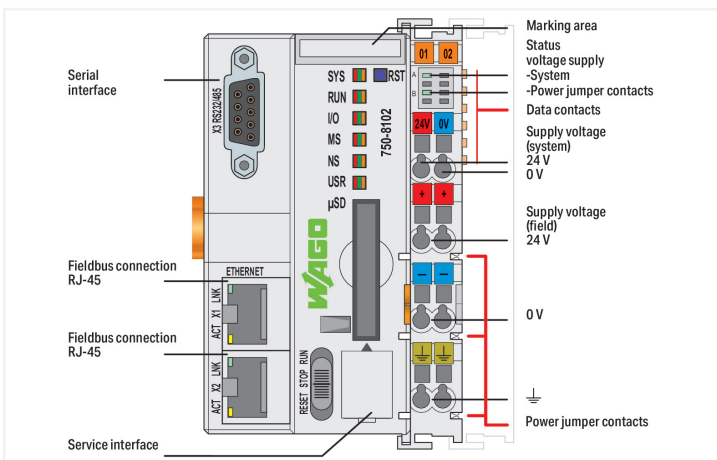
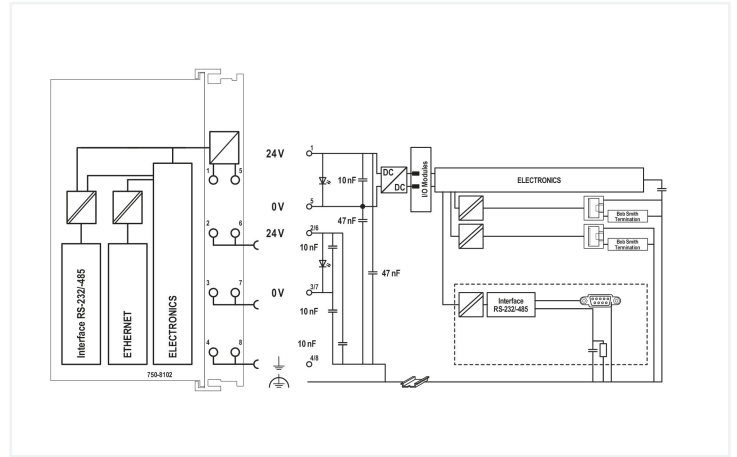


**Data Sheet | Item Number: 750-8102**  
**Controller PFC100; 2 x ETHERNET, RS-232/-485**

<https://www.wago.com/750-8102>



Color:  light gray



The PFC100 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 PFC100 status information.

Besides the processing industry and building automation, typical applications for the PFC100 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 **e!COCKPIT**
- Direct connection of WAGO's I/O modules
- 2 x ETHERNET (configurable), RS-232/485
- Linux 3.18 operating system with RT-Preempt patch
- Configuration via **e!COCKPIT** or Web-Based Management interface
- Maintenance-free

**Technical data**

Communication

Modbus (TCP, UDP)  
 ETHERNET  
 EtherNet/IP™ Adapter (slave), library for **e!RUNTIME**  
 Modbus® RTU  
 RS-232 serial interface  
 RS-485 interface  
 MQTT

ETHERNET protocols

DHCP  
 DNS  
 NTP  
 FTP  
 FTPS  
 SNMP  
 HTTP  
 HTTPS  
 SSH

Technical data	
Visualization	Web-Visu
Operating system	Real-time Linux 3.18 (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) Structured Text (ST) Sequential Function Chart (SFC)
Programming environment	<b>e!</b> COCKPIT (based on CODESYS V3)
Configuration options	<b>e!</b> 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 KB
Program memory	12 MB (Program and data memory (dynamically distributed))
Data memory	12 MB Program and data memory (dynamically distributed)
Non-volatile software memory	128 KB
Type of memory card	microSD 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 V3: 32000 words/32000 words
Indicators	LED (SYS, RUN, I/O, USR) 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)
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	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	61.5 mm / 2.421 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	163 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	2.22 MJ
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

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	4055143351829
Customs tariff number	85371091990

