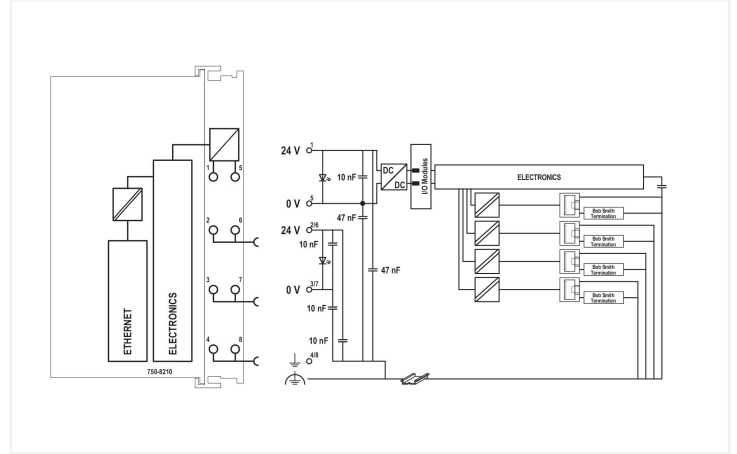


Data Sheet | Item Number: 750-8210 Controller PFC200; 2nd Generation; 4 x ETHERNET

<https://www.wago.com/750-8210>

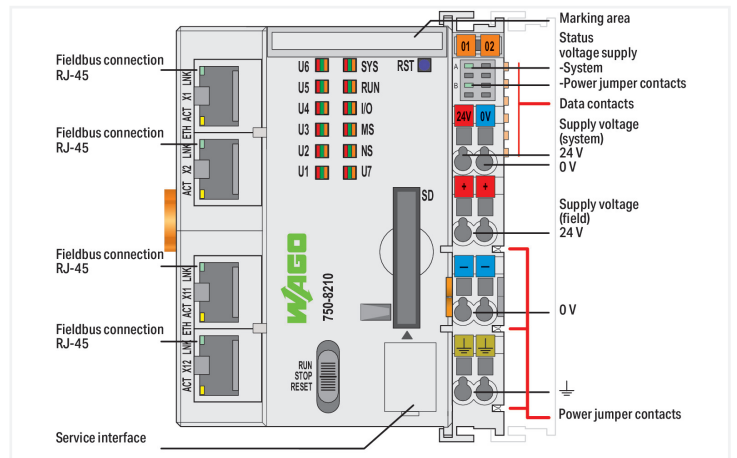


Color: light gray



PFC200 Communication options overview

Device	Product extension	Order No.	Cat. Temperature
CPU	Standard CPU	750-8210	Standard
	Standard CPU with 2x Ethernet	750-8211	Standard
Digital I/O	16 DI, 16 DO	750-8212	Standard
	16 DI, 16 DO, 16 AI, 16 AO	750-8213	Standard
	16 DI, 16 DO, 16 AI, 16 AO, 16 RS-485	750-8214	Standard
	16 DI, 16 DO, 16 AI, 16 AO, 16 RS-485, 16 CAN	750-8215	Standard
Analog I/O	8 AI, 8 AO	750-8216	Standard
	8 AI, 8 AO, 16 DI, 16 DO	750-8217	Standard
	8 AI, 8 AO, 16 DI, 16 DO, 16 AI, 16 AO	750-8218	Standard
	8 AI, 8 AO, 16 DI, 16 DO, 16 AI, 16 AO, 16 RS-485	750-8219	Standard
Specialty	16 DI, 16 DO, 16 AI, 16 AO, 16 RS-485, 16 CAN, 16 PROFIBUS	750-8220	Standard
	16 DI, 16 DO, 16 AI, 16 AO, 16 RS-485, 16 CAN, 16 PROFIBUS, 16 EtherCAT	750-8221	Standard



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. Four 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).

- Advantages:**
- Programming per IEC 61131-3
 - Programmable via WAGO-I/O-PRO V2.3 or *e!COCKPIT*
 - Direct connection of WAGO's I/O modules
 - 4 x ETHERNET (configurable)
 - Linux® operating system with RT-Preempt patch
 - Configuration via CODESYS, *e!COCKPIT* or Web-Based Management interface
 - Maintenance-free

Technical data	
Communication	Modbus (TCP, UDP) ETHERNET EtherNet/IP™ Adapter (slave), library for <i>e!RUNTIME</i> MQTT EtherCAT® master (requires an additional license) BACnet/IP, requires an additional license Telecontrol protocols (requires an additional license on the device)

Technical data	
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Telecontrol protocols	IEC 60870-5-101/-103/-104 (additional license as slave or master) IEC-61850 (additional license as Client 300) DNP3 (additional license as Slave or Master 300)
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	CODESYS V3.5, from firmware release 23 e! COCKPIT (based on CODESYS V3), up to firmware release 22 WAGO-I/O-PRO V2.3 (based on CODESYS V2.3), up to firmware release 22
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; CODESYS V3: 32 MB
Data memory	CODESYS V2: 64 MB; CODESYS V3: 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.)	250
Number of modules without a bus extension (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; CODESYS V3: 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, C) 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)	1700 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts
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): 4 x RJ-45
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 ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 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	215.4 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +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 %
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	2.518 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

ETIM 8.0	EC000236
ETIM 7.0	EC000236
PU (SPU)	1 pcs
Country of origin	DE
GTIN	4055143981378
Customs tariff number	85371091990

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Sec11

Approvals for marine applications



Approval	Standard	Certificate Name
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	66711/A0
DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-8210 ↓

Documentation

Manual			
Product Manual PFC200; G2; 4ETH	1.7.0 25.11.2022	pdf 3940.17 KB	↓
System Manual WAGO I/O System 750/753	V 3.1.0 05.12.2022	pdf 8495.90 KB	↓
System Manual Series 750/753 ↓			
Product Manual OPC UA Mapping Editor	V 1.1.0 11.03.2022	pdf 3314.23 KB	↓
OPC_UA Mapping Editor ↓			
Product Manual Documentation WAGO Solution Builder	1.2.0 26.10.2022	pdf 9066.54 KB	↓
Migration Guide	V 1.0.1 02.12.2022	pdf 3973.06 KB	↓
Migration Guide from e! COCKPIT projects to CODESYS V3.5 ↓			

System Description		
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	↓
Controller PFC100/200, General Product Information	pdf 578.66 KB	↓

Additional Information			
WAGO OPC UA Server	V 1.1.0 28.01.2021	pdf 1132.87 KB	↓

Bid Text		
750-8210	docx 18.62 KB	↓
750-8210	xml 10.02 KB	↓
ausschreiben.de 750-8210		↓

CAD/CAE-Data

CAD data	
2D/3D Models 750-8210	↓

CAE data	
EPLAN Data Portal 750-8210	↓
ZUKEN Portal 750-8210	↓

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	↓
WAGOupload	1.16.0.0 02.02.2022	zip 11121.72 KB	↓

Runtime Software

Firmware			
Image Update (SD Karte) PFC100/200	V 22 SP1 12.12.2022	zip 205165.20 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

1.1.1.1 Connector plug



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.: 2759-2015/260-1000
Application Grid Gateway; Single License



Item No.: 2759-2015/261-1000
Application Grid Gateway; 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

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); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

1.1.8.1 System enclosure



Item No.: 850-835

IP65 enclosure; Polyester (RAL 7032); WxHxD (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 flange plate



Item No.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate



Item No.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate



Item No.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate