

# Data sheet | Item number: 750-8212/025-000

Controller PFC200; 2nd Generation; 2 x ETHERNET, RS-232/-485; Ext. Temperature

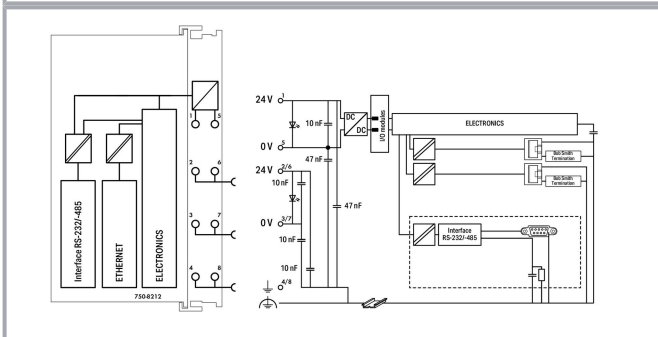
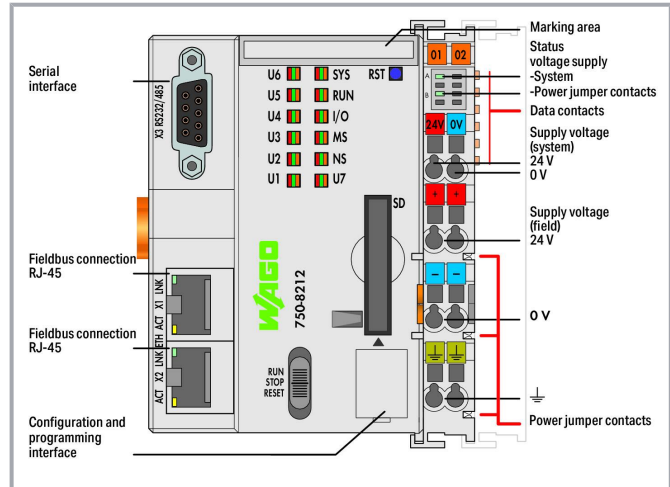


[www.wago.com/750-8212/025-000](http://www.wago.com/750-8212/025-000)



**i** Picture differs from the item.

Color:



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## Item description

The PFC200 Controller is a compact PLC for the modular WAGO I/O System. Besides network and fieldbus interfaces, the controller supports all digital, analog and specialty modules found within the 750/753 Series.

Two ETHERNET interfaces and an integrated switch enable line topology wiring.

An integrated Webserver provides user configuration options, while displaying PFC200 status information.

Besides the processing industry and building automation, typical applications for the PFC200 include standard machinery and equipment control (e. g., packaging, bottling and manufacturing systems, as well as textile, metal and wood processing machines).

Programming per IEC 61131-3

- Programmable via WAGO-I/O-PRO V2.3 or *e!COCKPIT*
- Direct connection of WAGO I/O Modules
- 2 x ETHERNET (configurable), RS-232/485
- Linux operating system with RT-Preempt patch
- Configuration via CODESYS, *e!COCKPIT* or Web-Based Management interface
- Maintenance-free

## Data

### Technical data

Communication	Modbus (TCP, UDP) ETHERNET EtherNet/IP™ Adapter (slave), library for e!RUNTIME Modbus® RTU RS-232 serial interface RS-485 serial interface MQTT EtherCAT Master, requires an additional license BACnet/IP, requires an additional license
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Visualization	Web Visu
Operating system	Real-time Linux (with RT-Preempt patch)

Subject to changes. Please also observe the further product documentation!



