

Installation and commissioning instructions

Ex-Contact protection relay XR-6x2

Important safety instructions please read and note !

The precondition for a perfect and safe operation of the contact protection relays are proper transport, storage and mounting, professional installation and commissioning, operation as intended and maintenance.

These activities may only be carried out by persons with the necessary expertise and qualifications. The relevant safety regulations for the assembly and operation of electrical equipment and the assembly requirements for **equipment in Ex-areas** must be complied with.

Please contact the manufacturer if the information included in these instructions is not adequate in some way. In addition, the EC-Type Examination Certificate **TÜV 10 ATEX 555760** has to be considered.

Electrical connection

The operating voltage must lie within the voltage range of the XR-6x2. The electrical connection must be made while without power. Probes with WHG approval must be used. Unused inputs must be wired with an **1 kOhm resistor** (For wiring the unused inputs 1 kOhm resistors are attached at the relays).

Mounting

XR-6x2 contact protection relay modules are intended for mounting on standard mounting rails 35mm according to DIN EN 50 022. The maximum ambient temperature of the electrode relay (see technical data) must not be exceeded at the place of installation.

Connection of the electrodes

Probes for channel 1:
must be connected to the terminals **E0** and **E1**.

Probes for channel 2:
must be connected to the terminals **E5** and **E6**.

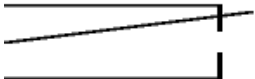
Note:

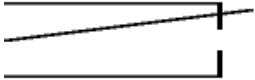
Care must be taken when installing the sensor line that it is installed with adequate distance to power cables. If this is not possible, the use of a shielded cable can reduce interference from coupling.

Connection of supply voltage

Make the electrical connection according to the imprint on the enclosure cover at the terminals identified with **A1(+)** and **A2(-)**; refer to the type plate for the voltage. According to EN 61010-1, all-pole disconnection is to be provided in the building installation which must be accessible as disconnecting device – marked as such – near the electrode relay. Over-current protection of the devices is provided by a fuse matching the supply voltage.

Connection of the potential-free output contacts

Device	Terminal	Assignment	Relay not actuated/released
XR-612 Channel 1	12	NC Normally closed contact	
XR-622 Channel 1	11	COM Common port	
	14	NO Normally open contact	

XR-612 Channel 1	22	NC Normally closed contact	
XR-622 Channel 2	21	COM Common port	
	24	NO Normally open contact	

As output, two potential-free change-over contacts are available at the XR-612, one potential-free change-over contact per channel is available at the XR-622.

Display elements / control elements:

LED GREEN "PWR"	LIGHTING	Ready for operation
	DARK	Power failure
LED RED "ERR"	LIGHTING	Line fault
	DARK	No line fault
LED YELLOW "OUT"	LIGHTING	Float floated up
	DARK	Float in normal position

Function button

Not supported.

Commissioning / Setting

The unit is delivered ready for use and requires no settings to commissioning.

Function control

To check the function, the floats connected to the relay must be checked while the medium rises and/or drops. The switching function needs to be checked by the status LEDs (yellow) on the relay and the downstream devices of warning elements for each channel.

Maintenance / cleaning

The relay does not require any special maintenance beyond the general inspection / function check of the electrical system.

Technical data

Electrical Data:	See EC-Type Examination Certificate TÜV 10 ATEX 555760
Dimensions WxDxH:	<u>XR-6x2-B</u> : 22.5 x 114,5 x 99mm, <u>XR-6x2-C</u> : 22.5 x 114,5 x 112mm
Line break resistance:	1 kOhm (WHG proves must be used)
Storage temperature:	- 30 ... + 80 °C
Operation temperature:	- 20 ... + 60 °C
Operating mode:	Closed-circuit current
System of protection:	Terminals IP 20; Housing IP 40

Type key

Basic designation	
Number of channels	1 = 1 channel 2 = 2 channels
Part of an overfill or leakage protection according to WHG	2 = WHG
Housing	B = Plugged clamps (for screwing) C = Plugged clamps (spring force)
Output	1 = 1 change-over contact (2 channel version) 2 = 2 change-over contacts (1 channel version)
Switching delay	0 = 0,5 seconds
Supply voltage	0 = 24 VDC 6 = 230 VDC 9 = 20...230 V AC/DC multi voltage power supply unit
Construction form without indication	= 22,5 mm mounting rail K = 19" board version
B	= Bus connection option at 24 VDC
Optional: SIL „safety integrity level“	TÜV NORD 4479912399841-013 1 = SIL 1 2 = SIL 2
XR-6	2
	0

Connection examples

