

Data sheet | Item number: 750-8202/000-012  
 Controller PFC200; FG2; 2 x ETHERNET, RS-232/-485; light gray



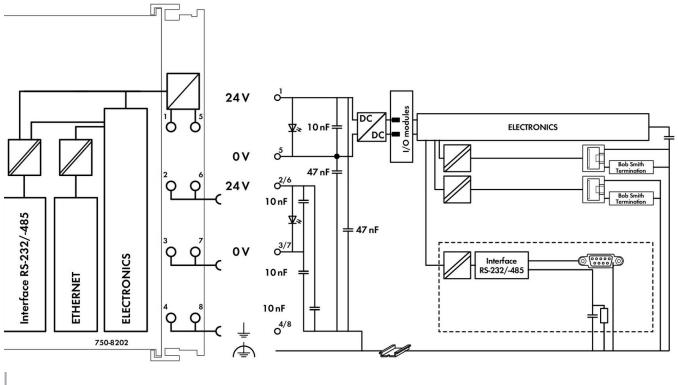
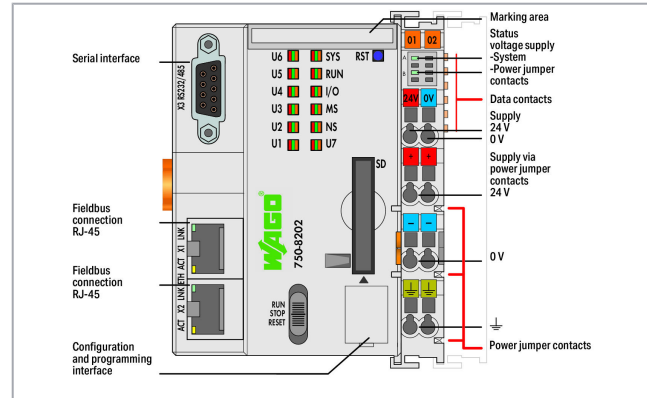
[www.wago.com/750-8202/000-012](http://www.wago.com/750-8202/000-012)



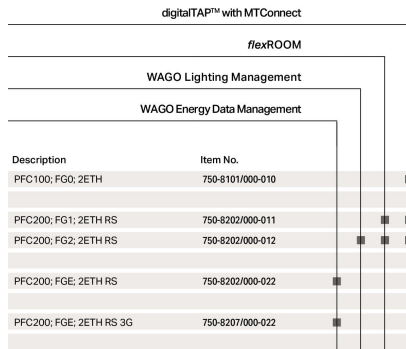
RoHS Compliant ✓

BOMcheck.net

Color: ■



Application – Controller Allocation



Item description

The controllers are designed for the processing of WAGO applications. You can identify these controllers by a special version of the item number.

The application can be downloaded from the respective item on our website. Additional information can be obtained from the application documentation.

The controllers can also be used with their own applications as they offer all possibilities of the respective standard variant beyond the use of the WAGO application(s).

Programming per IEC 61131-3

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

WAGO Kontakttechnik GmbH & Co. KG  
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Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



- 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

Suitable software application:

- Machine Data Collection with MTConnect
- Lighting management

**Note:**

Download and register the software: Formular

**Data**

**Technical data**

Communication	Modbus® RTU Modbus (TCP, UDP) Ethernet Modbus RTU RS-232 serial interface RS-485 Serial Interface EtherNet/IP™ Adapter (slave), library for e!RUNTIME
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; 600 MHz
Programming languages per IEC 61131-3	Instruction List (IL) Ladder Diagram (LD) Function Block Diagram (FBD), Continuous Function Chart (CFC)

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	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
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)	256 MB
Internal memory (flash)	256 MB
Non-volatile hardware memory	128 Kbytes
Program memory	CODESYS V2: 16 MB; e!RUNTIME: 60 MB (Program and data memory (dynamically distributed))
Data memory	CODESYS V2: 64 MB; e!RUNTIME: 60 MB Program and data memory (dynamically distributed)
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 758-879/000-001 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
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) DC 24 V (-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 DC 24 V (-25 ... +30 %); via power jumper contacts
Current carrying capacity (power jumper contacts)	10 A
Number of outgoing power jumper contacts	3

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Isolation	500 V system/field
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### 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

