

# RFC 480S PN 4TX - Safety controller

2404577

<https://www.phoenixcontact.com/us/products/2404577>



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Remote Field Controller with 4 x 10/100/1000 Ethernet, PROFINET controller with integrated PROFIsafe safety controller, PROFINET device, IP20 degree of protection, pluggable parameterization memory

## Your advantages

- Convenient operation via the touch display
- Modern communication with SCADA systems, thanks to OPC UA
- Communication in up to three separate subnets
- Rapid processing of CPU-intensive applications
- Operation of devices with the latest PROFIsafe profile

## Commercial data

Item number	2404577
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR10
Product key	DRAABC
GTIN	4055626443966
Weight per piece (including packing)	3,274.4 g
Weight per piece (excluding packing)	3,249 g
Customs tariff number	85371091
Country of origin	DE

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## Technical data

### Notes

Note on application

Note on application

Only for industrial use

### Product properties

Product type	Controller
Product family	Remote Field Controller
Type	Stand-alone

### Insulation characteristics

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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### Display

Diagnostics display	yes
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### System properties

Retentive data storage	2 Mbyte
IEC 61131 runtime system	
Program memory	typ. 16 Mbyte
Data storage system	32 Mbyte
Number of control tasks	16

### PROFINET

Device function	PROFINET controller, PROFINET device
Update rate	min. 1 ms
Number of supported devices	max. 256

### Function

Diagnostics display	yes
Redundancy function	no
Safety function	yes

### Functionality

Programming languages supported	Instruction list (IL) Symbolic flowchart (SFC) Ladder diagram (LD) Function block diagram (FBD) Structured text (ST)
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### System requirements

Engineering tool	PC Worx
Diagnostics tool	DIAG+, version 2.00 or higher
Application interface	Device driver interface via TCP/IP sockets

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## Electrical properties

Power consumption	typ. 25 W (Without fan module) max. 35 W (With fan module)
Maximum power dissipation for nominal condition	typ. 24 W (Without fan module) typ. 24 W (Without fan module)

## Supply

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including ripple)
Power supply connection	Screw terminal blocks, plug-in
Typical current consumption	1 A

## Real-time clock

Realtime clock	Integrated (battery backup)
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## Connection data

### COMBICON connector

Conductor cross-section, rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

## Interfaces

Web server	no
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### USB

Number of interfaces	1
Connection method	USB type A, male connector

### Ethernet

Bus system	RJ45
Number of interfaces	4
Connection method	RJ45 jack
Transmission speed	10/100/1000 Mbps (100 Mbps (LAN 3.1 and LAN 3.2), 1000 Mbps (LAN 1, LAN 2))

## Dimensions

### External dimensions

Width / Height / Depth	122 mm / 182 mm / 173 mm (without fan module) 122 mm / 220 mm / 173 mm (With fan module)
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## Material specifications

Color	anthracite grey (RAL 7016)
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## Characteristics

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Safety data: EN ISO 13849

Category	max. 4
Performance level (PL)	max. e

Safety data: IEC 61508 - High demand

Safety Integrity Level (SIL)	max. 3
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Safety data: EN IEC 62061

Safety Integrity Level Claim Limit (SIL CL)	max. 3
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20 (Manufacturers declaration, not evaluated by UL)
Ambient temperature (operation)	0 °C ... 60 °C up to 2000 m above mean sea level (from 40 °C only with fan module)
	0 °C ... 55 °C 2000 m ... 3000 m above mean sea level (With fan module only)
	0 °C ... 50 °C 3000 m ... 4000 m above mean sea level (With fan module only)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Shock (operation)	20g (in accordance with EN 60068-2-27/IEC 60068-2-27)
Shock (storage/transport)	20g (in accordance with EN 60068-2-27/IEC 60068-2-27)
Vibration (operation)	1g (in accordance with EN 60068-2-6/IEC 60068-2-6)
Vibration (storage/transport)	1g (in accordance with EN 60068-2-6/IEC 60068-2-6)
Air pressure (operation)	60 kPa ... 108 kPa (up to 4000 m above mean sea level)
Air pressure (storage/transport)	58 kPa ... 108 kPa (up to 4500 m above mean sea level)

## Mounting

Mounting type	DIN rail mounting
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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2404577>



**cULus Listed**  
Approval ID: E238705



**Functional Safety**  
Approval ID: 01/205/5649.01/23

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## Classifications

### ECLASS

ECLASS-13.0	27242207
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### ETIM

ETIM 9.0	EC000236
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### UNSPSC

UNSPSC 21.0	32151700
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(a), 6(a)-I, 6(c), 7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.	

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	270b9246-7fae-46dd-a74d-6402848075fd

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