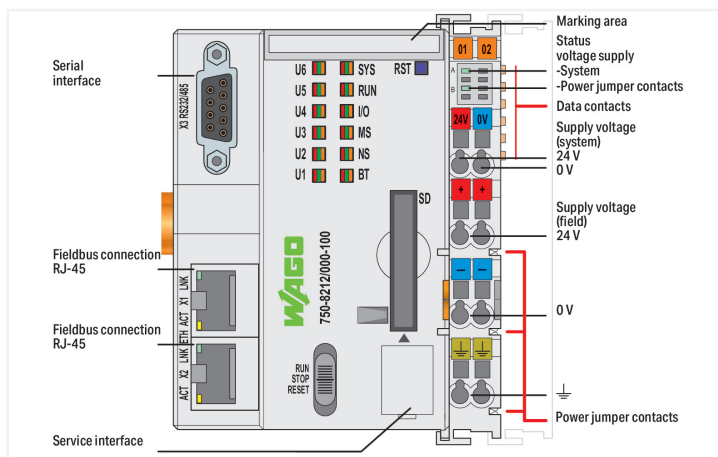
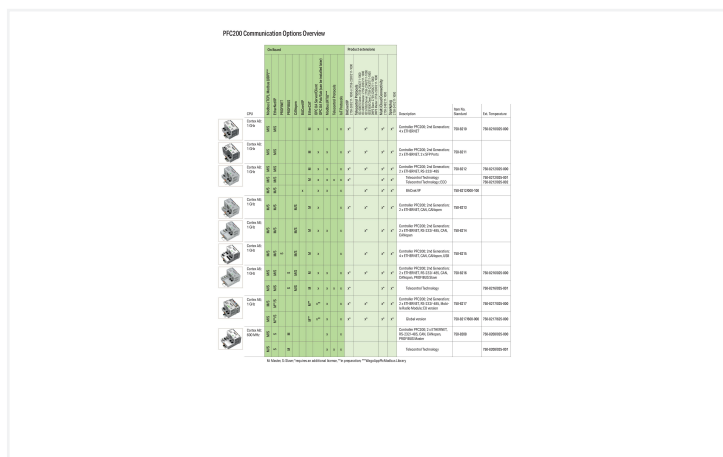


Controller PFC200; 2nd Generation; 2 x ETHERNET, RS-232/-485; BACnet/IP

[illegible]

Two ETHERNET interfaces and an integrated switch enable line topology wiring.

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).

- Programmable with CODESYS V3.5 from Firmware Release 23 or **e!COCKPIT** up to Firmware Release 22

- Direct connection of WAGO's I/O modules
- 2 x ETHERNET (configurable), RS-232/485
- Linux operating system with RT-Preempt patch
- Configuration via **e!COCKPIT** or Web-Based-Management user interface
- Maintenance-free

Communication

- BACnet/IP
- Modbus TCP master/slave
- Modbus (UDP), WagoAppPlcModbus Library
- Modbus (RTU), WagoAppPlcModbus Library
- ETHERNET
- RS-232 serial interface
- RS-485 interface
- Telecontrol protocols, **requires an additional license**
- EtherNet/IP™ Adapter (slave)
- EtherNet/IP™ Scanner
- EtherCAT® Master
- OPC UA Server/Client
- OPC UA Pub/Sub (can be installed later)
- MQTT



Technical data	
ETHERNET protocols	HTTP HTTPS SSH DHCP DNS NTP FTP FTPS SNMP
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
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
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	32 MB
Data memory	128 MB
Non-volatile software memory	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)
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 V3: 32000 words/32000 words
Device-specific	BACnet/IP protocol: ISO 16484-5; BACnet device profiles: B-BC (BACnet Building Controller); BACnet revision: 14
Indicators	LED (SYS; RUN; I/O; BT; U1 ... U6) red/green/orange: Status of system; program; local data bus; BACnet; 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)
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	BACnet/IP: 2 x RJ-45; 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	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
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	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	2.551 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
Packaging type	Box
Country of origin	DE
GTIN	4055143878326
Customs tariff number	8537109190



