

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



SMS relay and signaling module, European version, monitor digital values via cellular network, switch relay outputs remotely, communication via SMS or cellular network data connection (e-mail transmission, app), supply voltage 93 V ... 250 V AC

Product description

The TC MOBILE I/O X200-4G AC compact electronic signaling system is the successor to the TC MOBILE I/O X200 AC (2903806) and PSI-MODEM-SMS-RELAY/6 DI/4DO/AC (2313513) SMS relays. The electronic signaling system monitors digital values via the cellular network. It also switches relay outputs remotely. The device offers numerous helpful software functions, such as cellular diagnostics, sending logbooks via e-mail, and different user roles. A USB connection to a computer with a web browser is all that is needed for configuration.

Your advantages

- Future-proof 4G technology (LTE CAT1), simultaneous use of well-established 2G networks (GSM, GPRS, EDGE)
- Alerts via SMS in the field and, for example, via e-mail in the control room
- Message chain for sending an alert to the relevant service technician
- Alarm generation on voltage failure via SMS
- Free switching via phone call
- Cost control for prepaid cards
- Remote commands to avoid on-site servicing: switching, configuration commands, and logbook transmission
- Compact design also for domestic installations (4 HP, DIN 43880)
- Mounting on DIN rail or on the wall

Commercial data

Item number	1038568
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DNC423
Catalog page	Page 403 (C-6-2019)
GTIN	4055626592411
Weight per piece (including packing)	231.8 g
Weight per piece (excluding packing)	231.8 g
Customs tariff number	85176200
Country of origin	DE

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Technical data

Product properties

Product type	Signaling system
Application	I/O
MTTF	772 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	363 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	150 Years (SN 29500 standard, temperature 40°C, operating cycle 100%)

Electrical properties

Mains type	Cellular communication
------------	------------------------

Supply

Supply voltage range	93 V AC ... 250 V AC (47.5 Hz ... 63 Hz)
Typical current consumption	15 mA (for 230 V AC)
Max. current consumption	90 mA
Single conductor/terminal point, rigid	0.2 mm ² ... 2.5 mm ²
Single-wire/terminal point, flexible	0.2 mm ² ... 2.5 mm ²

Input data

Digital

Description of the input	Digital input
Number of inputs	4
Switching level "0" signal	0 V AC ... 50 V AC
Switching level "1" signal	90 V AC ... 250 V AC

Output data

Switching

Output name	Relay output
Number of outputs	4
Contact switching type	N/O contact
Minimum switching voltage	5 V
Maximum switching voltage	125 V DC 250 V AC
Limiting continuous current	5 A
Switching capacity	750 VA
Electrical service life	150000 cycles (5 A / 30 V DC)
	150000 cycles (3 A / 120 V AC)
	30000 cycles (5 A / 250 V AC)

Connection data

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Supply

Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 14
Stripping length	6.5 mm
Tightening torque	0.5 Nm ... 0.6 Nm (5-7 lbs-in, screw terminal blocks)

Interfaces

Data: USB 2.0

Connection method	Mini-USB type B, 5-pos.
Transmission length	≤ 3 m (only for configuration and diagnostics)

Wireless

Interface description	GSM / GPRS / EDGE / LTE (FDD)
Frequency range	800 MHz (LTE B20)
	1800 MHz (LTE B3)
	2600 MHz (LTE B7)
	900 MHz (2 W (EGSM))
	1800 MHz (1 W (EGSM))
GPRS	Multislot Class 33
EDGE	Multislot Class 33
LTE	CAT1

Dimensions

Width	72 mm
Height	90 mm
Depth	62 mm

Material specifications

Material	Polycarbonate
----------	---------------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (SMS mode only, note the derating information in the technical documentation for data connection)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	2000 m
Permissible humidity (operation)	0 % ... 95 %

Approvals

CE

Certificate	CE-compliant
-------------	--------------

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Wireless approval, Europe

Note	RED 2014/53/EU
------	----------------

UKCA

Certificate	UKCA-compliant
-------------	----------------

EMC data

Electromagnetic compatibility	Conformance with RED Directive 2014/53/EU
-------------------------------	---

Electrostatic discharge

Standards/regulations	EN 61000-4-2
-----------------------	--------------

Electrostatic discharge

Contact discharge	± 6 kV
Discharge in air	± 8 kV
Indirect discharge	± 6 kV
Comments	Criterion B

Electromagnetic HF field

Standards/regulations	EN 61000-4-3
-----------------------	--------------

Electromagnetic HF field

Frequency range	26 MHz ... 6 GHz
Field intensity	10 V/m
Comments	Criterion A

Fast transients (burst)

Standards/regulations	EN 61000-4-4
-----------------------	--------------

Fast transients (burst)

Input	± 2 kV (Unshielded supply line)
Signal	± 2 kV (Shielded signal line)
Comments	Criterion B

Surge current load (surge)

Standards/regulations	EN 61000-4-5
-----------------------	--------------

Surge current load (surge)

Input	± 1 kV (Symmetrical, unshielded supply line) ± 2 kV (Asymmetrical, unshielded supply line)
Signal	± 1 kV (Data line, asymmetrical)
Comments	Criterion B

Conducted interference

Standards/regulations	EN 61000-4-6
-----------------------	--------------

Conducted interference

Frequency range	0.15 MHz ... 80 MHz
Comments	Criterion A

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Voltage	10 V
---------	------

Voltage dips

Standards/regulations	EN 61000-4-11
-----------------------	---------------

Emitted interference

Emitted radio interference in acc. with EN 55011	Class B, area of application: Industry and residential
--	--

Criteria

Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.

Standards and regulations

Standards/regulations	EN 50360
Standards/regulations	EN 50121-4

Mounting

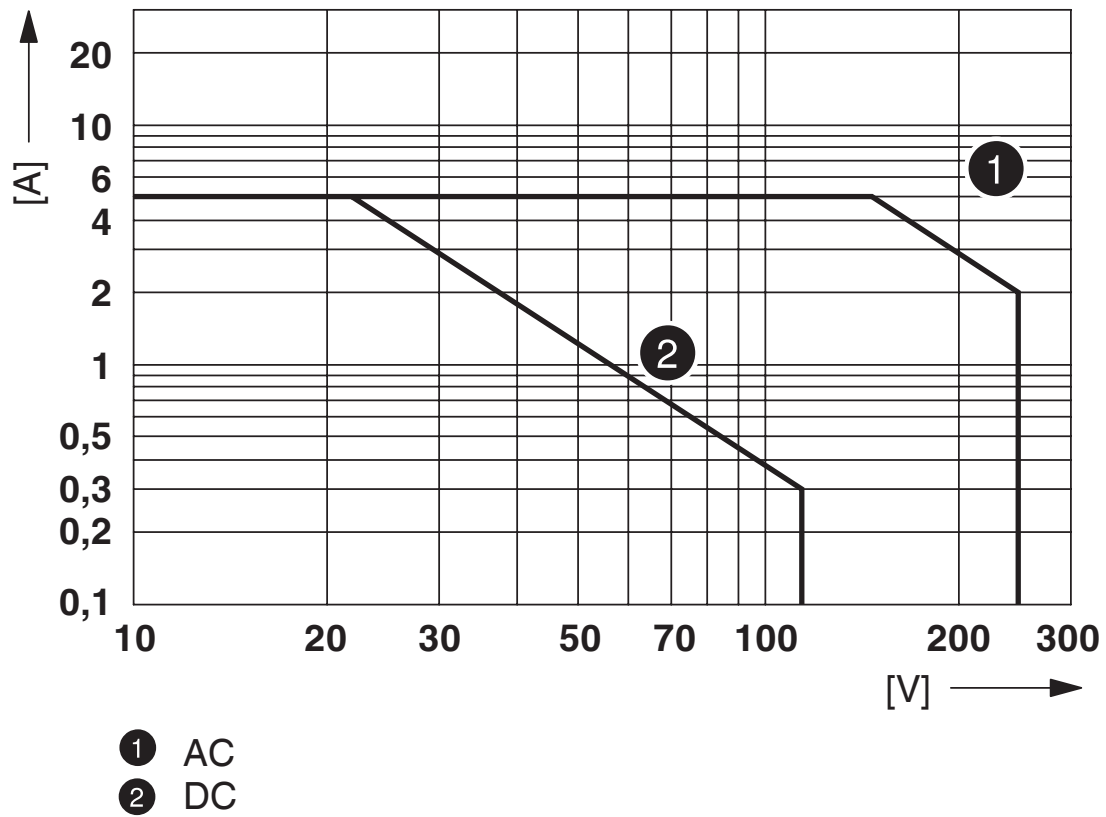
Mounting type	DIN rail mounting
---------------	-------------------

