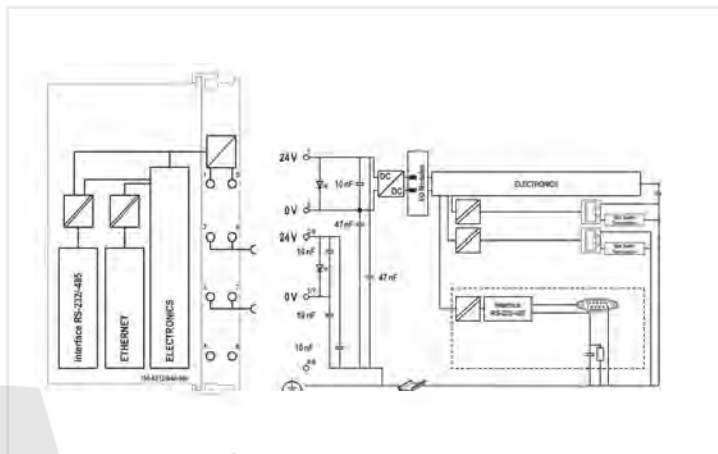
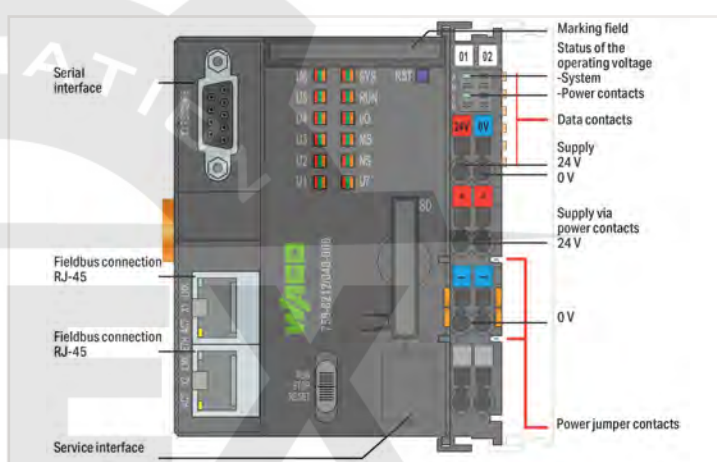




Color: dark gray

[illegible]

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's 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

The device is ideal for operation in extreme environments thanks to:

- An extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

Technical data

Communication	Modbus (TCP, UDP) ETHERNET EtherNet/IP™ Adapter (slave), library for e!RUNTIME Modbus® RTU RS-232 serial interface RS-485 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)
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 KB
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 KB 128 KB
Type of memory card	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.)	64
Input and output process image (internal) max.	1000 words/1000 words
Input and output process image (Modbus®) max.	CODESYS V2: 1000 words/1000 words; e!RUNTIME : 32000 words/32000 words
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
Derating	Derating (supply voltage): Ambient temperatures under laboratory conditions: (–25 ... +30 %); for –40 ... +55 °C: 24 V (–25 ... +20 %); for +55 ... +70 °C: 24 V (–25 ... +10 %); Lower limit in all temperature ranges: –27.5 % (including 15 % residual ripple)
Supply voltage (system)	24 VDC; via pluggable connector (CAGE CLAMP® connection); Derating must be observed!
Input current (typ.) at nominal load (24 V)	550 mA
Total current (system supply)	1700 mA
Supply voltage (field)	24 VDC; Power supply via pluggable connector (CAGE CLAMP® connection); Transmission via power jumper contacts; Derating must be observed!
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	2
Rated surge voltage	1 kV

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 interface: 1 x D-sub 9 socket
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: field supply	4 x CAGE CLAMP®
Connection type 1	System/field supply
Solid conductor	0.25 ... 2.5 mm² / 24 ... 14 AWG
Fine-stranded conductor	0.25 ... 2.5 mm² / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection technology: device configuration	1 x Male connector; 4-pole

