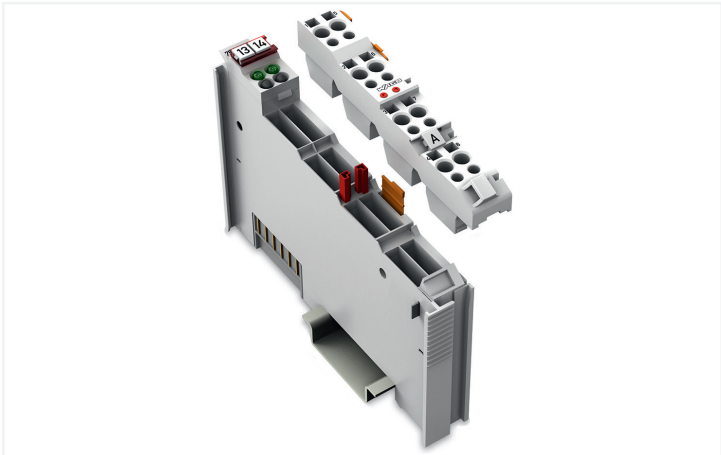
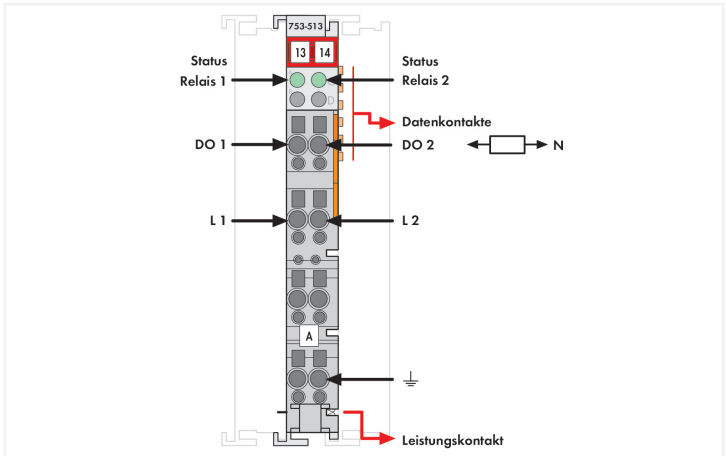
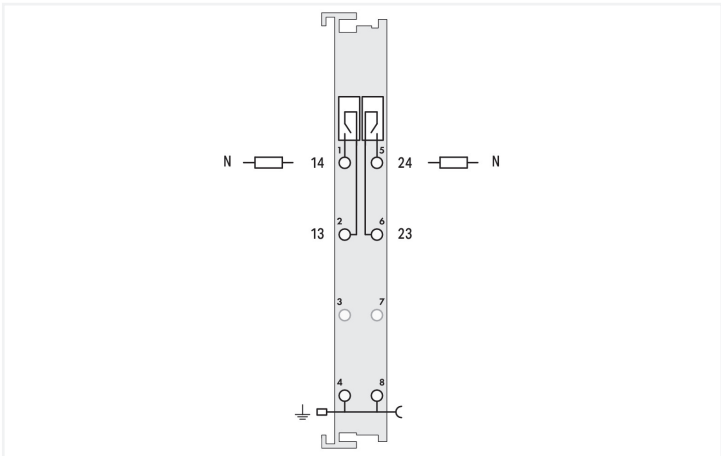
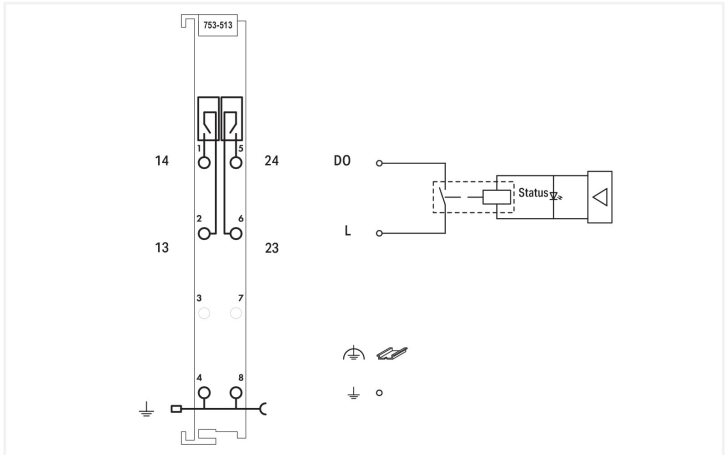




Color: ■ light gray



This digital output module transmits control signals from the automation device to the connected actuators.  
The internal system voltage triggers the relay.  
The NO contacts are electrically isolated.  
The state of the relay is indicated by a LED.