CPU	Cortex A8; 1 GHz
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD), Continuous Function Chart (CFC) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	e!COCKPIT (based on CODESYS V3) WAGO-I/O-PRO V2.3 (based on CODESYS V2.3)
Configuration options	e!COCKPIT WAGO-I/O-CHECK Web-Based Management e!RUNTIME Library CODESYS Library
Baud rate (communication/fieldbus 1)	10/100 Mbit/s
Baud rate	ETHERNET: 10/100 Mbit/s
Transmission medium (communication/fieldbus)	ETHERNET: Twisted Pair S-UTP; 100 Ω; Cat. 5; 100 m maximum cable length
Main memory (RAM)	512 MB
Internal memory (flash)	4096 MB
Non-volatile hardware memory	128 Kbytes
Program memory	CODESYS V2: 16 MB; e!RUNTIME: 32 MB
Data memory	CODESYS V2: 64 MB; e!RUNTIME: 128 MB
Non-volatile software memory	128 Kbytes
Non-volatile software memory	128. Kbytes
Memory card type	SD and SDHC up to 32 GB (all guaranteed properties only valid with WAGO Memory Card)
Memory card slot	Push-push mechanism; Cover lid (sealable)
Number of modules per node (max.)	250
Number of modules without a bus extension (max.)	64
Input and output (internal) process image (max.)	1000 Worte/1000 Worte
Input and output (MODBUS) process image (max.)	CODESYS V2: 1000 Worte/1000 Worte; e!RUNTIME: 32000 Worte /32000 Worte
Indicators	LED (SYS, RUN, I/O, U1 ... U7) red/green/orange: Status of system, program, local data bus, status programmable by user (can be used via CODESYS library); LED (A, B) green: Status of system power supply, field supply
Supply voltage (system)	24 VDC (-25 ... +30 %); via pluggable connector (CAGE CLAMP® connection)
Input current (typ.) at nominal load (24 V)	550 mA
Total current (system supply)	1,700 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts

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Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3
Isolation	500 V system/field

### Connection data

Connection technology: communication/fieldbus	Modbus TCP/UDP: 2 x RJ-45; Modbus RTU: 1 x D-sub 9 socket; RS-232 serial interface: 1 x D-sub 9 socket; RS-485 serial interface: 1 x D-sub 9 socket
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	6 x CAGE CLAMP®
Connection type (1)	System/field supply
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Connection technology: device configuration	1 x Male connector; 4-pole

### Physical data

Width	78.6 mm / 3.094 inch
Height	100 mm / 3.937 inch
Depth	71.9 mm / 2.831 inch
Depth from upper edge of DIN-rail	64.7 mm / 2.547 inch

### Mechanical data

Weight	214.6 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

### Environmental requirements

Surrounding air temperature (operation)	-20 ... 60 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Relative humidity (without condensation)	95 %

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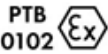


Relative humidity (with condensation)	Short-term condensation per Class 3K6/IEC EN 60721-3-3 and E-DIN 40046-721-3, accounting for a temperature range of -20 to +60 °C (except for wind-driven precipitation, water and ice formation)
Mounting position	any
Mounting type	DIN-35 rail
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Fire load	2.344 MJ
Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

## Commercial data

PU (SPU)	1 Stück
Packaging type	box
Country of origin	DE
GTIN	4055143764575
Customs tariff number	85371091990

## Approvals / Certificates

### Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079	TUEV_14_ATEX_148929_X
 Ex nA IIC T4 Gc	<b>CCCEX</b> CQST/CNEX	CNCA-C23-01	2020312310000213
	<b>IECEX</b> TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X
	<b>UL</b>	UL 121201	E198726 Sec.1

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Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)


### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>KC</b> National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750

### Ship Approvals


Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19-HG1821812-PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAA00001J4

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Sec11

### Optional accessories

#### General accessories

Bluetooth			
	<b>Item no.: 750-921</b> Bluetooth® Adapter		<a href="http://www.wago.com/750-921">www.wago.com/750-921</a>
Communication cable			
	<b>Item no.: 750-923</b> Configuration cable; USB connector; Length: 2.5 m		<a href="http://www.wago.com/750-923">www.wago.com/750-923</a>

Subject to changes. Please also observe the further product documentation!



**Item no.: 750-923/000-001**  
Configuration cable; USB connector; Length: 5 m

[www.wago.com/750-923/000-001](http://www.wago.com/750-923/000-001)

## System housing

### System enclosure



**Item no.: 850-814/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

[www.wago.com/850-814/002-000](http://www.wago.com/850-814/002-000)



**Item no.: 850-815/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

[www.wago.com/850-815/002-000](http://www.wago.com/850-815/002-000)



**Item no.: 850-816/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

[www.wago.com/850-816/002-000](http://www.wago.com/850-816/002-000)



**Item no.: 850-817/002-000**  
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

[www.wago.com/850-817/002-000](http://www.wago.com/850-817/002-000)



**Item no.: 850-825**  
IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

[www.wago.com/850-825](http://www.wago.com/850-825)



**Item no.: 850-826**  
IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-826](http://www.wago.com/850-826)



**Item no.: 850-827**  
IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-827](http://www.wago.com/850-827)



**Item no.: 850-827/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-827/002-000](http://www.wago.com/850-827/002-000)



**Item no.: 850-826/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-826/002-000](http://www.wago.com/850-826/002-000)



**Item no.: 850-828/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

[www.wago.com/850-828/002-000](http://www.wago.com/850-828/002-000)



**Item no.: 850-828**  
IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

[www.wago.com/850-828](http://www.wago.com/850-828)



**Item no.: 850-834**  
IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

[www.wago.com/850-834](http://www.wago.com/850-834)

**Item no.: 850-835**

Subject to changes. Please also observe the further product documentation!



IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-835](http://www.wago.com/850-835)



**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

[www.wago.com/850-836](http://www.wago.com/850-836)

**Cables and pluggable connectors**

Connector plug



**Item no.: 750-975**

ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly

[www.wago.com/750-975](http://www.wago.com/750-975)



**Item no.: 750-978/000-012**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief

[www.wago.com/750-978/000-012](http://www.wago.com/750-978/000-012)



**Item no.: 750-979/000-012**

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief

[www.wago.com/750-979/000-012](http://www.wago.com/750-979/000-012)



**Item no.: 750-978/000-021**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief

[www.wago.com/750-978/000-021](http://www.wago.com/750-978/000-021)



**Item no.: 750-979/000-022**

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief

[www.wago.com/750-979/000-022](http://www.wago.com/750-979/000-022)



**Item no.: 750-978/000-022**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief

[www.wago.com/750-978/000-022](http://www.wago.com/750-978/000-022)



**Item no.: 750-979/000-011**

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief

[www.wago.com/750-979/000-011](http://www.wago.com/750-979/000-011)



**Item no.: 750-979/000-021**

Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief

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**Item no.: 750-977/000-011**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22

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Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief

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**Item no.: 750-977/000-022**

Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24

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Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24

[www.wago.com/750-977/000-021](http://www.wago.com/750-977/000-021)

## Software

### Basic version



**Item no.: 2759-101/1110-2005**  
e!COCKPIT; Multi-User License; 05 pcs

[www.wago.com/2759-101/1110-2005](http://www.wago.com/2759-101/1110-2005)



**Item no.: 2759-101/1110-2002**  
e!COCKPIT; Workstation License

[www.wago.com/2759-101/1110-2002](http://www.wago.com/2759-101/1110-2002)



**Item no.: 2759-101/1110-2015**  
e!COCKPIT; Multi-User License; 15 pcs

[www.wago.com/2759-101/1110-2015](http://www.wago.com/2759-101/1110-2015)



**Item no.: 2759-101/1110-2020**  
e!COCKPIT; Multi-User License; 20 pcs

[www.wago.com/2759-101/1110-2020](http://www.wago.com/2759-101/1110-2020)



**Item no.: 2759-101/1110-2010**  
e!COCKPIT; Multi-User License; 10 pcs

[www.wago.com/2759-101/1110-2010](http://www.wago.com/2759-101/1110-2010)



**Item no.: 2759-101/1110-3000**  
e!COCKPIT; Site License

[www.wago.com/2759-101/1110-3000](http://www.wago.com/2759-101/1110-3000)



**Item no.: 2759-101/1110-4000**  
e!COCKPIT; Buy-out License

[www.wago.com/2759-101/1110-4000](http://www.wago.com/2759-101/1110-4000)



**Item no.: 759-333**  
WAGO-I/O-PRO

[www.wago.com/759-333](http://www.wago.com/759-333)



**Item no.: 759-333/000-923**  
WAGO-I/O-PRO; USB-Set

[www.wago.com/759-333/000-923](http://www.wago.com/759-333/000-923)



**Item no.: 759-911**  
WAGO-I/O-PRO; CD

[www.wago.com/759-911](http://www.wago.com/759-911)

### Runtime software



Subject to changes. Please also observe the further product documentation!