Color	light gray
Housing material	Polycarbonate; polyamide 6.6 Polycarbonate, polyamide 6.6
Conformity marking	CE

### Environmental requirements

Surrounding air temperature (operation)	0 ... 55 °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 %
Mounting position	any
Mounting type	DIN-35 rail
Vibration resistance	per IEC 60068-2-6

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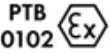



Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

### Commercial data


Packaging type	BOX
GTIN	4055143544610

### Approvals / Certificates

#### Ex-Approvals





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

#### Country specific Approvals


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

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

## Ship Approvals




Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1821926
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	<b>LR</b> Lloyds Register	-	02/20026 (E6)
	<b>PRS</b> Polski Rejestr Statków	-	TE/2236 /880590/19

## UL-Approvals
















Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

## Compatible products

## sensors

	<b>Item no.: 2851-8201</b> WAGO DALI Multi-Sensor Kit	<a href="http://www.wago.com/2851-8201">www.wago.com/2851-8201</a>
	<b>Item no.: 2851-8202</b> DALI sensor coupler	<a href="http://www.wago.com/2851-8202">www.wago.com/2851-8202</a>
	<b>Item no.: 2852-7201</b> HIGH BAY / Stand-alone motion sensors with switching contact	<a href="http://www.wago.com/2852-7201">www.wago.com/2852-7201</a>

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

	<b>Item no.: 2852-7202</b> VISION / Stand-alone motion sensors with switching contact	<a href="http://www.wago.com/2852-7202">www.wago.com/2852-7202</a>
	<b>Item no.: 2852-7203</b> DALI LS/PD LI / Control units for light management systems	<a href="http://www.wago.com/2852-7203">www.wago.com/2852-7203</a>
	<b>Item no.: 2852-7204</b> DALI Sensor Coupler E / DALI sensor coupler for external sensors	<a href="http://www.wago.com/2852-7204">www.wago.com/2852-7204</a>
	<b>Item no.: 2852-7205</b> DALI Sensor Coupler HF LS LI / DALI coupler for radar sensor HF LS LI	<a href="http://www.wago.com/2852-7205">www.wago.com/2852-7205</a>
	<b>Item no.: 2852-7206</b> HF LS LI / Control units for light management systems	<a href="http://www.wago.com/2852-7206">www.wago.com/2852-7206</a>
	<b>Item no.: 2852-7207</b> DALI HIGHBAY ADAPTER / Control units for light management systems	<a href="http://www.wago.com/2852-7207">www.wago.com/2852-7207</a>
	<b>Item no.: 2852-7208</b> 4p4c connection cable, 50 cm	<a href="http://www.wago.com/2852-7208">www.wago.com/2852-7208</a>
	<b>Item no.: 2852-7301</b> DALI XC Control Module with 4 freely programmable inputs	<a href="http://www.wago.com/2852-7301">www.wago.com/2852-7301</a>
<b>General accessories</b>		
	<b>Item no.: 2007-8874</b> Compact terminal block; for current and voltage transformers; 6,00 mm <sup>2</sup> ; multicoloured	<a href="http://www.wago.com/2007-8874">www.wago.com/2007-8874</a>
	<b>Item no.: 2007-8877</b> Compact terminal block; for current transformer circuit; 6,00 mm <sup>2</sup> ; multicoloured	<a href="http://www.wago.com/2007-8877">www.wago.com/2007-8877</a>
	<b>Item no.: 2852-7101</b> STC65 RS-485 EVC EnOcean Receiver/Transmitter with RS-485 EVC interface	<a href="http://www.wago.com/2852-7101">www.wago.com/2852-7101</a>
	<b>Item no.: 2852-7102</b> SRE Repeater with ext. ant. / EasySens Radio Repeater	<a href="http://www.wago.com/2852-7102">www.wago.com/2852-7102</a>
	<b>Item no.: 2852-7901</b> GPS DCF Converter UTC±	<a href="http://www.wago.com/2852-7901">www.wago.com/2852-7901</a>
	<b>Item no.: 750-921</b> Bluetooth® Adapter; light gray	<a href="http://www.wago.com/750-921">www.wago.com/750-921</a>
	<b>Item no.: 750-923</b> Configuration cable; USB connector; Length: 2.5 m; black	<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)