Physical data

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

Mechanical Data

Weight	213.6 g
Color	dark gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	-40 ... +70 °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 %
Relative humidity (with condensation)	Short-term condensation per Class 3K7/IEC EN 60721-3-3 and E-DIN 40046-721-3 (except for wind-driven precipitation, water and ice formation)
Mounting position	horizontal (standing/lying); vertical
Mounting type	DIN-35 rail
Vibration resistance	per IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155; EN 61373
Shock resistance	per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 50155, EN 61373
EMC immunity to interference	per EN 61000-6-1, -2; EN 61131-2; marine applications; EN 50121-3-2; EN 50121-4, -5; EN 60255-26; EN 60870-2-1; EN 61850-3; IEC 61000-6-5; IEEE 1613; VDEW: 1994
EMC emission of interference	per EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, EN 50121-4, -5
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Fire load	0.383 MJ
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm



Commercial data	
PU (SPU)	1 pcs
Country of origin	DE
GTIN	4066966053395
Customs tariff number	8537109190

Approvals and certificates

General approvals			Approvals for marine applications		
					
Approval	Standard	Certificate name	Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199	DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00000Y7

Approvals for hazardous areas



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV 17 ATEX 193969X (II 3 G Ex ec IIC T4 Gc)
CCC CNEX	CNCA-C23-01	2020312310000214 (Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 16.0046X (Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Downloads
Environmental Product Compliance
Compliance Search
Environmental Product Compliance 750-8212/040-000

Documentation			
Manual		System Description	
System Manual Series 750/753		Controller PFC200 XTR, General Product Information	pdf 489.22 KB
Product Manual Controller PFC200; 2nd Generation; 2 x ETHER-NET, RS-232/-485	V 1.0.0 23.02.2022	pdf 7778.69 KB	

Bid Text

750-8212/040-000	docx 32.57 KB	↓
750-8212/040-000	xml 11.58 KB	↓

Application Notes

Application Note e!COCKPIT

e!COCKPIT Anwendungshinweis HVAC BACnet Macros (a2021010)	1.2.0 28.09.2022	zip 61421.98 KB	↓
e!COCKPIT Application Note OPC UA Client (a2022001)	1.0.0 05.04.2022	zip 1336.65 KB	↓
e!COCKPIT Application Note WAGO Visualization Datalogger (a2022005)	20221021 21.10.2022	zip 5669.59 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 750-8212/040-000	↓
----------------------------------	-------------------

Engineering-Software

Configuration and Commissioning Software

WAGO-IO-PRO Demo-Version (759-912) / Serie 750, 758 und 762	V 2.3.9.68 17.02.2022	zip 122524.17 KB	↓
WAGUpload	1.15.0.0 02.02.2022	zip 11092.25 KB	↓

Runtime Software

Firmware

Image Update (SD Karte) PFC100/200	V 22 25.07.2022	zip 205165.20 KB	↓
WUP Update (WAGUploadTool) PFC100/200	V 22 26.07.2022	zip 203035.17 KB	↓

1 Compatible products

1.1 Optional accessories

1.1.1 Cables and connectors

1.1.1.1 Connector plug

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

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

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

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

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

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

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

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

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

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

**Item no.: 750-978/000-011**

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

**Item no.: 750-977/000-021**

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

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

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

**Item no.: 750-977/000-012**

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

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

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

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

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

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

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

**Item no.: 750-975**

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

1.1.2 Communication

1.1.2.1 Bluetooth

**Item no.: 750-921**

Bluetooth® Adapter

1.1.2.2 Communication cable

**Item no.: 750-923**

Configuration cable; USB connector; Length: 2.5 m

**Item no.: 750-923/000-001**

Configuration cable; USB connector; Length: 5 m

1.1.3 DIN-rail

1.1.3.1 Mounting accessories

**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

**Item no.: 210-198**

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

**Item no.: 210-508**

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

**Item no.: 210-197**

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

**Item no.: 210-506**

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

**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

**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

**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

**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

**Item no.: 210-504**

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

**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

**Item no.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.1.4 Marking

1.1.4.1 Group marker carrier



Item no.: 750-107
Group marker carrier

1.1.4.2 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

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

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

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

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

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

Item no.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

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



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

Item no.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

Item no.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item no.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.4.3 Marker carrier



