

Data Sheet | Item Number: 750-8214

Controller PFC200; 2nd Generation; 2 x ETHERNET, RS-232/-485, CAN, CANopen

<https://www.wago.com/750-8214>



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 Webservice 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 with CODESYS V3.5 from Firmware Release 23, WAGO-I/O-PRO V2.3 or **e!COCKPIT** up to Firmware Release 22
- Direct connection of WAGO's I/O modules
- 2 x ETHERNET (configurable), RS-232/-485, CAN, CANopen
- Linux operating system with RT-Preempt patch
- Configuration via CODESYS, **e!COCKPIT** or Web-Based Management user interface
- Maintenance-free

Technical data

Communications	CANopen Modbus TCP master/slave Modbus (UDP), WagoAppPlcModbus Library Modbus (RTU), WagoAppPlcModbus Library ETHERNET EtherNet/IP™ Adapter (slave) EtherNet/IP™ Scanner EtherCAT® Master OPC UA Server/Client OPC UA Pub/Sub (can be installed later) MQTT RS-232 serial interface RS-485 interface Telecontrol protocols, requires an additional license
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Telecontrol protocols	IEC 60870 (additional license as slave or master) IEC 61850 (additional license as Client or Server) DNP3 (additional license as Slave or Master)
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, Firmware Release 23 or higher 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	CODESYS V3 e!COCKPIT WAGO-I/O-CHECK Web-Based Management e!RUNTIME library CODESYS Library
Baud rate (communication/fieldbus 1)	10/100 Mbit/s
Transmission 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

Technical data

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's 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
Input and output process image (CAN) max.	2000 words/2000 words
Indicators	LED (SYS, RUN, I/O, CAN, U1 ... U6) red/green/orange: Status system, program, internal data bus, CANopen, status programmable by user (can be used via CODESYS library); LED (A, B) green: Status 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	CANopen: 1 x D-sub 9 plug; 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	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	112 mm / 4.409 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	256.9 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	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	Horizontal left, horizontal right, horizontal up, horizontal down, vertical top and vertical bottom
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	2.911 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

eCl@ss 10.0	27-24-26-07
eCl@ss 9.0	27-24-26-07
ETIM 9.0	EC000236
ETIM 8.0	EC000236
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143759762
Customs tariff number	85371091990

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 693-98-1 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 2-methylimidazole Diboron trioxide Lead Lead monoxide Perfluorobutane sulfonic acid (PFBS) and its salts
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	d9aadd2f-b15f-4e94-8da8-2ed7a3021578
SCIP notification number (Belgium)	859989bc-2637-419c-8e32-a01ccb47ee12
SCIP notification number (Bulgaria)	33204001-767b-4079-a168-8802c4fa0269
SCIP notification number (Czech Republic)	3c9292d6-2615-4261-8465-f143b7638688
SCIP notification number (Denmark)	8317f84e-c65f-4805-8b79-c08a39de4f76
SCIP notification number (Finland)	d4b2388e-b609-4fcb-bfac-145688fbe1f1
SCIP notification number (France)	b8cf4f71-58fc-43c3-a366-bb3feafb3787
SCIP notification number (Germany)	e83469b5-3ba2-4366-b66d-6f902f06abb1
SCIP notification number (Hungary)	9fdebca9-ae2d-4ae6-af11-47ab714b3ca2
SCIP notification number (Italy)	76fca1bc-308c-4ede-b4ba-180817226836
SCIP notification number (Netherlands)	51dc0dd6-cb66-422f-85d6-89363a14eb03
SCIP notification number (Poland)	ca54f228-b993-4f07-a253-40c757faaed2