

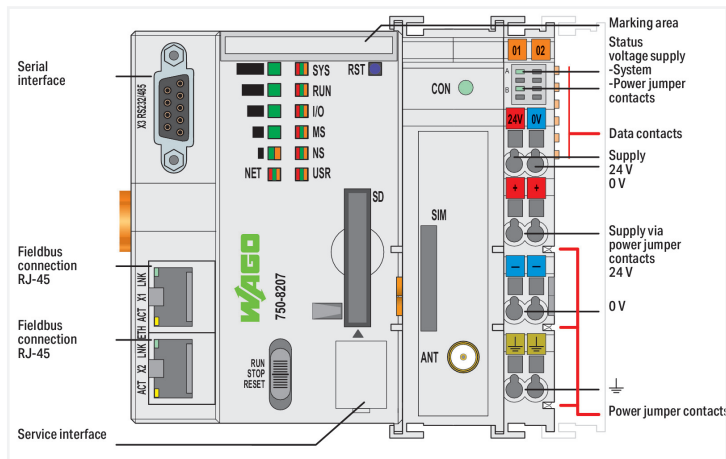
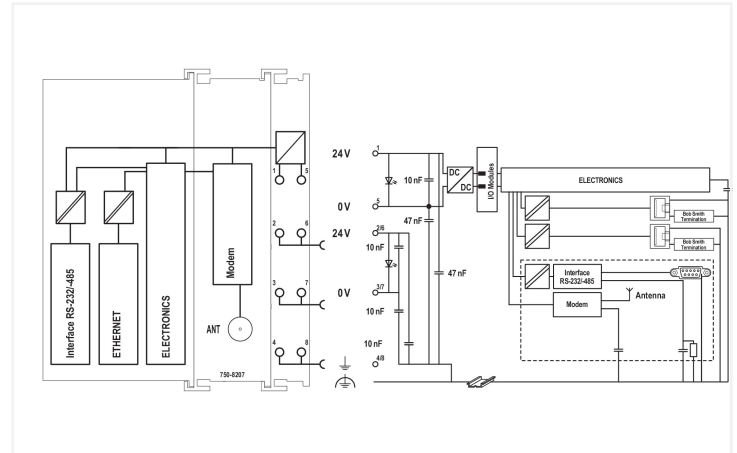
Data Sheet | Item Number: 750-8207/025-000
Controller PFC200; 2 x ETHERNET, RS-232/-485, Mobile Radio
Module; Ext. Temperature

<https://www.wago.com/750-8207/025-000>

DISCONTINUED:
31.10.2021



Color: ■ light gray



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 I/O modules found within the 750/753 Series.
 Two ETHERNET interfaces and an integrated switch enable line topology wiring. The controller's mobile radio module sends and receives SMS and provides wireless Internet connectivity.

An integrated Webserver provides user configuration options, while displaying PFC200 status information.

Besides standard machinery and equipment control, as well as building automation, typical applications for the PFC200 include decentralized data logging for the process industry.

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



Technical data	
Communications	Modbus (TCP, UDP) ETHERNET Modbus RTU RS-232 serial interface RS-485 interface EtherNet/IP™ Adapter (slave), library for e!RUNTIME MQTT
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
Security encryption	OpenVPN, IPsec, firewall
Services	SMS (bidirectional) GPRS connection to Internet
Radio technology	GSM/Edge/UMTS/HSPA+
Frequency band	GSM quad-band
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)	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 the WAGO 758-879/000-001 Memory Card)
Memory Card Slot	Push-push mechanism; cover lid (sealable)
SIM card type	Mini-SIM
SIM card slot	Push-push mechanism
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
Indicators	LED (SYS, RUN, I/O, USR, S1–S5, NET) red/green/orange: System status, program, local data bus, status programmable by user (can be used via CODESYS library); signal strength S1–S5, network status; LED (CON, A, B) green: Mobile network status, system power supply status, field supply status
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)	700 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): 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: antenna	1 x SMA socket
Connection technology: device configuration	1 x Male connector; 4-pole

Physical data	
Width	102.5 mm / 4.035 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	254.8 g
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	-20 ... +60 °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 %
Relative humidity (with condensation)	Short-term condensation per Class 3K6/IEC EN 60721-3-3 and E-DIN 40046-721-3, accounting for a temperature range of -20 to +60 °C (except for wind-driven precipitation, water and ice formation)
Mounting position	Horizontal left, horizontal right, horizontal up, horizontal down, vertical top and vertical bottom
Mounting type	DIN-35 rail
Vibration resistance	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	3.965 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 8.0	EC000236
ETIM 7.0	EC000236
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055144121735
Customs tariff number	85371091990
End of Sale	2021-10-31
End of Production	2021-11-05
End of Delivery	2021-11-15
End of Service and Repair	2023-10-31