1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Drawings

Diagram



Relay, max. load switching capacity, resistive load

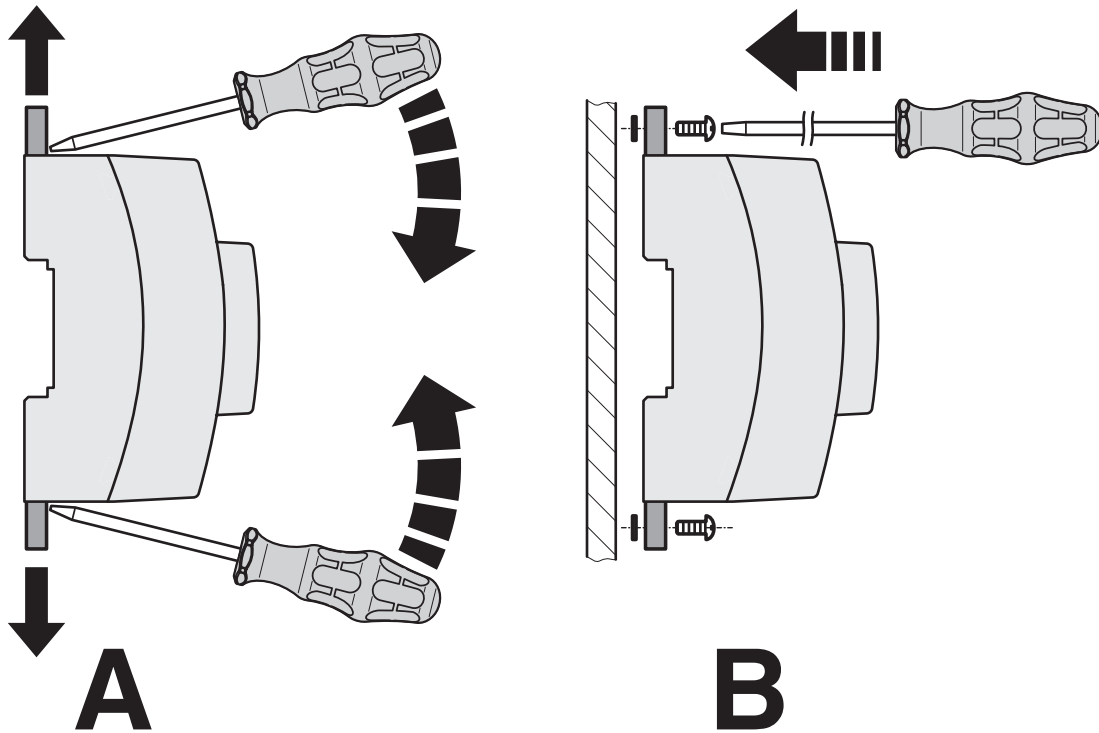
TC MOBILE I/O X200-4G AC - SMS relay



1038568

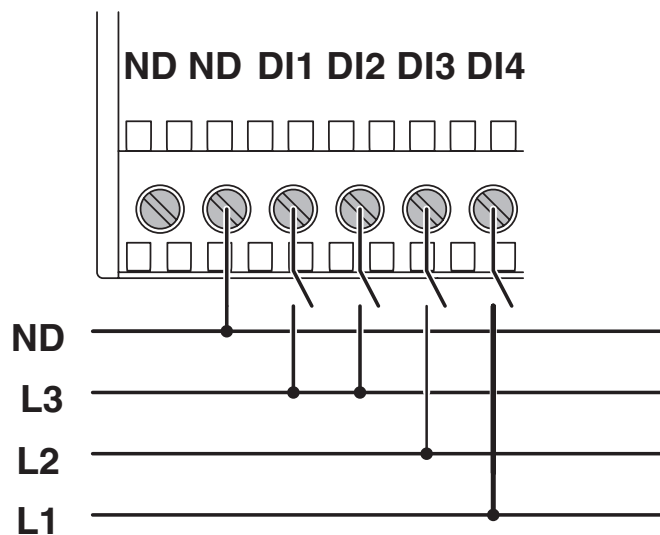
<https://www.phoenixcontact.com/pc/products/1038568>