**Item no.: 2759-2283/211-1000**

e!RUNTIME; BACnet; 300; M; Single License; Online activation

[www.wago.com/2759-2283/211-1000](http://www.wago.com/2759-2283/211-1000)



**Item no.: 2759-283/211-1000**

e!RUNTIME; BACnet; 300; Single License; Online activation

[www.wago.com/2759-283/211-1000](http://www.wago.com/2759-283/211-1000)



**Item no.: 2759-263/211-1000**

e!RUNTIME; EtherCAT Master; 300; Single License; Online activation

[www.wago.com/2759-263/211-1000](http://www.wago.com/2759-263/211-1000)

### Marking accessories

#### Marker carrier

**Item no.: 750-103**

Group marker carrier

[www.wago.com/750-103](http://www.wago.com/750-103)

#### Marker

**Item no.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

[www.wago.com/2009-145/000-006](http://www.wago.com/2009-145/000-006)

**Item no.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

[www.wago.com/2009-145](http://www.wago.com/2009-145)

**Item no.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

[www.wago.com/2009-145/000-002](http://www.wago.com/2009-145/000-002)

**Item no.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

[www.wago.com/2009-145/000-007](http://www.wago.com/2009-145/000-007)

**Item no.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

[www.wago.com/2009-145/000-005](http://www.wago.com/2009-145/000-005)

**Item no.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

[www.wago.com/2009-145/000-012](http://www.wago.com/2009-145/000-012)

**Item no.: 2009-145/000-023**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

[www.wago.com/2009-145/000-023](http://www.wago.com/2009-145/000-023)

**Item no.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

[www.wago.com/2009-145/000-024](http://www.wago.com/2009-145/000-024)

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**Item no.:** 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

[www.wago.com/248-501/000-006](http://www.wago.com/248-501/000-006)



**Item no.:** 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

[www.wago.com/248-501/000-007](http://www.wago.com/248-501/000-007)



**Item no.:** 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

[www.wago.com/248-501/000-002](http://www.wago.com/248-501/000-002)



**Item no.:** 248-501/000-012

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

[www.wago.com/248-501/000-012](http://www.wago.com/248-501/000-012)



**Item no.:** 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

[www.wago.com/248-501](http://www.wago.com/248-501)



**Item no.:** 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

[www.wago.com/248-501/000-017](http://www.wago.com/248-501/000-017)



**Item no.:** 248-501/000-005

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

[www.wago.com/248-501/000-005](http://www.wago.com/248-501/000-005)



**Item no.:** 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

[www.wago.com/248-501/000-024](http://www.wago.com/248-501/000-024)



**Item no.:** 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

[www.wago.com/248-501/000-023](http://www.wago.com/248-501/000-023)

Group marker carrier



**Item no.:** 750-107

Group marker carrier

[www.wago.com/750-107](http://www.wago.com/750-107)

#### Memory card

Memory card

**Item no.:** 758-879/000-001

Memory Card SD; SLC-NAND; 2 GByte; Temperature from -40 to 90 °C

[www.wago.com/758-879/000-001](http://www.wago.com/758-879/000-001)



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Item no.: 758-879/000-2108

Memory Card SD; pSLC-NAND; 8 GB; Temperature range: -40 to 90°C








[www.wago.com/758-879/000-2108](http://www.wago.com/758-879/000-2108)


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**Shield termination**


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## Shield clamping saddle




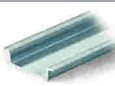
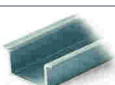

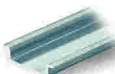
	<b>Item no.: 790-116</b> Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	<a href="http://www.wago.com/790-116">www.wago.com/790-116</a>
	<b>Item no.: 790-124</b> Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	<a href="http://www.wago.com/790-124">www.wago.com/790-124</a>
	<b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>
	<b>Item no.: 790-140</b> Shield clamping saddle; diameter of compatible conductor	<a href="http://www.wago.com/790-140">www.wago.com/790-140</a>
	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	<a href="http://www.wago.com/790-216">www.wago.com/790-216</a>
	<b>Item no.: 790-220</b> Shield clamping saddle; 30 mm wide; 6 ... 20 mm	<a href="http://www.wago.com/790-220">www.wago.com/790-220</a>
	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	<a href="http://www.wago.com/790-208">www.wago.com/790-208</a>

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**Carrier rail**


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## Mounting accessories

	<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-197">www.wago.com/210-197</a>
	<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<a href="http://www.wago.com/210-198">www.wago.com/210-198</a>
	<b>Item no.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-504">www.wago.com/210-504</a>
	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-505">www.wago.com/210-505</a>
	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-506">www.wago.com/210-506</a>
	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-508">www.wago.com/210-508</a>
	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>

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**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

[www.wago.com/210-118](http://www.wago.com/210-118)