Item no.: 750-103
Group marker carrier

1.1.5 Memory card

1.1.5.1 Memory card



Item no.: 758-879/000-2108
Memory Card SD; pSLC-NAND; 8 GB; Temperature range: -40 to 90°C

Item no.: 758-879/000-001
Memory Card SD; SLC-NAND; 2 GByte; Temperature from -40 to 90 °C

1.1.6 Shield termination

1.1.6.1 Shield clamping saddles


Item no.: 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm

Item no.: 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

Item no.: 790-116

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

Item no.: 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm


Item no.: 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

Item no.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

Item no.: 790-140

Shield clamping saddle; diameter of compatible conductor

1.1.7 Software

1.1.7.1 Basic version


Item no.: 2759-101/1110-4000

e!COCKPIT; Buy-out License

Item no.: 2759-101/1110-2005

e!COCKPIT; Multi-User License; 05 pcs

Item no.: 2759-101/1110-2010

e!COCKPIT; Multi-User License; 10 pcs

Item no.: 2759-101/1110-2015

e!COCKPIT; Multi-User License; 15 pcs


Item no.: 2759-101/1110-2020

e!COCKPIT; Multi-User License; 20 pcs

Item no.: 2759-101/1110-3000

e!COCKPIT; Site License

Item no.: 2759-101/1110-2002

e!COCKPIT; Workstation License

Item no.: 759-333

WAGO-I/O-PRO


Item no.: 759-333/000-923

WAGO-I/O-PRO; USB-Set

1.1.7.2 Software applications


Item no.: 2759-206/261-1000

Application Energy Data Management; Single License; Online activation

Item no.: 2759-2110/261-1000

Application flexROOM; Single License; Online activation

Item no.: 2759-2015/260-1000

Application Grid Gateway; Single License

Item no.: 2759-2015/261-1000

Application Grid Gateway; Single License; Online activation


Item no.: 2759-204/261-1000

Application Lighting Management; Single License; Online activation

Item no.: 2759-241/261-1000

Application Weather Station; Single License; Online activation

Item no.: 2759-120/1121-1000

e!COCKPIT MTP; Single License; Online activation

Item no.: 2759-245/211-1000

Library Controller Redundancy Master; Single License; Online activation


Item no.: 2759-208/211-1000

Library MTP; Single License; Online activation

Item no.: 2759-203/211-1000

Library Power Plant Control; VDE-AR-N 4110 / 4120; Single License; Online activation

Item no.: 2759-207/271-1000

Visualization Energy Data Management; Single License; Online activation

Item no.: 2759-2103/271-1000

Visualization Lighting Management; L; Single License; Online activation


Item no.: 2759-2102/271-1000

Visualization Lighting Management; M; Single License; Online activation

Item no.: 2759-2101/271-1000

Visualization Lighting Management; S; Single License; Online activation

1.1.8 System enclosure

1.1.8.1 System enclosure

**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032);
WxHxD (160x100x160 mm); 9 x M12, 4 x
M20

**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032);
WxHxD (240x100x160 mm); 4 x M20, 4 x
M16, 14 x M12 cable grip

**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032);
WxHxD (320x100x160 mm); 4 x M20, 8 x
M16, 17 x M12 cable grip

**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032);
WxHxD (480x100x160 mm); 4 x M20, 10 x
M16, 35 x M12 cable grip

**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

**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

**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

**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); Wx-
HxD (164x100x164 mm); 9 x M12, 4 x M20

**Item no.: 850-835**

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

**Item no.: 850-836**

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

**Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (200x120x200 mm); without flan-
ge plate

**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (300x120x200 mm); without flan-
ge plate

**Item no.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (400x120x200 mm); without flan-
ge plate

**Item no.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (600x120x200 mm); without flan-
ge plate