

RFC 460R PN 3TX - Controller



2700784

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High-availability Remote Field Controller with redundancy function, 3 x 10/100 Ethernet, PROFINET controller, IP20 protection, plug-in parameterization memory

Product description

High-availability Remote Field Controller for PROFINET networks

When it comes to high-availability, distributed, and modular automation, Remote Field Controllers (RFCs) with IEC 61131 control intelligence, redundancy technology, and network connection are the ideal solution. Thanks to the integrated fiber optic-based redundancy function, you can reduce system downtimes, work cost-effectively, and also avoid potential hazards, e.g., in tunnels or at airports.

Your advantages

- The RFC 460R PN 3TX features:
- Fast startup and automatic configuration of all redundancy functions, thanks to AutoSync technology
- Uninterrupted process in the event of failure or when a controller is replaced
- Optimum device integration, thanks to PROFINET standards; redundancy for your future-proof Ethernet network
- High-resolution display for displaying status and error messages in plain text
- Uninterrupted visualization - thanks to redundancy-capable OPC server
- A distance of up to 80 km between the controllers via fiber optics; cost-optimized thanks to plug-in SFP modules

Commercial data

Item number	2700784
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR10
Product key	DRAABA
GTIN	4046356640589
Weight per piece (including packing)	2,100 g
Weight per piece (excluding packing)	1,870 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	120 kByte (NVRAM)
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IEC 61131 runtime system

Program memory	typ. 8 Mbyte
Data storage system	16 Mbyte
Number of control tasks	1

PROFINET

Device function	PROFINET-Controller
Specification	Version 1.1
Update rate	min. 1 ms

Function

Diagnostics display	yes
Redundancy function	yes
Safety function	no

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

Maximum power dissipation for nominal condition	typ. 24 W (Without fan module)
Transmission medium	Copper
Maximum power dissipation for nominal condition	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

Connection method	without
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Interfaces

Web server	no
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Ethernet

Bus system	RJ45
Number of interfaces	3
Connection method	RJ45 jack
Transmission speed	10/100 Mbps
Transmission physics	Copper
Transmission length	100 m (per segment)

Synchronization interface

Number of interfaces	1
Connection method	SFP
Transmission speed	1 Gbps
Transmission physics	Depending on the SFP module
Transmission length	up to 80 km (Depending on the fiber/SFP module used)

USB 2.0

Number of interfaces	2
Connection method	USB type A, socket

Dimensions

External dimensions	
Width / Height / Depth	124 mm / 185 mm / 190 mm (without fan module)
	124 mm / 210 mm / 190 mm (With fan module)

Material specifications

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Color

anthracite grey (RAL 7016)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C (from 45°C only with fan module)
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	5 % ... 90 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 90 % (non-condensing)
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	1g, Criterion 1, according to IEC 60068-2-6
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3000 m above sea level)

Mounting

Mounting type

DIN rail mounting

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Approvals

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UL Listed

Approval ID: E140324



cUL Listed

Approval ID: E140324

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Classifications

ECLASS

ECLASS-13.0	27242207
ECLASS-15.0	27242207

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	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	e26c3b55-47e1-45ef-8674-88e83dffae13

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