

Data Sheet | Item Number: 750-8204

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

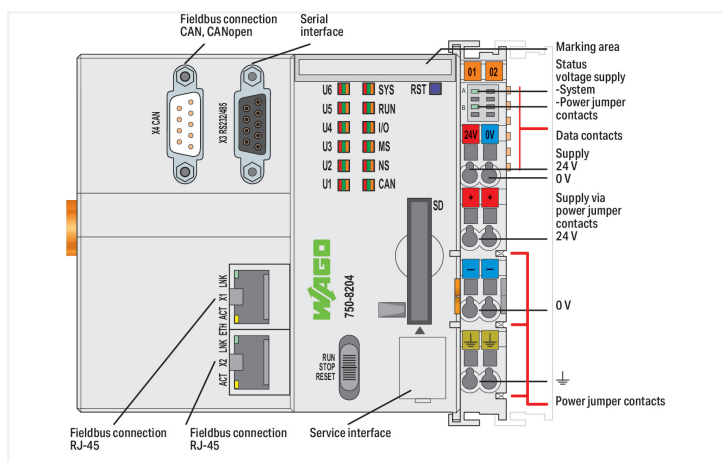
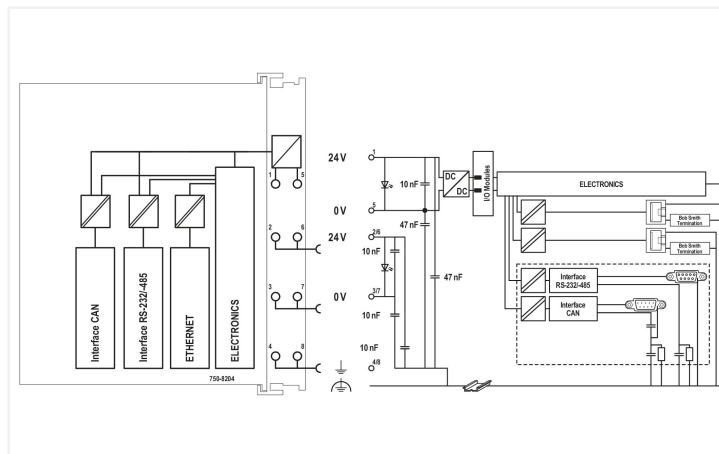
<https://www.wago.com/750-8204>

DISCONTINUED:

31.12.2020



Color: ■ light gray



Note:

For this item, a successor is available: [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 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, CAN, CANopen
- Linux operating system with RT-Preempt patch
- Configuration via CODESYS, **e!COCKPIT** or Web-Based Management interface
- Maintenance-free



Technical data	
Communication	CANopen Modbus (TCP, UDP) ETHERNET Modbus® RTU RS-232 serial interface RS-485 interface
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) 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)	256 MB
Internal memory (flash)	256 MB
Non-volatile hardware memory	128 KB
Program memory	CODESYS V2: 16 MB; CODESYS V3: 60 MB (Program and data memory (dynamically distributed))
Data memory	CODESYS V2: 64 MB; CODESYS V3: 60 MB Program and data memory (dynamically distributed)
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 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 process image (internal) max.	1000 words/1000 words
Input and output process image (Modbus®) max.	CODESYS V2: 1000 words/1000 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 (actuator)	N/A N/A
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 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 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	71.9 mm / 2.831 inches
Height from upper-edge of DIN-rail	64.7 mm / 2.547 inches
Depth	100 mm / 3.937 inches

Mechanical data	
Weight	246.7 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +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	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	2.911 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	
Product Group	15 (I/O System)
eCl@ss 10.0	27-24-26-07
eCl@ss 9.0	27-24-26-07
ETIM 8.0	EC000236
ETIM 7.0	EC000236
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821739487
Customs tariff number	85371091990



Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-8204 ↓

Documentation

Manual			
Cyber Security for Controller PFC100 / PFC200	V 1.2.0	pdf	8128.80 KB ↓
System Manual WAGO I/O System 750/753	V 3.3.0 04.05.2023	pdf	8548.45 KB ↓
PFC200 CS 2ETH RS CAN	3.12.0 29.08.2022	pdf	8258.34 KB ↓
Product Manual WAGO MODBUS Master Configurator	V 1.1.0	pdf	1761.59 KB ↓

Tutorial			
Establish connection to a controller using SSH	1.0 05.08.2017	mp4	28368.02 KB ↓
Set IP address with Ethernet Settings	3.0 18.12.2017	mp4	86272.82 KB ↓

Additional Information			
External license agreement for open source software	V 1.0.0	pdf	1482.55 KB ↓

Bid Text			
750-8204	19.02.2019	xml	7.67 KB ↓
750-8204	23.01.2019	docx	20.30 KB ↓