**Item no.: 210-112**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored

[www.wago.com/210-112](http://www.wago.com/210-112)



**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

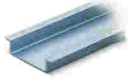
[www.wago.com/210-114](http://www.wago.com/210-114)



**Item no.: 210-115**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored

[www.wago.com/210-115](http://www.wago.com/210-115)



**Item no.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

[www.wago.com/210-196](http://www.wago.com/210-196)

## Downloads

### Documentation

#### Manual

e!RUNTIME EtherCAT® Master	V 1.1.1 2019. 12. 17.	pdf 879.5 kB	Download
WAGO MODBUS Master Configurator for configuration of MODBUS networks in WAGO-I/O-PRO (CODESYS)	V 1.1.0	pdf 1.8 MB	Download
PFC200 G2 2ETH RS Controller PFC200; 2nd Generation; 2 x ETHERNET, RS-232/-485	V 1.5.0 2020. 12. 10.	pdf 7.2 MB	Download
Cyber Security for Controller PFC100 / PFC200	V 1.2.0	pdf 8.3 MB	Download
System Manual WAGO I/O System 750 / 753 Decentralized Automation Technology	V 3.0.2 2021. 4. 27.	pdf 6.6 MB	Download
OPC-UA Mapping Editor Online Hilfe HTML		URL	Download
System Manual Series 750/753 Online HTML		URL	Download
<b>Bid Text</b>			
750-8212/025-000	2019. 2. 19.	xml 9.9 kB	Download

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## X81 - Datei

750-8212/025-000 docx - Datei	2018. 11. 21.	docx 22.5 kB	Download
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## Tutorial

Establish connection to a controller using SSH In this video we are demonstrating how to establish a SSH connection with a controller using for example PuTTY to be able to work with the LINUX console. Contents: 0:21 Download and install the SSH client; 0:40 Establish the SSH connection; 0:50 Log on to the Controller	1.0 2017. 8. 5.	mp4 29.0 MB	Download
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Set IP address with Ethernet Settings In this video we are demonstrating how you can set a IP address with Ethernet Settings. Content: 00:27 – Chapter #1 Download and install software; 00:56 – Chapter #2 Open Ethernet Settings; 01:10 – Chapter #3 Establish serial Connection; 01:34 – Chapter #4 Set IP address; 02:10 – Chapter #5 Check IP address	3.0 2017. 12. 18.	mp4 88.3 MB	Download
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## System Description

Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
Controller PFC100/200, General Product Information		pdf 591.2 kB	Download

## Additional Information

e!RUNTIME EtherCAT® Master	V 1.1.1 2019. 12. 17.	pdf 879.5 kB	Download
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
WAGO OPC UA Server	V 1.1.0 2021. 1. 28.	pdf 1.2 MB	Download

## Application Notes

## Application Note CoDeSys 2.3

HART Tool Routing via ETHERNET with 750-820x/750-88x and CODESYS 2.3 (a116120) This application note describes how to set up asset management systems, which facilitate simple, efficient configuration of HART field devices.	1.0.0 2019. 3. 22.	pdf 3.9 MB	Download
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With the Cerabar PMC51 (Endress+Hauser) as an example, a connection is established from any HART sensor to a WAGO PROFIBUS Controller and a WAGO ETHERNET Fieldbus Coupler. The configuration is made with the asset management software WAGOframe, PACTware und FieldCare.

Connection of a Thermokon Thanos SR L MODBUS room control unit to the WAGO-I/O-SYSTEM	02.05.2013 2013. 5. 13.	zip 313.2 kB	Download
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The fundamental method of setting up communication between the WAGO I/O System and the Thanos SR L MODBUS room operating panel from Thermokon is described in this application note.

Application note for installing a MySQL-Server on a PFC-Controller	V 1.0.4 2019. 5. 16.	zip 4.5 MB	Download
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This Application Note explains how a MySQL-Server can be set up and used on a PFC 200. The Application shows how measurement values of the 3-Phase Power Measurement Module can be written into a database.

Application Note Data Plotter	2020-09-17 2020. 9. 17.	zip 6.7 MB	Download
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The Data Plotter is a Web application that can be used as a visualization tool for the data logger in CODESYS V2.3 and e!COCKPIT. It allows the user to graphically display data captured by the data logger library (WAGO\_Datalogger\_02.lib for CODESYS V2.3 and WagoAppDatalogger for e!COCKPIT from V1.2.100.6023).

