

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
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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
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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)

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 ² ... 2.5 mm ²
Conductor cross-section, flexible	0.2 mm ² ... 2.5 mm ²
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)

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

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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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