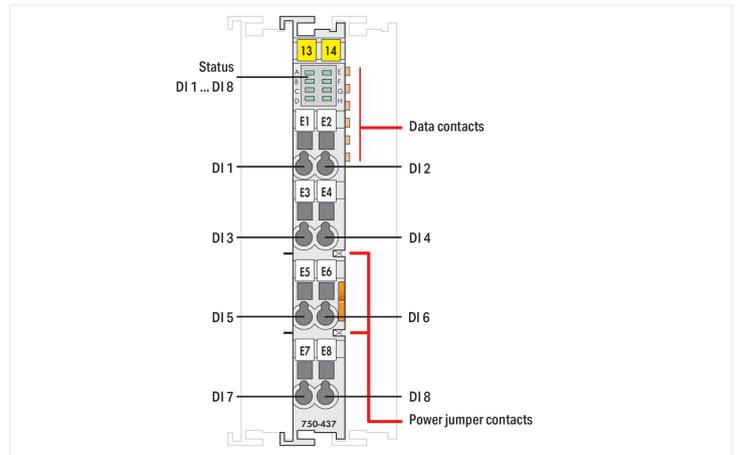
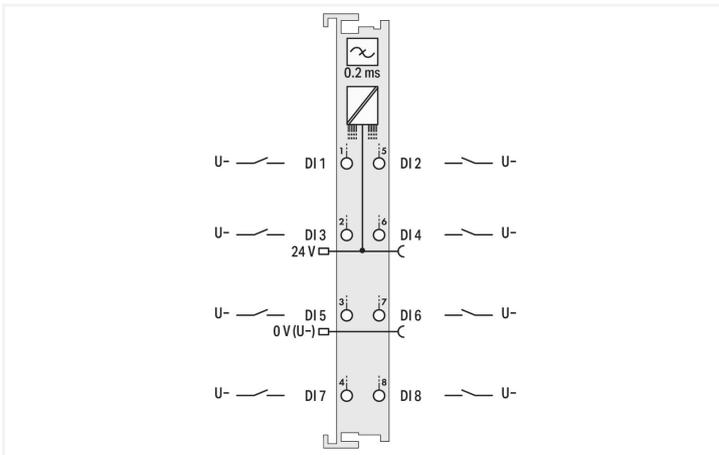
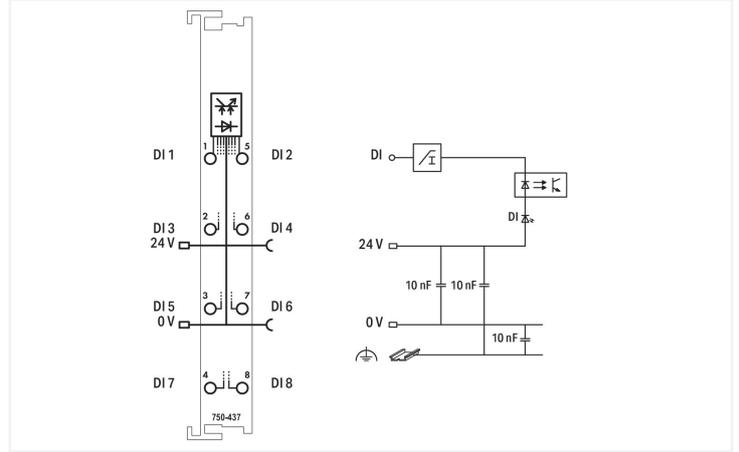


**Data Sheet | Item Number: 750-437**  
 8-channel digital input; 24 VDC; 0.2 ms; Low-side switching

<https://www.wago.com/750-437>



Color: ■ light gray



This digital input module features eight channels in a width of just 12 mm (0.47 inch). It receives control signals from digital field devices (e.g., sensors). Each input module has a noise-rejection filter. Field and system levels are electrically isolated.

| Technical data                                    |                                                                                                                                                      |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of digital inputs                          | 8                                                                                                                                                    |
| Total number of channels (module)                 | 8                                                                                                                                                    |
| Signal type                                       | Digital                                                                                                                                              |
| Signal type (voltage)                             | 24 VDC                                                                                                                                               |
| Sensor connection                                 | 8 x (1-wire)                                                                                                                                         |
| Input characteristic                              | low-side switching                                                                                                                                   |
| Input filter (digital)                            | 0.2 ms                                                                                                                                               |
| Input current per channel for signal (0) typ.     | 2.8 mA                                                                                                                                               |
| Voltage range for signal (0)                      | 15 ... 30 VDC                                                                                                                                        |
| Voltage range for signal (1)                      | -3 ... +5 VDC                                                                                                                                        |
| Input data width (internal) max.                  | 8 bits                                                                                                                                               |
| Supply voltage (system)                           | 5 VDC; via data contacts                                                                                                                             |
| Current consumption (5 V system supply)           | 13 mA                                                                                                                                                |
| Supply voltage (field)                            | 24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact) |
| Isolation                                         | 500 V system/field                                                                                                                                   |
| Indicators                                        | LED (A-D) green: Status DI 1, DI 3, DI 5, DI 7; LED (E-H) green: Status DI 2, DI 4, DI 6, DI 8                                                       |
| Number of incoming power jumper contacts          | 2                                                                                                                                                    |
| Number of outgoing power jumper contacts          | 2                                                                                                                                                    |
| Current carrying capacity (power jumper contacts) | 10 A                                                                                                                                                 |