Anbindung der HKW-Elektronik Wetterprognose-Station WS-K xx T ModBus	V 1.1 2017. 7. 7.	zip 781.1 kB	Download
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Dieser Anwendungshinweis beschreibt, wie die Kommunikation zwischen dem WAGO-I/O-System und einer HKW-Elektronik Wetterprognose-Station Kompakt realisiert werden kann.

HLK-Anlagenmakros für TRIC	2015-07-10 2015. 7. 10.	zip 76.8 MB	Download
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In dieser Zip-Datei finden Sie Vorlagen und Makros für die Planungssoftware TRIC. TRIC ist ein Werkzeug für Planer und Errichter von HLK-Anlagen, das den Richtlinien der VOB, VDI und DIN EN ISO entspricht.

Application Note PowerMeasurement_03 Library	19.01.2011 2012. 3. 19.	zip 954.5 kB	Download
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This application note describes how current, voltage, effective power, power factor and energy consumption can be measured using 3-phase power measurement modules (750-493).

Application Note for the 750-495 3-Phase Power Measurement Module	24.01.2014 2014. 1. 24.	zip 1.8 MB	Download
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The application note for the 3-Phase Power Measurement Module 750-495 shows how the measured values of the power measurement module can be read. It is also shown how the power module can be configured using the WAGO-I/O-PRO- V2.3 visualization tool.

Application Note: MpBus_03 Library	2020-08-14 2020. 8. 14.	zip 526.0 kB	Download
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This Application Note explains how a WAGO fieldbus controller sets up communication to the MP-bus actuators via the MP-bus master module (750-643).

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Using the web visualization with Java™ runtime environment (JRE, JVM) 7 update 51 (7u51) (a500690)	V1.2.4 2019. 2. 26.	zip 5.0 MB	Download
Oracle announced an update (7u51) for their Java™ runtime environment for the 14th of January 2014 which might have an impact on the use of the WAGO web visualization with Controller, PERSPECTO CP devices and WAGO-IO-IPCs. For more details please have a look into our application note.			
Application Note for the 750-494 3-Phase Power Measurement Module	24.01.2014 2014. 11. 11.	zip 1.7 MB	Download
The application note for the 3-Phase Power Measurement Module 750-494 shows how the measured values of the power measurement module can be read. It is also shown how the power module can be configured using the WAGO-I/O-PRO- V2.3 visualization tool.			
Application Note Library WagoDatalogger_02	2020-05-20 2020. 5. 20.	zip 1.3 MB	Download
This application note describes the use of the WagoDatalogger_02.lib library. Up to 80 analog or digital signals can be recorded.			
Application note: DALI 753-647 Configuration Interface	V1.0.2 2019. 4. 29.	zip 3.1 MB	Download
This application note describes the WAGO DALI Configurator, the integration of the DALI visualization for configuring various sensor types and the implementation in a program.			
Application Note Weather Station Elsner P03 Modbus	01.12.2011 2011. 10. 28.	zip 275.6 kB	Download
This application note describes how communication can be set up between the WAGO I/O System and the ELSNER P03/3 weather station with a Modbus interface.			
HVAC System Macros	10.03.2017 2019. 3. 15.	zip 13.6 MB	Download
WAGO provides system macros for HVAC applications that are based on Building_HVAC_03.lib.			
Connection of DMX devices to the WAGO-I/O-SYSTEM via the ArtNet-DMX STAGE-PROFI 1.1	11.01.2013 2013. 1. 11.	zip 1.5 MB	Download
This application note describes connecting the ArtNet-DMX STAGE-PROFI 1.1 to the WAGO-I/O-SYSTEM. The ArtNet-DMX STAGE-PROFI 1.1 can be operated as a DMX master and a DMX slave.			
Anwendungshinweis für die Steuerung eines Iigus robotlink	12.11.2015 2015. 11. 12.	zip 1.3 MB	Download
Der Anwendungshinweis beschreibt anhand einer Demoapplikation die Steuerung eines Iigus robotlink® Roboterarms mit sechs Achsen. Als Steuerung wird ein Wago PFC200 (Art.-Nr. 750-8202) verwendet.			
Connection of Thermokon Multi-function room control units WRF 08	10.04.2019 2019. 4. 10.	zip 876.4 kB	Download
The fundamental way of carrying out the communication between the WAGO I/O System and the multi-function room operating panel (WRF08 RS485 Modbus) from Thermokon is described in this application note.			

