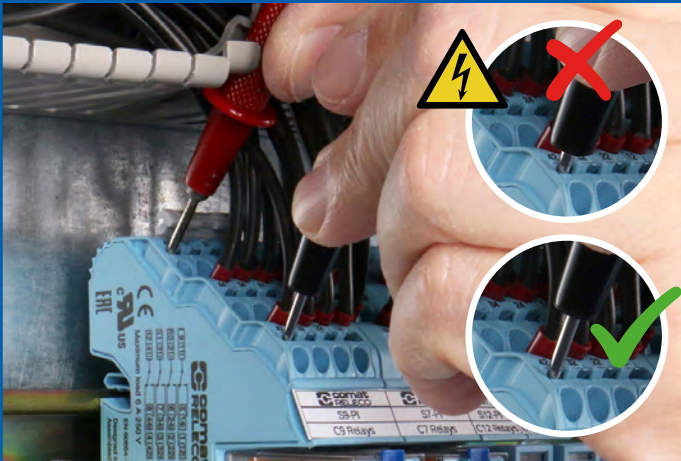
4.8 Installation of A2 bridge bars

Plug in of A2 bridge bars



4.9 Application of test probes

Application of test probes in tool openings



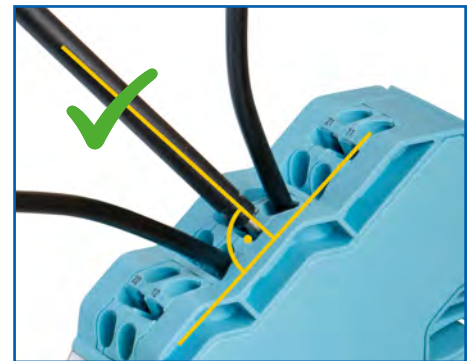
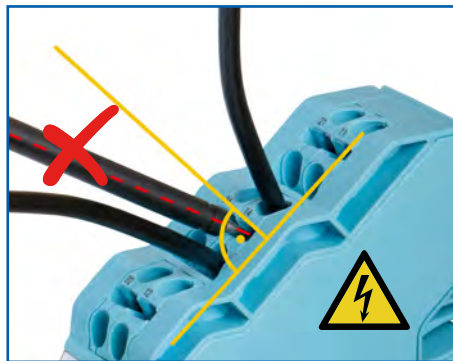
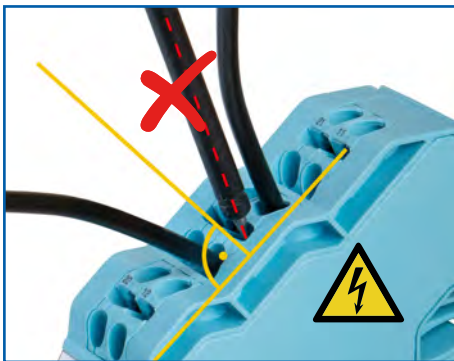
Application of test probes in contact terminals



During the entire measuring process, hold the probe by hand perpendicularly in the push-in box and hold it gently against the electrical contact.



When placing test probes for measuring, the user must NOT press the probes completely into the opening and in the wrong angle. Failure to do so can release the cable (which might be under tension) and result in serious injury or death.



5 Maintenance

No maintenance is required nor foreseen for the product throughout the life time.

5.1 Device exchange

In case of defective or damaged products, replace it with a new one. Do not attempt to dismantle or repair it.

DANGER



Risk of death due to electric shock!

Only mount or dismantle the device when it is disconnected from the power supply.

WARNING



The work described in this chapter must only be carried out by qualified electricians!

6 Disposal



Disposal information for users of electrical and electronic equipment waste according to the WEEE directive (Waste of Electrical and Electronic Equipment):

For professional users in the European Union

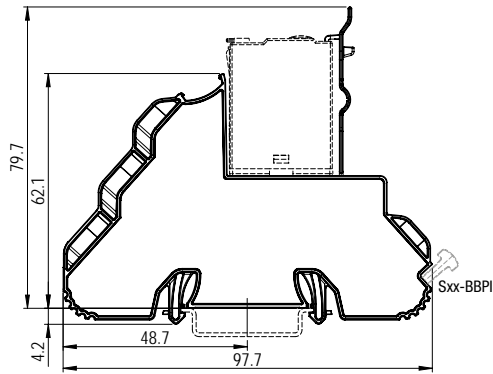
If you wish to dispose of electrical and electronic equipment, please contact your dealer or supplier for further information. Please also observe the country-specific regulations.