Schematic diagram



Wall mounting

Connection diagram



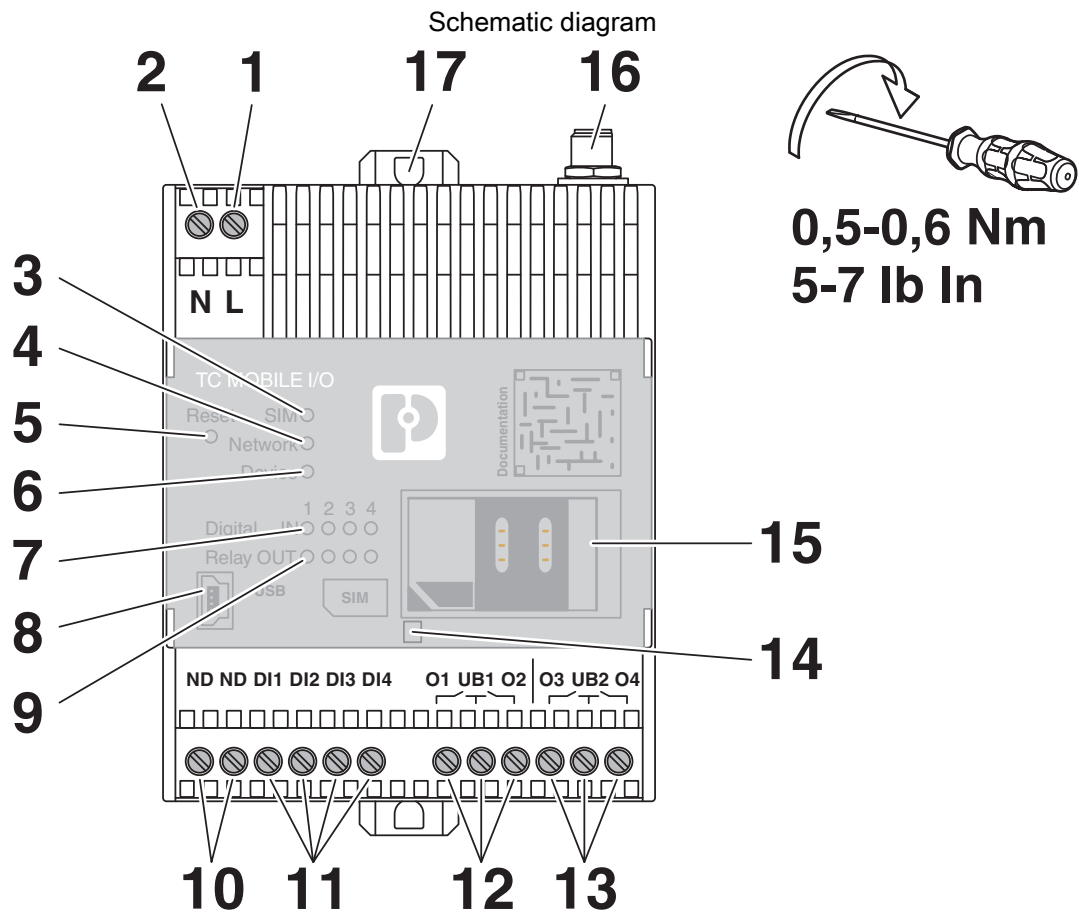
Digital inputs

TC MOBILE I/O X200-4G AC - SMS relay



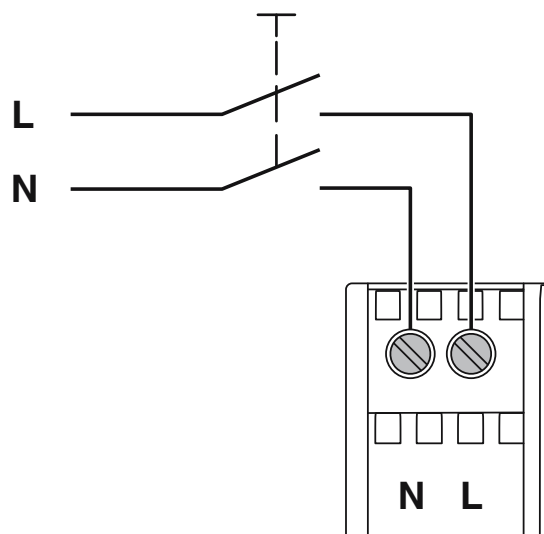
1038568

<https://www.phoenixcontact.com/pc/products/1038568>



