

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

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.



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
Catalog page	Page 53 (C-6-2019)
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

## Technical data

### Product properties

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

### Insulation characteristics

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

### Display

Diagnostics display	yes
---------------------	-----

### System properties

Processor	Intel® Celeron® 927 UE 1.5 GHz
Retentive data storage	120 kByte (NVRAM)

### 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
Controller redundancy	yes
Safety function	No

### 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

### Electrical properties

Transmission medium	Copper
Maximum power dissipation for nominal condition	max. 24 W

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

## 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)
----------------	-----------------------------

## Connection data

Connection method	without
-------------------	---------

## Interfaces

Web server	No
------------	----

## 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

Color	anthracite grey (RAL 7016)
-------	----------------------------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
----------------------	------

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

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
---------------	-------------------

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2700784>



**EAC**

Approval ID: RU\*DE\*08.B.00529/19



**UL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 140324

**cULus Listed**

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

## Classifications

### ECLASS

ECLASS-11.0	27242207
ECLASS-12.0	27242207
ECLASS-13.0	27242207

### ETIM

ETIM 9.0	EC000236
----------	----------

### UNSPSC

UNSPSC 21.0	32151700
-------------	----------

# RFC 460R PN 3TX - Controller



2700784

<https://www.phoenixcontact.com/us/products/2700784>

## 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"

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)