

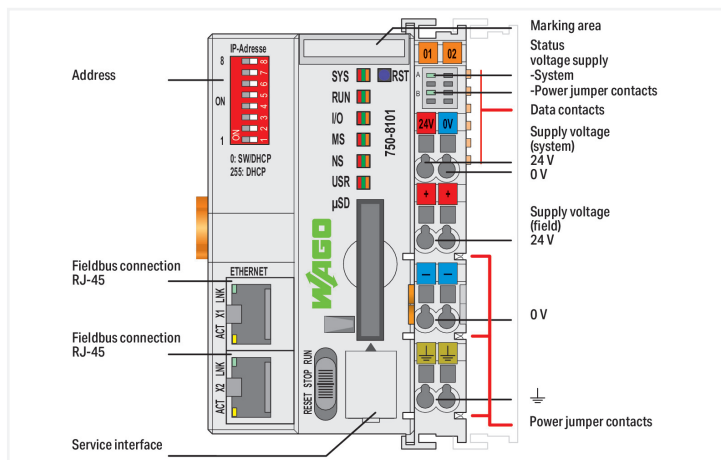
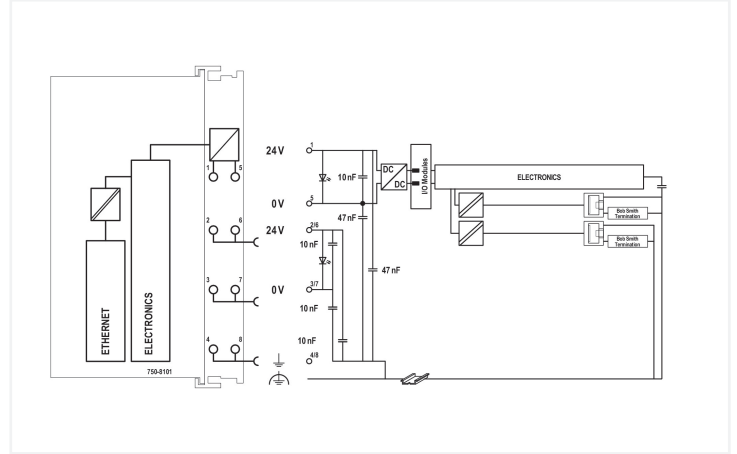
Data Sheet | Item Number: 750-8101

Controller PFC100; 2 x ETHERNET

<https://www.wago.com/750-8101>



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 I/O 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).

The DIP switch configures the last byte of the IP address and may be used for IP address assignment.

Programming per IEC 61131-3

- Programmable via **e!COCKPIT**
- Direct connection of WAGO's I/O modules
- 2 x ETHERNET (configurable)
- 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 MQTT
ETHERNET protocols	DHCP DNS NTP FTP FTPS SNMP HTTP HTTPS SSH
Visualization	Web-Visu
Operating system	Real-time Linux 3.18 (with RT-Preempt patch)

Technical data

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	e! COCKPIT (based on CODESYS V3)
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	64 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	64 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
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 ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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	127.9 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	2.48 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	4055143351843
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 Tetrabromobisphenol A (TBBPA) Zirconium Oxide
RoHS Exemption	7(a) 7(c)-I 7(c)-II

Environmental Product Compliance

SCIP notification number (Austria)	3ae1ebc5-b970-4ec3-bace-f308947236fa
SCIP notification number (Belgium)	577d074b-f5b6-47a3-86f5-e03afa6f8acf
SCIP notification number (Bulgaria)	0c137896-495d-4572-8bad-2f12636184af
SCIP notification number (Czech Republic)	fa250128-b0e8-4526-b55c-1e75c36bee79
SCIP notification number (Denmark)	85b64307-1dd8-4c08-b444-b940554bedf5
SCIP notification number (Finland)	9bd68d0c-2c48-47b6-b9f5-d073ce6649cf
SCIP notification number (France)	b084583f-17c9-44b5-a2fe-8722dafc4d2f
SCIP notification number (Germany)	5e3b6efc-ca82-4d2e-ad28-ecba7927bbc0
SCIP notification number (Hungary)	50f0bf53-fb33-4fea-a632-c0104484f5c9
SCIP notification number (Italy)	5bd461b4-56da-42a4-81a7-753e791fe261
SCIP notification number (Netherlands)	1756c077-e8b4-422f-8db2-bfe8ebb567e9
SCIP notification number (Poland)	4c405904-267d-40be-9e96-deb919c82b51
SCIP notification number (Romania)	63e2dcd9-b83c-410b-bf90-be70fa3d4f25
SCIP notification number (Sweden)	0af18714-977e-4c7b-b78e-bf06250f786e

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)

Approvals for hazardous areas

INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	21-KA4BO-0556X
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 750-8101

Documentation

Manual

System Manual WAGO I/O System 750/753	V 3.1.0 05.12.2022	pdf 8495.90 KB	
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System Manual Series 750/753			
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PFC100 CS 2ETH	1.12.0 29.08.2022	pdf 4561.38 KB	
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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	
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Set IP address with Ethernet Settings	3.0 18.12.2017	mp4 86272.82 KB	
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Additional Information

WAGO OPC UA Server	V 1.1.0 28.01.2021	pdf 1132.87 KB	
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External license agree- ment for open source software	V 1.0.0	pdf 1482.55 KB	
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Bid Text

750-8101	19.02.2019	xml 7.07 KB	
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750-8101	06.01.2016	doc 33.50 KB	
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ausschreiben.de 750-8101			
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Instruction Leaflet

CCC Ex (Additional in- formation)	26.04.2023	pdf 159.76 KB	
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Application Notes

Application Note CoDeSys 2.3

Application note Cloud Connectivity	2019-09-17 17.09.2019	zip 3973.74 KB	
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Application Note e!COCKPIT

e!COCKPIT application note WagoAppCloud	2022-11-04 04.11.2022	zip 2678.52 KB	
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CAD/CAE-Data

CAD data	
2D/3D Models 750-8101	↓

CAE data	
EPLAN Data Portal 750-8101	↓
WSCAD Universe 750-8101	↓
ZUKEN Portal 750-8101	↓

Engineering-Software

Configuration and Commissioning Software			
(759-316) WAGO Ethernet 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	V 22 SP1 12.12.2022	zip 205815.20 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 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

1.1.1.1 Connector plug



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

1.1.4.2 Marker



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); 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