Front view

Schematic diagram



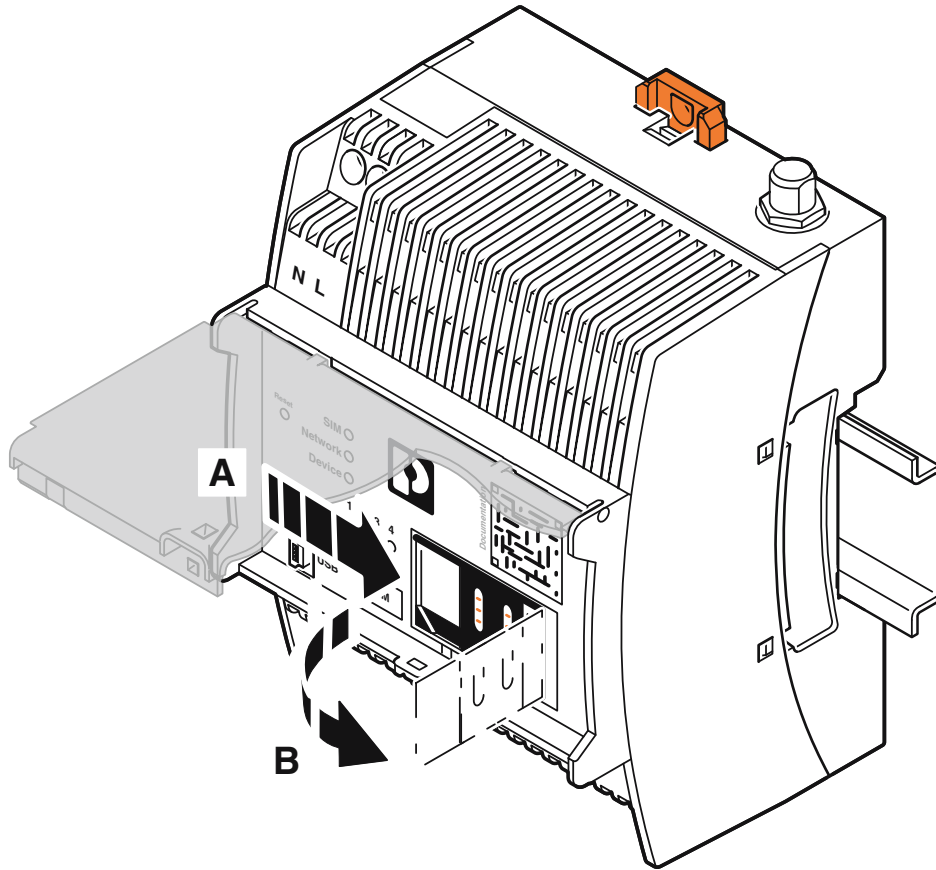
Connecting the supply voltage

TC MOBILE I/O X200-4G AC - SMS relay

1038568

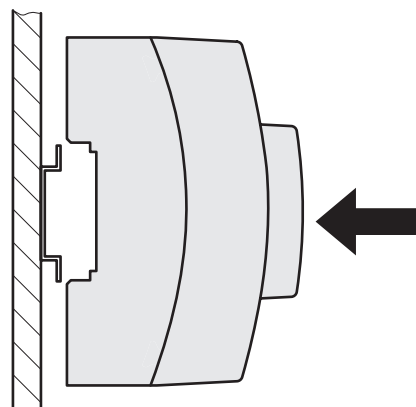
<https://www.phoenixcontact.com/pc/products/1038568>

