

## SMS relay - TC MOBILE I/O X200 - 2903805

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Successor to the SMS relay: monitor analog and digital values via the mobile communication network, and switch relay outputs remotely. Communication is via SMS or GPRS (e-mail). Supply voltage range of 10 V ... 60 V DC.

### Product Description


The compact TC MOBILE I/O X200 AC signaling system is the successor to the PSI-MODEM-SMS-RELAY/6ADI/4DO/DC SMS relay (Order No. 2313520) and is used to monitor analog and digital values via the mobile communication network and switch relay outputs remotely. A USB connection to a computer and a web browser is all that is needed for configuration. The device features numerous helpful software functions, such as mobile communication diagnostics, sending of log books via e-mail, and different user roles.

### Why buy this product

- Notification via SMS on change of status at input
- SMS status query of all inputs and outputs
- SMS relay for remote control of outputs
- Alarm generation on voltage failure via SMS
- GSM mobile phone network: 850, 900, 1800, and 1900 MHz
- Switching of outputs for a predefined time
- Communication via SMS and e-mail
- Two analog inputs
- Configuration via USB and web browser
- Compact design: 4 pitches (DIN 43880)



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 768832
GTIN	4046356768832
Weight per Piece (excluding packing)	253.000 g
Custom tariff number	85176200
Country of origin	Germany

# SMS relay - TC MOBILE I/O X200 - 2903805

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

### Dimensions

Width	72 mm
Height	90 mm
Depth	62 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (for derating, see technical documentation)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	0 % ... 95 %
Altitude	2000 m
Degree of protection	IP20

### General

Standards/regulations	EN 50360
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Net weight	253 g
Housing material	Polycarbonate
MTTF	692 Years (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))
	338 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	134 Years (SN 29500 standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc X (Please follow the special installation instructions in the documentation!)
FCC	Part 15.107(a), 15.109(a)

### Power supply

Supply voltage range	10 V DC ... 60 V DC
Max. current consumption	80 mA
Typical current consumption	50 mA (24 V DC)
Conductor cross section flexible max.	2.50 mm <sup>2</sup>
Conductor cross section flexible min.	0.20 mm <sup>2</sup>
Conductor cross section solid max.	2.50 mm <sup>2</sup>
Conductor cross section solid min.	0.20 mm <sup>2</sup>
Max. AWG conductor cross section, flexible	14
Min. AWG conductor cross section, flexible	24
Conductor cross section AWG max.	14
Conductor cross section AWG min.	24

# SMS relay - TC MOBILE I/O X200 - 2903805

## Technical data

### Serial interface

Interface 1	USB 2.0
Connection method	Mini-USB type B, 5-pos.
Transmission length	≤ 3 m (only for configuration and diagnostics)

### Radio interface

Interface description	GSM
Frequency	850 MHz (2 W (EGSM))
	900 MHz (2 W (EGSM))
	1800 MHz (1 W (EGSM))
	1900 MHz (1 W (EGSM))
EDGE	Multislot Class 10

### Digital outputs

Output name	Relay output
Number of outputs	4
Contact type	N/O contact
Minimum switching voltage	5 V
Maximum switching voltage	60 V
Limiting continuous current	6 A
Switching capacity	1500 VA
Electrical service life	100000 cycles (5 A, ohmic load)
	200000 cycles (2 A, $\cos\phi = 0.4$ )

### Digital inputs

Description of the input	Digital input
Number of inputs	4
Switching threshold "0" signal in reference to $U_N$	≤ 0.3
Switching threshold "1" signal in reference to $U_N$	≥ 0.7

### Analog inputs

Description of the input	Analog input
Number of inputs	2
Input signal	Current or voltage
Voltage input signal	0 V DC ... 60 V DC
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA (configurable)
Input impedance	600 kΩ (Voltage inputs)
	50 Ω (Current inputs)
Precision	± 0.1 %
Resolution	15 bit

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
-------------------------------	---

# SMS relay - TC MOBILE I/O X200 - 2903805

## Technical data

### Standards and Regulations

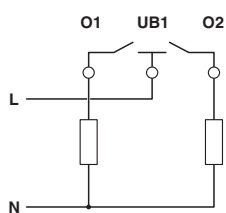
Standards/regulations	EN 61000-4-2
Contact discharge	± 6 kV
Indirect discharge	± 6 kV
Standards/regulations	EN 61000-4-3
Frequency range	26 MHz ... 3 GHz
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	± 1 kV (Data line, asymmetrical)
Standards/regulations	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Standards/regulations	EN 50360
	EN 50121-4
Conformance	CE-compliant
ATEX	# II 3 G Ex nA nC IIC T4 Gc X
FCC	Part 15.107(a), 15.109(a)
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