Application Notes

Application Note CoDeSys 2.3			
Application note for installing a MySQL-Server on a PFC-Controller	1.0.4 16.05.2019	zip	4392.22 KB ↓
Application note Cloud Connectivity	2019-09-17 17.09.2019	zip	3973.74 KB ↓
HART Tool Routing via ETHERNET with 750-820x/750-88x and CODESYS 2.3 (a116120)	1.0.0 22.03.2019	pdf	3798.36 KB ↓
Using the web visualization with Java™ runtime environment (JRE, JVM) 7 update 51 (7u51) (a500690)	1.2.4 26.02.2019	zip	4896.43 KB ↓
How to use Matlab code in a CODESYS project (a500710)	1.0.0 09.04.2014	zip	2633.79 KB ↓
Application Note PowerMeasurement_03 Library	19.01.2011 19.03.2012	zip	932.08 KB ↓
Application Note: DMX_02	26.04.2017 26.04.2017	zip	733.43 KB ↓
HVAC System Macros	10.03.2017 15.03.2019	zip	13252.92 KB ↓
Application Note: Mp-Bus_03 Library	2020-08-14 14.08.2020	zip	513.66 KB ↓

Application Note CoDeSys 2.3			
Connection of a Thermokon Thanos SR L MODBUS room control unit to the WAGO-I/O-SYSTEM	02.05.2013 13.05.2013	zip	305.89 KB ↓
Anbindung der HKW-Elektronik Wetterprognose-Station WS-K xx T ModBus	1.1 07.07.2017	zip	762.78 KB ↓
Application Note Scheduler_03.lib	20.05.2011 20.05.2011	zip	1717.92 KB ↓
Application Note Connecting with an iPod Touch	30.03.2011 28.10.2011	zip	428.79 KB ↓
GRUNDFOS GENiBus interface, application note	20.03.2017 20.03.2017	zip	279.86 KB ↓
Connection of Thermokon Multi-function room control units WRF 08	10.04.2019 10.04.2019	zip	855.84 KB ↓
Connection of DMX devices to the WAGO-I/O-SYSTEM via the ArtNet-DMX STAGE-PROFI 1.1	11.01.2013 11.01.2013	zip	1450.63 KB ↓
Connection of Thermokon Multi-function room control units WRF 06	10.04.2019 08.04.2016	zip	826.10 KB ↓



Application Note CoDeSys 2.3			
Application Note for the 750-494 3-Phase Power Measurement Module	24.01.2014 11.11.2014	zip 1629.99 KB	↓
Application Note: EnOcean_06 Library	30.11.2016 30.11.2016	zip 822.25 KB	↓
Application Note for the 750-495 3-Phase Power Measurement Module	24.01.2014 24.01.2014	zip 1806.18 KB	↓
Application Note Library WagoDataLogger_02	2020-05-20 20.05.2020	zip 1256.74 KB	↓
Application Note Weather Station Elsner P03 Modbus	01.12.2011 28.10.2011	zip 269.09 KB	↓
Application note: DALI 753-647 Configuration Interface	1.0.2 29.04.2019	zip 3032.71 KB	↓
HLK-Anlagenmakros für TRIC	2015-07-10 10.07.2015	zip 74963.43 KB	↓
Application Note Library ModuleAccess_01	05.01.2016 29.01.2016	zip 1001.22 KB	↓
Anwendungshinweis für die Steuerung eines Icus robolink	12.11.2015 12.11.2015	zip 1281.38 KB	↓

Application Note e!COCKPIT			
e!COCKPIT application note installation MySQL-Server	1.0.3 09.09.2019	pdf 1868.46 KB	↓
e!COCKPIT application note WagoAppCloud	2022-11-04 04.11.2022	zip 2678.52 KB	↓
HART Tool Routing via ETHERNET with 750-820x and e!RUNTIME (a116130)	1.0.0 22.03.2019	pdf 2867.01 KB	↓
SNMP Communication (a500850)	1.1.0 20.02.2020	zip 3743.05 KB	↓

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 750-8204 ↓	EPLAN Data Portal 750-8204 ↓
	WSCAD Universe 750-8204 ↓
	ZUKEN Portal 750-8204 ↓

Runtime Software			
Firmware			
Image Update (SD Karte) PFC100/200	V 22 SP1 12.12.2022	zip 205815.20 KB	↓

Libraries			
Library		Library	
WagoCANLayer2_01	1.0.1	WagoLibCpuUsage	1.0.0
	pdf 770.37 KB		pdf 259.51 KB
WagoConfigToolLIB	1.0.0 08.10.2013	WagoCANLayer2_02	1.0.0
	pdf 340.92 KB		pdf 847.63 KB
WagoLibLed	1.0.0	WagoCANopen_02	1.0.1
	pdf 504.39 KB		pdf 1024.23 KB
WagoLibNetSnmpManager	1.1.0	Library WagoLib-Cloud_02.lib	2.2.4 21.01.2020
	pdf 1090.83 KB		zip 56.21 KB
WagoLibDiagnosticIDs	1.0.0		
	pdf 291.17 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



Item No.: 750-963
Fieldbus Connector CANopen; with D-sub female connector; 9-pole

1.1.2 Communication

1.1.2.1 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.: 758-879/000-001](#)
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

1.1.8 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

**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