Environmental Product Compliance	
CAS-No.	12060-00-3 1303-86-2 1317-36-8 693-98-1 7439-92-1 79-94-7 80-05-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 2-methylimidazole 4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide Lead titanium oxide (PbTiO3) 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)	4b363358-a7bd-482f-a841-81ffe68e144e
SCIP notification number (Belgium)	6eea09db-3b8a-48bc-aae9-c12b43988c17
SCIP notification number (Bulgaria)	ac4497a3-2fa3-497c-b409-881417f3e970
SCIP notification number (Czech Republic)	02807527-0c7d-4d9e-a753-bcc8119e0e47
SCIP notification number (Denmark)	cb07be0e-53f3-4531-a87a-6d876da1a9c0
SCIP notification number (Finland)	88281285-371b-4af3-bcf8-d0411900d3bf
SCIP notification number (France)	a519a923-026b-451b-b380-727f3e47f13d
SCIP notification number (Germany)	ed47bd08-dd5a-4b76-8aa1-32b9d781c5fb
SCIP notification number (Hungary)	c55045f6-4285-4256-851c-2365f6bde4b7
SCIP notification number (Italy)	9c1351c6-b5ca-4e9e-bb46-88f631ccde46
SCIP notification number (Netherlands)	836b558d-7de9-4d72-ad57-b23067cab965
SCIP notification number (Poland)	7c56b761-b907-4fdf-a6d0-4fa7ca35d8b2
SCIP notification number (Romania)	406fb3e5-4c8b-4b98-b306-c84d57f21bd5
SCIP notification number (Sweden)	868f997a-101e-422d-9acd-65da0b23f533



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEX CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	TÜV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-8207/025-000



Documentation

Manual
Cyber Security for Controller PFC100 / PFC200
V 1.2.0
pdf 8128.80 KB
System Manual Series 750/753
V 1.1.0
pdf 1761.59 KB
Product Manual WAGO MODBUS Master Configurator
1.12.0 29.08.2022
pdf 7401.42 KB

System Description
Overview on WAGO-I/O-SYSTEM 750 approvals
pdf 770.48 KB
Controller PFC100/200, General Product Information
pdf 578.66 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			
WAGO OPC UA Server	V 1.1.0 28.01.2021	pdf 1132.87 KB	↓

Bid Text			
750-8207/025-000	19.02.2019	xml 8.33 KB	↓
750-8207/025-000	23.01.2019	docx 20.65 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 159.76 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		↓
Application Note e!COCKPIT				
eCOCKPIT 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 750-8207/025-000	↓	EPLAN Data Portal 750-8207/025-000	↓
		WSCAD Universe 750-8207/025-000	↓
		ZUKEN Portal 750-8207/025-000	↓

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	↓



Runtime Software

Firmware			
Image Update (SD Karte) PFC100/200 für Codesys V2.3 u. Elcockpit	V 22 SP1 12.12.2022	zip 205815.20 KB	↓
WUP Update (WAGOuploadTool) PFC100/200 Codesys V2.3 u. Elcockpit	V 22 SP1 12.12.2022	zip 203580.70 KB	↓

Libraries

Library			
Library WagoLib-Cloud_02.lib	2.2.4 21.01.2020	zip 56.21 KB	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Antenna

1.1.1.1 Antenna



Item No.: 758-961
Self-adhesive antenna; with 2.5m cable and SMA straight plug; GSM/ UMTS/ LTE/ Bluetooth®/ WLAN; 699-960, 1710-2690 MHz

1.1.2 Cables and connectors

1.1.2.1 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



1.1.3 Communication

1.1.3.1 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

1.1.4 DIN-rail

1.1.4.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; galvanized; according to EN 60715; silver-colored

1.1.5 Marking

1.1.5.1 Group marker carrier



Item No.: 750-107
Group marker carrier

1.1.5.2 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



1.1.5.2 Marker



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

1.1.5.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.1.6 Memory card

1.1.6.1 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

1.1.7 Shield termination

1.1.7.1 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

1.1.8 Software

1.1.8.1 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



1.1.9 System enclosure

1.1.9.1 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