## Application Note: DMX\_02

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This application note describes how a DMX master for DMX device control can be performed via 750-652 serial interface.	26.04.2017 2017. 4. 26.	zip 751.0 kB	Download
Application Note Library ModuleAccess_01 These instructions describe the use of the ModuleAccess_01.lib library using 4 examples.	05.01.2016 2016. 1. 29.	zip 1.0 MB	Download
Application Note Connecting with an iPod Touch This Application Note explains the basic procedures for access to the WAGO Ethernet Controller 750-8xx or the WAGO Ethernet Coupler 750-3xx using an iPod Touch.	30.03.2011 2011. 10. 28.	zip 439.1 kB	Download
Connection of Thermokon Multi-function room control units WRF 06 The fundamental method of setting up communication between the WAGO I/O System and the multi-function room operating panel (WRF06 RS485 Modbus) from Thermokon is described in this application note.	10.04.2019 2016. 4. 8.	zip 845.9 kB	Download
Application Note Scheduler_03.lib This application note describes different applications of the Scheduler_03.lib library.	20.05.2011 2011. 5. 20.	zip 1.8 MB	Download
GRUNDFOS GENIbus interface, application note This application note describes how communication between the WAGO-I/O-SYSTEM and the Grundfos MAGNA series circulation pumps can be performed via GENIbus interface.	20.03.2017 2017. 3. 20.	zip 286.6 kB	Download
Application note Cloud Connectivity This application note explains how the WAGO controllers PFC100 and PFC200 can communicate with cloud services like Microsoft Azure (WAGO Cloud), Amazon AWS and IBM Bluemix. Data could be send to the cloud and commands could receive from the cloud. The libraries WagoLibCloud for WAGO-I/O-PRO V2.3 and WagoAppCloud for e!COCKPIT are used.	2019-09-17 2019. 9. 17.	zip 4.1 MB	Download
Application Note: EnOcean_06 Library This application note describes how communication between the WAGO-I/O-SYSTEM and different EnOcean wireless sensors can be implemented using the EnOcean_06.lib library.	30.11.2016 2016. 11. 30.	zip 842.0 kB	Download
<b>Application Note e!COCKPIT</b>			
Application Note Data Plotter The Data Plotter is a Web application that can be used as a visualization tool for the data logger in CODESYS V2.3 and e!COCKPIT. It allows the user to graphically display data captured by the data logger library (WAGO_Datalogger_02.lib for CODESYS V2.3 and WagoAppDatalogger for e!COCKPIT from V1.2.100.6023).	2020-09-17 2020. 9. 17.	zip 6.7 MB	Download
e!COCKPIT application note WagoAppCloud Subject to changes. Please also observe the further product documentation!	2020-11-27	zip	Download



<p>This application note explains how the WAGO controllers PFC100 and PFC200 can communicate with cloud services like Microsoft Azure (WAGO Cloud), Amazon AWS and IBM Bluemix. Data could be send to the cloud and commands could receive from the cloud. The libraries WagoLibCloud for WAGO-I/O-PRO V2.3 and WagoAppCloud for e!COCKPIT are used.</p>	2020. 11. 27.	2.8 MB	
<p>eCOCKPIT application note installation MySQL-Server</p> <p>This Application Note explains how a MySQL-Server can be set up and used on a PFC 200. The Application shows how measurement values of the 3-Phase Power Measurement Module can be written into a database.</p>	2019-09-09 2019. 9. 9.	pdf 1.9 MB	Download
<p>HART Tool Routing via ETHERNET with 750-820x and e!RUNTIME (a116130)</p> <p>This application note describes how to set up asset management systems, which facilitate simple, efficient configuration of HART field devices. With the Cerabar PMC51 (Endress+Hauser) as an example, a connection is established from any HART sensor to a WAGO PROFIBUS Controller and a WAGO ETHERNET fieldbus coupler. The configuration is made with the asset management software WAGOframe, PACTware und FieldCare.</p>	1.0.0 2019. 3. 22.	pdf 2.9 MB	Download
<p>SNMP Communication (a500850)</p> <p>This application note explains how the WAGO controllers PFC100 andPFC200 can communicate via SNMP: Sending traps / inform notifications, creating an MIB and using the controller as an SNMP agent. To do so, the SNMP-specific libraries for WAGO-I/O-PRO V2.3 and e!COCKPIT are used.</p>	V1.1.0 2020. 2. 20.	zip 3.8 MB	Download