| Notes |                                                                        |
|-------|------------------------------------------------------------------------|
| Note  | Pluggable connectors and coding fingers (753 Series) are not included. |

| Technical data                    |                                                          |
|-----------------------------------|----------------------------------------------------------|
| Number of digital outputs         | 2                                                        |
| Total number of channels (module) | 2                                                        |
| Signal type                       | Digital                                                  |
| Actuator connection               | 2 x (1-wire)                                             |
| Output circuit design             | 2 make contacts<br>Relay                                 |
| Output characteristic             | potential-free                                           |
| Switching frequency (max.)        | 0.5 Hz; Nominal load                                     |
| Switching voltage (max.)          | 250 VAC, 30 VDC                                          |
| Switching current (max.)          | 2 A                                                      |
| Switching voltage (min.)          | 5 V                                                      |
| Switching current (min.)          | 10 mA                                                    |
| Switching power                   | 500 VA / 60 W; cos $\varphi$ max. = 0.4; L/R max. = 7 ms |
| Pull-in time (max.)               | 10 ms                                                    |
| Drop-out time (max.)              | 10 ms                                                    |

### Technical data

|                                                                 |                                                           |
|-----------------------------------------------------------------|-----------------------------------------------------------|
| Bounce time (typ.)                                              | 1.2 ms                                                    |
| Electrical switching operations (min.) (at max. resistive load) | 300 x 10 <sup>3</sup> switching operations                |
| Mechanical switching operations (min.) (at max. resistive load) | 20 x 10 <sup>6</sup> switching operations                 |
| Output data width (internal) max.                               | 2 bits                                                    |
| Supply voltage (system)                                         | 5 VDC; via data contacts                                  |
| Current consumption (5 V system supply)                         | 100 mA                                                    |
| Supply voltage (field)                                          | Transmission of ground potential via power jumper contact |
| Isolation                                                       | 1500 V (system/field)                                     |
| Indicators                                                      | LED (A, C) green: Status relay 1, relay 2                 |
| Number of incoming power jumper contacts                        | 1                                                         |
| Number of outgoing power jumper contacts                        | 1                                                         |
| Current carrying capacity (power jumper contacts)               | 10 A                                                      |

### Connection data

|                                       |                                              |
|---------------------------------------|----------------------------------------------|
| Connection technology: inputs/outputs | 8 x CAGE CLAMP®                              |
| Connection type 1                     | Inputs/outputs                               |
| Solid conductor                       | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Fine-stranded conductor               | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Strip length                          | 9 ... 10 mm / 0.35 ... 0.39 inches           |

### Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 12 mm / 0.472 inches   |
| Height                            | 100 mm / 3.937 inches  |
| Depth                             | 69.8 mm / 2.748 inches |
| Depth from upper-edge of DIN-rail | 62.6 mm / 2.465 inches |

### Mechanical data

|                     |             |
|---------------------|-------------|
| Mounting type       | DIN-35 rail |
| Pluggable connector | pluggable   |

### Material data

|                    |                              |
|--------------------|------------------------------|
| Color              | light gray                   |
| Contact material   | Ag alloy                     |
| Housing material   | Polycarbonate; polyamide 6.6 |
| Fire load          | 1.242 MJ                     |
| Weight             | 44 g                         |
| 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                       | 0 ... 2000 m / 0 ... 6562 ft          |
| Mounting position                        | horizontal (standing/lying); vertical |
| Relative humidity (without condensation) | 95 %                                  |
| 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 61000-6-4, marine applications |
| Exposure to pollutants                   | per IEC 60068-2-42 and IEC 60068-2-43 |



| Environmental requirements                                                         |        |
|------------------------------------------------------------------------------------|--------|
| 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       |                 |
|-----------------------|-----------------|
| Product Group         | 15 (I/O System) |
| eCl@ss 10.0           | 27-24-26-04     |
| eCl@ss 9.0            | 27-24-26-04     |
| ETIM 8.0              | EC001599        |
| ETIM 7.0              | EC001599        |
| PU (SPU)              | 1 pcs           |
| Packaging type        | Box             |
| Country of origin     | DE              |
| GTIN                  | 4050821404354   |
| Customs tariff number | 85371098990     |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                          |                        |                                 | Approvals for marine applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|
|    |                        |                                 |         |                      |                   |
| Approval                                                                                                                                                                                                                                                   | Standard               | Certificate Name                | Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Standard             | Certificate Name  |
| EAC<br>Brjansker Zertifizierungs-<br>stelle                                                                                                                                                                                                                | TP TC 020/2011         | EAC RU C-DE.AM02.<br>B.00087/19 | ABS<br>American Bureau of Ship-<br>ping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -                    | 22-2219060        |
| KC<br>National Radio Research<br>Agency                                                                                                                                                                                                                    | Article 58-2, Clause 3 | MSIP-REM-W43-DOM750             | BSH<br>Bundesamt fuer See-<br>schifffahrt und Hydrogra-<br>phie                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -                    | 1104              |
| UL<br>Underwriters Laboratories<br>Inc. (ORDINARY LOCATI-<br>ONS)                                                                                                                                                                                          | UL 508                 | E175199 Sec.1                   | BV<br>Bureau Veritas S.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -                    | 13453/E0 BV       |
|                                                                                                                                                                                                                                                            |                        |                                 | DNV<br>DNV GL SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DNV-CG-0339,Aug.2021 | TAA0000194        |
|                                                                                                                                                                                                                                                            |                        |                                 | KR<br>Korean Register of Ship-<br>ping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -                    | KR HMB05880-AC001 |
|                                                                                                                                                                                                                                                            |                        |                                 | LR<br>Lloyds Register EMEA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -                    | LR22180952TA      |
|                                                                                                                                                                                                                                                            |                        |                                 | PRS<br>Polski Rejestr Statków                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -                    | TE/2236/880590/19 |
|                                                                                                                                                                                                                                                            |                        |                                 | RINA<br>RINA Germany GmbH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -                    | ELE343521XG001    |