### Environmental Product Compliance

CAS-No.	1303-86-2 1314-23-4 1317-36-8 693-98-1 7439-92-1 79-94-7
REACH Candidate List Substance	2-methylimidazole Diboron trioxide Lead Lead monoxide Perfluorobutane sulfonic acid (PFBS) and its salts Tetrabromobisphenol A (TBBPA) Zirconium Oxide

**Environmental Product Compliance**

RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	d9913184-60d2-47f3-a977-2ee4483c4a88
SCIP notification number (Belgium)	1d3f4083-a107-44e6-907b-e1806bc5b385
SCIP notification number (Bulgaria)	a60df0db-834c-4157-9b00-59bf45c93373
SCIP notification number (Czech Republic)	74a69d35-16f9-4a0a-ba18-3b43700248d4
SCIP notification number (Denmark)	23c665d1-28fe-4108-bbbd-24fb918e0773
SCIP notification number (Finland)	b7acf51d-4a78-48aa-a3b9-955f6a0a706b
SCIP notification number (France)	f9417db2-dce5-4793-aa1e-62fdcebfbba0
SCIP notification number (Germany)	8b170836-8b7f-40a1-81c1-e72453c9129a
SCIP notification number (Hungary)	83782306-97f6-4797-a4df-38885bba1f68
SCIP notification number (Italy)	e2018359-9ab7-4e5c-9e95-9ef988f5b127
SCIP notification number (Netherlands)	57cc0ac6-a912-4c44-a61e-4a43d7a8ad43
SCIP notification number (Poland)	73126fa5-a04e-4bbf-9cf9-3bcd656f098f
SCIP notification number (Romania)	30583624-4a2b-433b-ae56-510d35758ac3
SCIP notification number (Sweden)	684ee82b-abef-4632-9926-2c6188487b1a

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PFC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

**Approvals for marine applications**



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	66711/A0
DNV DNV GL SE	DNV-CG-0339, Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex e IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TUV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TUV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-8102



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 3.1.0 05.12.2022	pdf 8495.90 KB	
System Manual Series 750/753			
PFC100 CS 2ETH RS	1.12.0 29.08.2022	pdf 5196.44 KB	

System Description

Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	
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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	
External license agreement for open source software	V 1.0.0	pdf 1482.55 KB	

Bid Text			
750-8102	19.02.2019	xml 6.95 KB	<a href="#">↓</a>
750-8102	06.01.2016	doc 33.50 KB	<a href="#">↓</a>
ausschreiben.de 750-8102			<a href="#">↓</a>

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	<a href="#">↓</a>

### Application Notes

Application Note CoDeSys 2.3			
Application note Cloud Connectivity	2019-09-17 17.09.2019	zip 3973.74 KB	<a href="#">↓</a>

Application Note e!COCKPIT			
e!COCKPIT application note WagoAppCloud	2022-11-04 04.11.2022	zip 2678.52 KB	<a href="#">↓</a>

### CAD/CAE-Data

CAD data	
2D/3D Models 750-8102	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 750-8102	<a href="#">↓</a>
WSCAD Universe 750-8102	<a href="#">↓</a>
ZUKEN Portal 750-8102	<a href="#">↓</a>

### Engineering-Software

Configuration and Commissioning Software			
(759-316) WAGO Ethernet Settings / Serie 750	06.18.01.01 02.09.2021	zip 26678.54 KB	<a href="#">↓</a>
WAGOupload	1.16.1.0 02.02.2022	zip 12111.45 KB	<a href="#">↓</a>

### Runtime Software

Firmware			
Image Update (SD Karte) PFC100/200	V 22 SP1 12.12.2022	zip 205815.20 KB	<a href="#">↓</a>

### 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 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

1.1.3.1 Mounting accessories



**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.: 758-879/000-3102**  
Memory Card SD Micro; 2 GByte

**Item No.: 758-879/000-3108**  
Memory Card SD Micro; pSLC-NAND; 8 GB; Temperature range: -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

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

### 1.1.8.1 System enclosure



**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