**Item no.: 758-940/001-000**  
Radio transmitter; EnOcean easyfit PTM 250; 2-channel lighting control

[www.wago.com/758-940/001-000](http://www.wago.com/758-940/001-000)



**Item no.: 758-940/003-000**  
Radio transmitter; EnOcean easyfit PTM 250; 4-channel lighting control

[www.wago.com/758-940/003-000](http://www.wago.com/758-940/003-000)



**Item no.: 788-304**  
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm; 2,50 mm<sup>2</sup>; gray [www.wago.com/788-304](http://www.wago.com/788-304)



**Item no.: 788-357**  
Relay module; Nominal input voltage: 24 VDC; 1 make contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm [www.wago.com/788-357](http://www.wago.com/788-357)

#### power supply



**Item no.: 787-1007**  
Switched-mode power supply; for DALI module (753-647); 1-phase; 18 VDC output voltage; 1.1 A output current; 2,50 mm<sup>2</sup> [www.wago.com/787-1007](http://www.wago.com/787-1007)



**Item no.: 787-1112**  
Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC OK signal [www.wago.com/787-1112](http://www.wago.com/787-1112)

#### 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)

#### application



**Item no.: 750-1405**  
16-channel digital input; 24 VDC; 3 ms; light gray

[www.wago.com/750-1405](http://www.wago.com/750-1405)



**Item no.: 750-1504**  
16-channel digital output; 24 VDC; 0.5 A; light gray

[www.wago.com/750-1504](http://www.wago.com/750-1504)



**Item no.: 750-495**  
3-Phase Power Measurement; 690 VAC, 1 A; light gray

[www.wago.com/750-495](http://www.wago.com/750-495)



**Item no.: 750-495/000-001**  
3-Phase Power Measurement; 690 VAC, 5 A; light gray

[www.wago.com/750-495/000-001](http://www.wago.com/750-495/000-001)



**Item no.: 750-495/000-002**  
3-Phase Power Measurement; 690 VAC Rogowski coils; light gray

[www.wago.com/750-495/000-002](http://www.wago.com/750-495/000-002)







**Item no.: 750-600**  
End Module; light gray

[www.wago.com/750-600](http://www.wago.com/750-600)

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



	<b>Item no.: 750-640</b> Real-time clock Module; light gray	<a href="http://www.wago.com/750-640">www.wago.com/750-640</a>
	<b>Item no.: 750-652</b> RS-232/485 Serial Interface; light gray	<a href="http://www.wago.com/750-652">www.wago.com/750-652</a>
	<b>Item no.: 753-646</b> KNX/EIB/TP1 Interface; light gray	<a href="http://www.wago.com/753-646">www.wago.com/753-646</a>
	<b>Item no.: 753-647</b> DALI Multi-Master; light gray	<a href="http://www.wago.com/753-647">www.wago.com/753-647</a>

## Downloads

### Documentation

#### Manual

Cyber Security for Controller PFC100 / PFC200	V 1.2.0	pdf 8.3 MB	Download
Visualization Lighting Management The WAGO Lighting Management visualization is an independent, Web-based user interface for operating and monitoring the lighting management software on a lighting management controller. With its responsive design, the visualization adapts to the resolution of all devices, making it suitable for display on a desktop PC, or for tablets, smartphones and WAGO Touch Panels.	V 1.0.0 15. 7. 2020	pdf 2.4 MB	Download
Documentation Lighting Management WAGO Lighting Management is the refined solution for lighting control in large spaces such as production facilities and warehouses. Using a combination of predefined hardware and user-friendly software, WAGO offers a lighting management system that facilitates design and commissioning of new lighting systems while providing numerous additional advantages for their operation.	V 1.2.1 3. 2. 2021	pdf 8.2 MB	Download
PFC200 FGx 2ETH RS Controller PFC200; FGx; 2 x ETHERNET, RS-232/-485	V 1.2.0 15. 11. 2019	pdf 5.0 MB	Download
Systemhandbuch WAGO I/O System 750 / 753 Dezentrale Automatisierungstechnik	V 3.0.0 4. 3. 2021	pdf 6.6 MB	Download