## Libraries

### Library

<p>WAGO_Datalogger_02.lib</p> <p>The FbDatalogger function block logs entries from up to 80 channels at an interval of min. one second in a CSV file.</p>	2.7 2020. 5. 20.	zip 678.8 kB	Download
<p>WagoLibDiagnosticIDs</p> <p>This library is used to take part in an internal diagnostics protocol via an IEC-61131 application. You can define your own IDs and provide your own texts for this. You can also transmit your own diagnostics IDs. Diagnostics generated in this manner are saved in the system log and displayed in text form, for example, in the WBM.</p>	1.0.0	pdf 298.2 kB	Download
<p>Library WagoLibCloud_02.lib</p> <p>Die Bibliothek dient zur Kommunikation des WAGO Controller PFC100 und PFC200 mit Cloud Diensten wie Microsoft Azure (WAGO Cloud), Amazon AWS and IBM Bluemix. Daten können zur Cloud gesendet und Kommandos von der Cloud empfangen werden.</p>	2.2.4 2020. 1. 21.	zip 57.6 kB	Download

### WagoLibNetSnmpManager

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The "WagoLibNetSnmpManager.lib" library is used to implement SNMP manager functions. This makes it possible to access other SNMP agents as well as call and modify OIDs via an IEC program.	1.1.0	pdf 1.1 MB	Download
WagoConfigToolLIB The library WagoConfigToolLIB.lib library provides function blocks for accessing the device configuration (e.g., network settings, data and time, ongoing services).	1.0.0 2013. 10. 8.	pdf 349.1 kB	Download
WagoLibCpuUsage This library enables you to determine the CPU load (usage).	1.0.0	pdf 265.7 kB	Download
WagoLibLed This library contains function blocks that can be used for control and querying of the user LEDs and for querying of the status LEDs. Depending on the device design, not all of the user or status LEDs may be provided.	1.0.0	pdf 516.5 kB	Download
ModuleAccess_01.lib The ModuleAccess_01 library provides both module configuration and access to its process data within a CoDeSys project without the use of WAGO I/O Check.	1.8.7 2020. 1. 27.	zip 2.2 MB	Download

## Engineering-Software

### e!COCKPIT

e!COCKPIT Register at no cost and test our engineering software for 30 days.	V 1.9 2021. 6. 14.	zip 3.0 GB	Download
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### Configuration and Commissioning Software

WAGO-IO-PRO Demo-Version (759-912) / Serie 750, 758 und 762	2.3.9.61 2015. 7. 3.	zip 372.0 MB	Download
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## Runtime Software

### Linux® Toolchain

Linux® Software Development Kit (SDK) With the PFC SDK, WAGO offers Linux® enthusiasts the opportunity to compile the PFC firmware themselves, and to expand it according to their own wishes.		URL	Download
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The WAGO PFC SDK includes a Pengutronix build environment, optimized for the PFC, and the OSELAS Toolchain, which open up the following possibilities, among others:

- Expanding the firmware functions using open source packages like: Python, SQLite3, PHP, etc.

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- Compiling their own C/C++ applications with direct or indirect bus access to the local bus, CANopen, or PROFIBUS.
- Compiling external libraries using CODESYS V2 to expand the PLC applications.
- There are detailed instructions for many of these tasks and ideas (see WAGO GitHub HowTo's).

## Firmware

Firmware PFC 200/100	V 19.0 2021. 8. 19.	zip 167.2 MB	Download
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## IoT/ Cloud

### "Remote Access" Beta Software

"Remote Access" Beta Software Register for the beta version of "Remote Access" for the WAGO Cloud.	V 0.11.0.0 2020. 12. 1.	ZIP 2.1 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 750-8212/025-000	URL	Download
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### CAE data

ZUKEN Portal 750-8212/025-000	URL	Download
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EPLAN Data Portal 750-8212/025-000	URL	Download
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 750-8212/025-000 Controller PFC200; 2nd Generation; 2 x ETHERNET, RS-232/-485; Ext. Temperature	URL	Download
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## Installation Notes

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Data sheet | Item number: 750-8212/025-000

[www.wago.com/750-8212/025-000](http://www.wago.com/750-8212/025-000)



## Product family

**Controller 750**

[Show all products from the family](#)

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