For disposal in countries outside the European Union

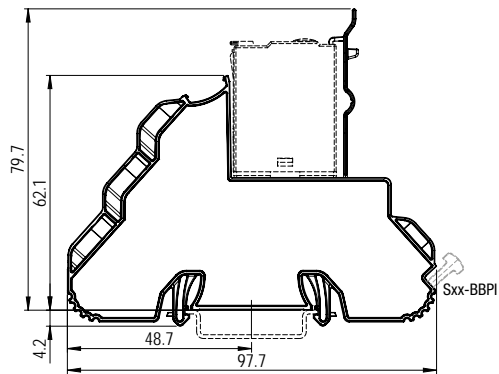
The above symbol is only valid in the European Union (EU). If you wish to dispose of this product, contact your local authorities or your dealer and ask for the correct method of disposal.

7 Technical data

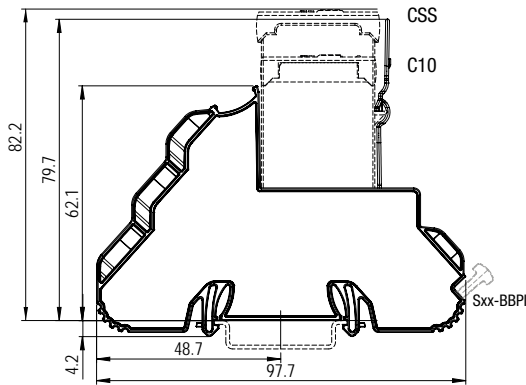
7.1 Dimensions



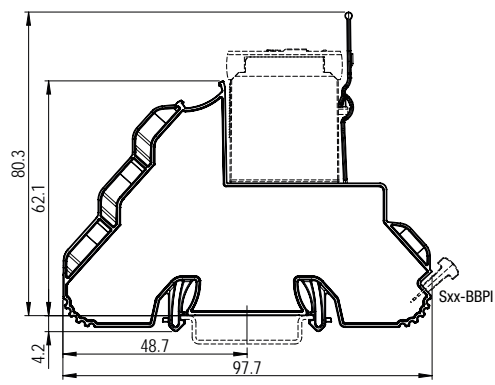
S7-PI and S7-PIR



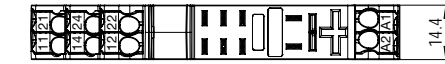
S9-PI and S9-PIR



S10-PI and S10-PIR



S12-PI and S12-PIR



Designed for use with DIN rail EN 60715.

7.2 Technical documentation







The basic data are printed on the product.
Further technical data are available on www.comatreleco.com or with the following link.




8 Order details and accessories



The devices may only be operated with accessories from the ComatReleco range.
 You can find information on this in the table below or on the ComatReleco push-in socket website → [Link](#).
 Operation with other accessories may result in damage and/or non-conformities.

Order number	Description
S7-PI	socket for C7 relay family
S7-PIR	socket for C7 relay family for railway application
S9-PI	socket for C9 relay family
S9-PIR	socket for C9 relay family for railway application
S10-PI	socket for C10 relay family
S10-PIR	socket for C10 relay family for railway application
S12-PI	socket for C12 relay family
S12-PIR	socket for C12 relay family for railway application
BS11-PI	50m marking strip
	
S7-CPI (BAG 10 PCS)	Retaining clip, plastic for S7-PI resp. S7-PIR and S9-PI resp. S9-PIR
	
S10-CPI (BAG 10 PCS)	Retaining clip, plastic for S10-PI resp. S10-PIR and S12-PI resp. S12-PIR
	
Sxx-BBPI (BAG 20 PCS)	Bridge bar A2
	
Sxx-BBPI2 (BAG 20 PCS)	2-pole potential bridge bar
	
Sxx-BBPI4 (BAG 20 PCS)	4-pole potential bridge bar
	

<p>OT-PI kit</p> 	<p>Multi tool for push-in sockets</p>
<p>C7-xx</p>	<p>Relay for S7-PI</p>
<p>R7-xx</p>	<p>Relay for S7-PIR</p>
<p>C9-xx</p>	<p>Relay for S9-PI</p>
<p>R9-xx</p>	<p>Relay for S9-PIR</p>
<p>C10-xx CSS-xx</p>	<p>Relay for S10-PI</p>
<p>R10-xx R10-Z1-xx</p>	<p>Relay for S10-PIR</p>
<p>C12-xx</p>	<p>Relay for S12-PI</p>
<p>R12-xx</p>	<p>Relay for S12-PIR</p>