Approvals for hazardous areas

| <div><div><div>PTB</div><div>0102</div></div><div><div>Ex</div><div></div></div><div><div>EH</div><div></div></div><div><div>Ex</div><div></div></div><div><div>IECEX</div></div><div><div>UL</div></div></div> |                |                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------|
| Approval                                                                                                                                                                                                        | Standard       | Certificate Name                                     |
| ATEX<br>TUEV Nord Cert GmbH                                                                                                                                                                                     | EN 60079-0     | TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)           |
| CCC<br>CNEX                                                                                                                                                                                                     | CNCA-C23-01    | 2020312310000213 (Ex ec nC IIC T4 Gc)                |
| EAC<br>Brjansker Zertifizierungs-<br>stelle                                                                                                                                                                     | TP TC 012/2011 | EAC RU C-DE.AM02.<br>B.00163/19 (2Ex nA IIC T4 Gc X) |
| IECEX<br>TUEV Nord Cert GmbH                                                                                                                                                                                    | IEC 60079-0    | IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)                |
| INMETRO<br>TÜV Rheinland do Brasil<br>Ltda.                                                                                                                                                                     | IEC 60079-0    | BR-Ex_TÜV 12.1297 X                                  |
| UKEx<br>WAGO GmbH & Co. KG                                                                                                                                                                                      | EN 60079-0     | UKCA_WA-<br>GO22UKEX003X_ec nC                       |
| UL<br>Underwriters Laboratories<br>Inc. (HAZARDOUS LOCA-<br>TIONS)                                                                                                                                              | UL 121201      | E198726 Sec.1                                        |

Downloads

Documentation

| Manual                                                   |                       |                   |   | System Description                                               |                  |  |   |
|----------------------------------------------------------|-----------------------|-------------------|---|------------------------------------------------------------------|------------------|--|---|
| Product Manual 2-<br>channel, 230VAC,<br>30VDC, 2A AC/DC | V 1.2.0               | pdf<br>2204.28 KB | ↓ | 750/753 Series I/O-<br>System – General Pro-<br>duct Information | pdf<br>953.35 KB |  | ↓ |
| System Manual WAGO<br>I/O System 750/753                 | V 3.3.3<br>29.08.2023 | pdf<br>8512.61 KB | ↓ | Overview on WAGO-I/<br>O-SYSTEM 750 appro-<br>vals               | pdf<br>770.48 KB |  | ↓ |
| System Manual Series<br>750/753                          |                       |                   | ↓ |                                                                  |                  |  |   |

| Bid Text |            |                 |   |
|----------|------------|-----------------|---|
| 753-513  | 19.02.2019 | xml<br>4.96 KB  | ↓ |
| 753-513  | 12.07.2017 | doc<br>30.00 KB | ↓ |

| Instruction Leaflet                  |            |                  |   |
|--------------------------------------|------------|------------------|---|
| CCC Ex (Additional in-<br>formation) | 26.04.2023 | pdf<br>159.76 KB | ↓ |

CAD/CAE-Data

| CAD data             |   | CAE data                     |   |
|----------------------|---|------------------------------|---|
| 2D/3D Models 753-513 | ↓ | EPLAN Data Portal<br>753-513 | ↓ |
|                      |   | WSCAD Universe<br>753-513    | ↓ |
|                      |   | ZUKEN Portal 753-513         | ↓ |

1 Compatible Products

## 1.1 Required Accessories

### 1.1.1 Pluggable connector

#### 1.1.1.1 Male connector/plug



**Item No.: 753-110**

Plug

## 1.2 Optional Accessories

### 1.2.1 DIN-rail

#### 1.2.1.1 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; unslopped; 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

### 1.2.2 Marking

#### 1.2.2.1 Group marker carrier



**Item No.: 750-106**

Group marker carrier

#### 1.2.2.2 Marker



**Item No.: 750-100**

Marker card; as a DIN A4 sheet; plain



**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



1.2.2.2 Marker



**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

1.2.2.3 Marker carrier



**Item No.: 750-103**  
Group marker carrier

1.2.3 Pluggable connector

1.2.3.1 Coding



**Item No.: 753-150**  
753 Series coding elements

1.2.4 Shield termination

1.2.4.1 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

1.2.5 System enclosure



1.2.5.1 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