#### Bid Text

Tender text Lighting Management Tender text for the Lighting Management software – basic functions, detailed functions, configuration		doc 80.4 kB	Download
750-8202/000-012	10. 1. 2019	docx	Download

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docx - Datei			23.6 kB	
750-8202/000-012	19. 2. 2019		xml	Download
X81 - Datei			7.9 kB	
<b>Instruction Leaflet</b>				
Beipackzettel Applikationscontroller			pdf	Download
Beipackzettel mit dem Hinweis auf den Download der Software			425.0 kB	
<b>Tutorial</b>				
Installation Tutorial Application Controller			mp4	Download
Video on the installation of the Lighting Management software on the application controller			30.6 MB	
Establish connection to a controller using SSH	1.0		mp4	Download
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	5. 8. 2017		29.0 MB	
Set IP address with Ethernet Settings	3.0		mp4	Download
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	18. 12. 2017		88.3 MB	
<b>Compatibility Information</b>				
Compatibility List DALI Sensors	V 1.2.0		pdf	Download
This application note shows all DALI Sensors which are compatible with CODESYS V2.3 applications, e!Cockpit applications, the WAGO Lighting Management software, the WAGO flexROOM®software and the WAGO DALI Configurator.	24. 9. 2020		511.7 kB	
<b>Additional Information</b>				
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0		pdf	Download
			265.8 kB	
WAGO OPC UA Server	V 1.1.0		pdf	Download
	28. 1. 2021		1.2 MB	
<b>System Description</b>				
Overview on WAGO-I/O-SYSTEM 750 approvals			pdf	Download
			780.2 kB	

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Controller PFC100/200, General Product Information

pdf  
591.2 kB

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## Application Notes

### Application Note CoDeSys 2.3

Application Note Data Plotter	2020-09-17	zip	Download
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).	17. 9. 2020	6.7 MB	

Application note for installing a MySQL-Server on a PFC-Controller	V 1.0.4	zip	Download
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.	16. 5. 2019	4.5 MB	

### Application Note e!COCKPIT

Application Note Data Plotter	2020-09-17	zip	Download
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).	17. 9. 2020	6.7 MB	

eCOCKPIT application note installation MySQL-Server	2019-09-09	pdf	Download
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.	9. 9. 2019	1.9 MB	

## Libraries

### Library

WagoLibFTPS_01	V 1.15	zip	Download
This library provides a function block for FTP and FTPS communication. FTPS supports explicit and implicit TLS encryption: - Explicit FTP over TLS: Client explicitly asks for TLS encryptions by issuing the command "AUTH TLS" (Described in RFC4217) - Implicit FTP over TLS: Client tries to establish an TLS connection immediately.	14. 1. 2019	416.5 kB	

Library WagoLibCloud_02.lib	V2.2.4	zip	Download
	21. 1. 2020	57.6 kB	

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

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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.

## Runtime Software

### Firmware

Firmware: 750-8202/000-012 Controller PFC200; FG2; 2 x ETHERNET, RS-232/-485; light gray	18 22. 12. 2020	zip 117.8 MB	Download
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## Software Solutions (Applications)

### Lighting management

Lighting Management Application WAGO Lighting Management is a highly sophisticated solution for lighting control in large spaces such as production facilities and warehouses. Using a combination of predefined hardware and user-friendly software, WAGO offers a lighting management system that facilitates the design and commissioning of new lighting systems while providing numerous additional advantages for their operation.	2021-02-01 3. 2. 2021	ZIP 224.0 MB	Download
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## CAD/CAE-Data

### CAE data

EPLAN Data Portal 750-8202/000-012		URL	Download
WSCAD Universe 750-8202/000-012		URL	Download
EPLAN Data Portal 750-8202/000-012		URL	Download
WSCAD Universe 750-8202/000-012		URL	Download
ZUKEN Portal 750-8202/000-012		URL	Download

### CAD data

2D/3D Models 750-8202/000-012		URL	Download
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## Device Files

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## Device Driver

KNX Interface Lighting Management KNX interface description for ETS	29. 1. 2018	zip 2.1 kB	Download
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 750-8202/000-012 Controller PFC200; FG2; 2 x ETHERNET, RS-232/-485; light gray	URL	Download
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## Installation Notes

## Product family

**Controller 750**  
[Show all products from the family](#)

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