Schematic diagram



Insert the SIM card

Schematic diagram



DIN rail mounting

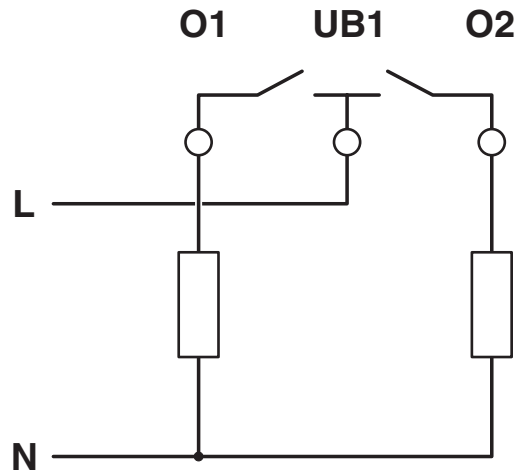
TC MOBILE I/O X200-4G AC - SMS relay



1038568

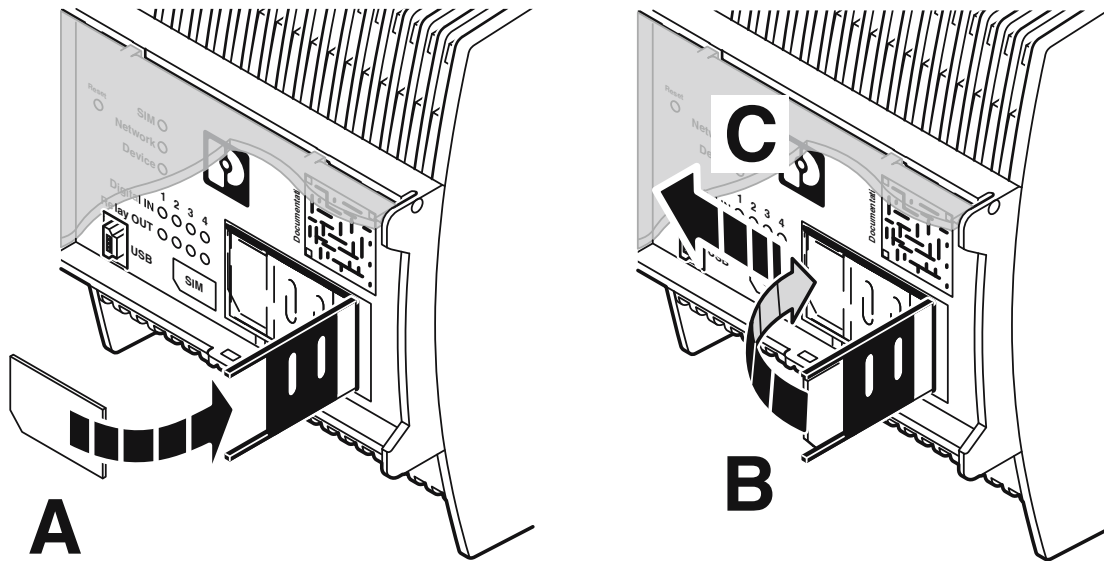
<https://www.phoenixcontact.com/pc/products/1038568>

Connection diagram



Floating relay contacts

Schematic diagram



Insert the SIM card

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Classifications

ECLASS

ECLASS-11.0	27242608
ECLASS-12.0	27242608
ECLASS-13.0	27242608

ETIM

ETIM 8.0	EC001604
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

Accessories

CABLE-USB/MINI-USB-3,0M - USB cable

2986135

<https://www.phoenixcontact.com/pc/products/2986135>

USB connecting cable: USB plug type A to USB plug type Mini-B; length: 3 m



TC ANT MOBILE WALL 5M - Antenna

2702273

<https://www.phoenixcontact.com/pc/products/2702273>

Multiband omnidirectional antenna for wall or mast mounting, 0.6 GHz ... 6 GHz, gain: 3 dBi ... 7 dBi, degree of protection: IP66, connection: SMA (male), incl. 5 m connecting cable, mounting bracket, and mast clamps



TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

ANT-OMNI-0671-01 - Antenna

1396316

<https://www.phoenixcontact.com/pc/products/1396316>



Multiband omnidirectional antenna for wall or mast mounting, 0.6 GHz ... 7.1 GHz, gain: 1 dBi ... 3 dBi, degree of protection: IP67, seawater-resistant, connection: N (female), incl. mounting bracket and mast clamps

ANT-OMNI-0671-02 - Antenna

1396318

<https://www.phoenixcontact.com/pc/products/1396318>



Multiband omnidirectional antenna with protection against vandalism for control cabinet mounting, frequency band: 0.6 GHz ... 7.1 GHz, gain: 2 dBi ... 4 dBi, degree of protection: IP67, shockproof: IK10, seawater-resistant, connection: N (female)

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

ANT-OMNI-0671-03 - Antenna

1565400

<https://www.phoenixcontact.com/pc/products/1565400>



Multiband omnidirectional antenna for installation in plastic control cabinets not visible from the outside, frequency band: 0.6 GHz ... 7.1 GHz, gain: 1 dBi 2 dBi, connection: SMA (male), antenna connector with 90° articulated joint