Environmental Product Compliance	
CAS-No.	79-94-7 1303-86-2 1317-36-8 693-98-1 7439-92-1
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)	20e734fa-ab82-4e58-b015-5596c9c39d2e
SCIP notification number (Belgium)	27367c67-2238-487d-9cf1-7dc1e4bcbbff
SCIP notification number (Bulgaria)	172b9283-d6bd-427b-82ec-1e6a27a57a4d
SCIP notification number (Czech Republic)	d72436ba-246e-416a-bcca-baa4323ddfed
SCIP notification number (Denmark)	60a9a809-8357-4ccd-8da3-483b36c7aac0
SCIP notification number (Finland)	686e4d1f-9c99-499d-a411-494b74236a05
SCIP notification number (France)	1b04aa87-6907-4fa6-8dfe-ba87a5edf7fd
SCIP notification number (Germany)	b37b94c0-2e38-4563-9c77-57eb379c5d91
SCIP notification number (Hungary)	dc7c278a-7fd8-4c3f-9b17-72fcc55d63f5
SCIP notification number (Italy)	586efd71-00f0-43dc-b33d-93bcb2a8b7fe
SCIP notification number (Netherlands)	3c8826e1-fdf6-45b1-bbab-9ccdb0f60be3
SCIP notification number (Poland)	6595f333-9c7e-4547-a6be-358e9e9f532d
SCIP notification number (Romania)	50df8d29-aa9b-4b2a-a80f-7ced9dc249bc
SCIP notification number (Sweden)	013272af-5232-4aaa-bd1b-97177c15855c

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
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 marine applications



Approval	Standard	Certificate Name
BSH Bundesamt fuer See- schifffahrt und Hydrogra- phie	-	1104
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
PRS Polski Rejestr Statków	-	TE/1101/880590/23

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)



Approvals for hazardous areas		
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 LOCA- TIONS)	UL 121201	E198726 Sec.1

Protocol and fieldbus specific certificates		
		
Approval	Standard	Certificate Name
BACnet WSP Cert	-	AMEV Testat-2017

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 750-8212/000-100	

Documentation			
Manual		Compatibility Information	
WAGO Solution Builder		BACnet Protocol Imple- mentation Conforma- nce Statement (PICS)	
Product Manual PFC200; G2; 2ETH RS BACnet/IP	V 1.1.0 / FW 14 09.12.2019	pdf 3636.83 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 Edi- tor			
Product Manual Docu- mentation WAGO Solu- tion Builder	2.1.0 25.04.2024	pdf 11063.61 KB	
Migration Guide	V 1.3.0 03.07.2023	pdf 4938.74 KB	
Migrationsleitfaden von e!COCKPIT-Projekten zu CODESYS V3.5			

System Description		Tutorial	
Overview on WAGO-I/ O-SYSTEM 750 appro- vals	pdf 770.48 KB	Establish connection to a controller using SSH	
Controller PFC100/200, General Product Infor- mation	pdf 578.66 KB	Set IP address with Ethernet Settings	



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

Bid Text			
750-8212/000-100	21.05.2019	docx 23.33 KB	↓
750-8212/000-100	21.05.2019	xml 10.19 KB	↓
ausschreiben.de 750-8212/000-100			↓

Instruction Leaflet			
CCC Ex (Additional in-formation)	26.04.2023	pdf 159.76 KB	↓

Application Notes

Application Note e!COCKPIT			
e!COCKPIT application note WagoAppCloud	2022-11-04 04.11.2022	zip 2678.52 KB	↓
e!COCKPIT Application Note BACnet PFC	1.0.0 06.12.2021	pdf 3323.56 KB	↓
e!COCKPIT Anwen-dungshinweis WAGO Solution Builder (a2021012)	2021-12-06 06.12.2021	zip 2678.00 KB	↓
e!COCKPIT Anwen-dungshinweis HVAC BACnet Macros (a2021010)	1.3.0 27.02.2023	zip 67588.63 KB	↓
e!COCKPIT Application Note OPC UA Client (a2022001)	1.0.0 05.04.2022	zip 1336.65 KB	↓
Application Note WAGO Visualization Datalog-ger (a2022005)	20240109 09.01.2024	zip 3851.08 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 750-8212/000-100	↓

CAE data	
EPLAN Data Portal 750-8212/000-100	↓

Engineering-Software

Configuration and Commissioning Software			
(759-316) WAGO Ether-net Settings / Serie 750	06.18.01.01 02.09.2021	zip 26678.54 KB	↓
WAGOupload	1.16.1.0 02.02.2022	zip 12111.45 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	
PFC200, Firmware Update für CoDeSys V3.5	V 23 24.02.2023	zip 167985.38 KB	
WUP Update (WAGOuploadTool) PFC100/200 Codesys V2.3 u. Elcockpit	V 22 SP1 12.12.2022	zip 203580.70 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

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.: 758-879/000-2108
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; dia-
meter 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; dia-
meter 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; dia-
meter 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 com-
patible 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

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); Wx-
HxD (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