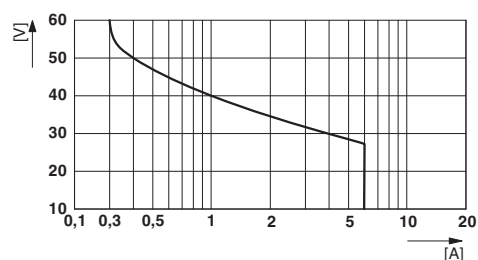
## Drawings

Connection diagram



Floating relay contacts

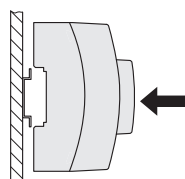
Diagram



Relay load curve - ohmic load

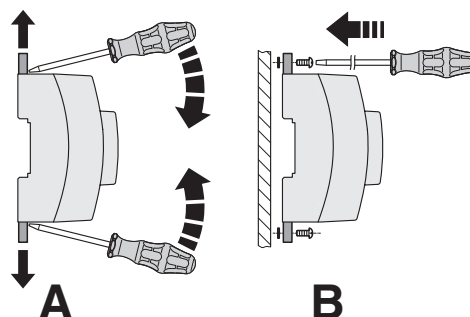
# SMS relay - TC MOBILE I/O X200 - 2903805

Schematic diagram



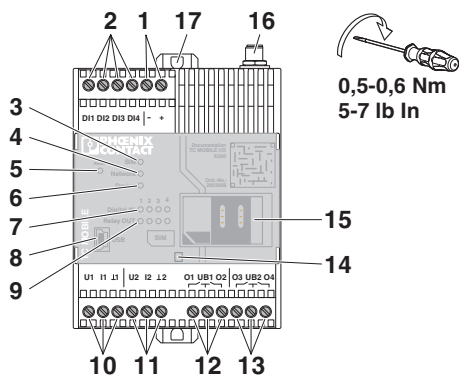
DIN rail mounting

Schematic diagram



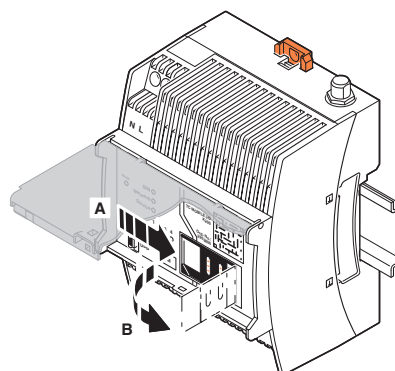
Wall mounting

Schematic diagram



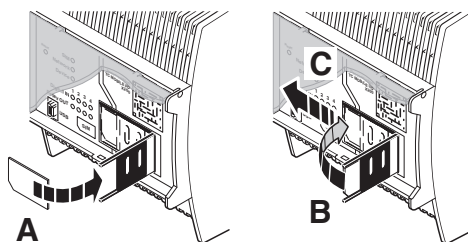
Front view

Schematic diagram



Insert the SIM card

Schematic diagram



Insert the SIM card

## Classifications

eCl@ss

eCl@ss 4.0	27250312
------------	----------

# SMS relay - TC MOBILE I/O X200 - 2903805

## Classifications

### eCl@ss

eCl@ss 4.1	27250312
eCl@ss 5.0	27242208
eCl@ss 5.1	27242208
eCl@ss 6.0	27242208
eCl@ss 7.0	27242208
eCl@ss 8.0	19179290
eCl@ss 9.0	27242608

### ETIM

ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC001604
ETIM 6.0	EC000310

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43222604

## Accessories

### Accessories

#### Antenna

Antenna - PSI-GSM-STUB-ANT - 2313342



Mobile communication antenna for direct mounting on the device, SMA (male) antenna connector with articulated joint. The antenna is suitable for installation in plastic control cabinets not visible from the outside.

Antenna - PSI-GSM/UMTS-QB-ANT - 2313371



GSM UMTS antenna, with omnidirectional characteristic, 2 m antenna cable with SMA round connector

## SMS relay - TC MOBILE I/O X200 - 2903805

### Accessories

Antenna - TC ANT MOBILE WALL 5M - 2702273



Multiband mobile phone antenna with mounting bracket for outdoor installation. 5 m antenna cable with SMA round plug

---

### Coaxial cable

Antenna cable - PSI-CAB-GSM/UMTS-10M - 2900981



Mobile network antenna cable, 10 m in length, SMA (male) -> SMA (female), 50 ohm impedance

---

Antenna cable - PSI-CAB-GSM/UMTS- 5M - 2900980



Mobile network antenna cable, 5 m in length, SMA (male) -> SMA (female), 50 ohm impedance

---

### Power supply

Power supply unit - STEP-PS/ 1AC/24DC/0.5 - 2868596



Primary-switched STEP POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC/0.5 A

---

### Programming cable

USB cable - CABLE-USB/MINI-USB-3,0M - 2986135



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

---

### Surge protection for transceiver systems

## SMS relay - TC MOBILE I/O X200 - 2903805

### Accessories

Surge protection device - CSMA-LAMBDA/4-2.0-BS-SET - 2800491



Attachment plug with Lambda/4 technology as surge protection for coaxial signal interfaces. Connection: Male/female SMA connectors.

---

---

Phoenix Contact 2017 © - all rights reserved  
<http://www.phoenixcontact.com>