NBC-COX-CNM/0.5-S/COX-CKM - Coaxial cable

1340139

<https://www.phoenixcontact.com/pc/products/1340139>



Coaxial cable, 50 Ω , length: 0.5 m, N(m) - SMA(m), external cable diameter: 2.8 mm, transmission frequency: ≤ 7.25 GHz, typical attenuation: 800 MHz 0.4 dB, 2.4 GHz 0.7 dB, 5.8 GHz 1.1 dB, 7.25 GHz 1.5 dB

TC MOBILE I/O X200-4G AC - SMS relay

1038568

<https://www.phoenixcontact.com/pc/products/1038568>

NBC-COX-CNM/1.0-M/COX-CKM - Coaxial cable

1340143

<https://www.phoenixcontact.com/pc/products/1340143>



Coaxial cable, 50 Ω , length: 1 m, N(m) - SMA(m), external cable diameter: 4.9 mm, transmission frequency: ≤ 7.25 GHz, typical attenuation: 800 MHz 0.5 dB, 2.4 GHz 0.8 dB, 5.8 GHz 1.2 dB, 7.25 GHz 1.4 dB

NBC-COX-CNM/3.0-M/COX-CKM - Coaxial cable

1340144

<https://www.phoenixcontact.com/pc/products/1340144>



Coaxial cable, 50 Ω , length: 3 m, N(m) - SMA(m), external cable diameter: 4.9 mm, transmission frequency: ≤ 7.25 GHz, typical attenuation: 800 MHz 1.4 dB, 2.4 GHz 2.3 dB, 5.8 GHz 3.6 dB, 7.25 GHz 4.2 dB

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

NBC-COX-CNM/5.0-M/COX-CKM - Coaxial cable

1340147

<https://www.phoenixcontact.com/pc/products/1340147>



Coaxial cable, 50 Ω , length: 5 m, N(m) - SMA(m), external cable diameter: 4.9 mm, transmission frequency: ≤ 7.25 GHz, typical attenuation: 800 MHz 2.3 dB, 2.4 GHz 3.8 dB, 5.8 GHz 6 dB, 7.25 GHz 7.3 dB

RAD-CAB-EF393- 3M - Antenna cable

2867649

<https://www.phoenixcontact.com/pc/products/2867649>



Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: stranded, attenuation: 1.0 / 1.8 / 3.1 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2 x N (male), cable length: 3 m (10 ft.)

TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

RAD-CAB-EF393- 5M - Antenna cable

2867652

<https://www.phoenixcontact.com/pc/products/2867652>

Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: stranded, attenuation: 1.6 / 2.9 / 5.0 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2 x N (male), cable length: 5 m (16 ft.)



RAD-CAB-EF393-10M - Antenna cable

2867665

<https://www.phoenixcontact.com/pc/products/2867665>

Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: stranded, attenuation: 2.9 / 5.6 / 9.9 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2 x N (male), cable length: 10 m (32 ft.)



TC MOBILE I/O X200-4G AC - SMS relay

1038568

<https://www.phoenixcontact.com/pc/products/1038568>



RAD-CAB-EF393-15M - Antenna cable

2885634

<https://www.phoenixcontact.com/pc/products/2885634>

Antenna cable, outside diameter: 10 mm (0.4 in.), inner conductor: stranded, attenuation: 4.3 / 8.3 / 14.8 dB at 0.9 / 2.4 / 5.8 GHz, connection: 2 x N (male), cable length: 15 m (50 ft.)



CN-UB-70DC-6-BB - Surge protection device

2803166

<https://www.phoenixcontact.com/pc/products/2803166>

Attachment plug with surge protection for coaxial signal interfaces. Connection: N connector, female/female



TC MOBILE I/O X200-4G AC - SMS relay



1038568

<https://www.phoenixcontact.com/pc/products/1038568>

RAD-ADP-N/F-N/F - Adapter

2867843

<https://www.phoenixcontact.com/pc/products/2867843>

Antenna adapter for control cabinet feed-through, frequency range: 0.3 GHz ...
6 GHz, degree of protection: IP65, connection: 2 x N (female)



RAD-TAPE-SV-19-3 - Weather protection tape

2903182

<https://www.phoenixcontact.com/pc/products/2903182>

Vulcanizing sealing tape for external protection of adapters, cable connections,
etc. against the effects of weather, roll length: 3 m



Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com