### Connection data

|                                       |                                              |                         |                                              |
|---------------------------------------|----------------------------------------------|-------------------------|----------------------------------------------|
| Connection technology: inputs/outputs | 8 x CAGE CLAMP® (inputs)                     | Connection type 1       | Input                                        |
| Connectable conductor materials       | Copper                                       | Solid conductor         | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Connection type 1                     | Input                                        | Fine-stranded conductor | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Solid conductor                       | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG | Strip length            | 8 ... 9 mm / 0.31 ... 0.35 inches            |
| Fine-stranded conductor               | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |                         |                                              |
| Strip length                          | 8 ... 9 mm / 0.31 ... 0.35 inches            |                         |                                              |

### Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 12 mm / 0.472 inches   |
| Height                            | 100 mm / 3.937 inches  |
| Depth                             | 67.8 mm / 2.669 inches |
| Depth from upper-edge of DIN-rail | 60.6 mm / 2.386 inches |

### Mechanical data

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

### Material data

|                    |                              |
|--------------------|------------------------------|
| Color              | light gray                   |
| Housing material   | Polycarbonate; polyamide 6.6 |
| Fire load          | 1.417 MJ                     |
| Weight             | 47.8 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 left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom |
| 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 61000-6-3, marine applications                                                                  |
| Exposure to pollutants                                                             | per IEC 60068-2-42 and IEC 60068-2-43                                                                  |
| 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 9.0              | EC001599        |
| ETIM 8.0              | EC001599        |
| PU (SPU)              | 1 pcs           |
| Packaging type        | Box             |
| Country of origin     | DE              |
| Customs tariff number | 85389099990     |

### Environmental Product Compliance

|                                           |                                           |
|-------------------------------------------|-------------------------------------------|
| CAS-No.                                   | 1303-86-2<br>1317-36-8<br>7439-92-1       |
| REACH Candidate List Substance            | Diboron trioxide<br>Lead<br>Lead monoxide |
| RoHS Compliance Status                    | Compliant,With Exemption                  |
| RoHS Exemption                            | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II         |
| SCIP notification number (Austria)        | 85d51dfb-85e5-4c07-860e-d6cd1516e239      |
| SCIP notification number (Belgium)        | 73dfb1b5-edd5-457b-9c8a-0c038c757963      |
| SCIP notification number (Bulgaria)       | c578e8ad-fdfc-4e96-9000-0e7e8b108385      |
| SCIP notification number (Czech Republic) | 46db05f3-2dee-4147-be70-55f905b933b6      |
| SCIP notification number (Denmark)        | 67ca0066-8acd-41e8-ac66-c758b7986460      |
| SCIP notification number (Finland)        | b5bcc8bc-b7e2-47eb-be47-7ee7a2d6401c      |
| SCIP notification number (France)         | e8985620-ed9a-4261-9eed-8e6c53691f11      |
| SCIP notification number (Germany)        | 2f886572-89e4-45d2-b1b1-ddb093a6b88b      |
| SCIP notification number (Hungary)        | aeb517c-53e1-49c6-92eb-35dfca133e3d       |
| SCIP notification number (Italy)          | f097ee59-f448-4008-846d-aba84e978365      |
| SCIP notification number (Netherlands)    | 7d818246-30f1-4efe-9272-948b977175dd      |
| SCIP notification number (Poland)         | 290692d8-ce73-4889-9b83-41f60130bc6b      |
| SCIP notification number (Romania)        | 0b8520d9-862d-44b6-a515-1e73c7921e93      |
| SCIP notification number (Sweden)         | 0301fe30-23de-42aa-9574-54a072bf4a1f      |

### Approvals / Certificates

#### General approvals



| Approval                                                     | Standard               | Certificate Name    |
|--------------------------------------------------------------|------------------------|---------------------|
| EAC<br>GZO Almaty Standart                                   | TP TC 020/2011         | EAC CoC 03083       |
| KC<br>National Radio Research<br>Agency                      | Article 58-2, Clause 3 | MSIP-REM-W43-DIM750 |
| UL<br>Underwriters Laboratories<br>Inc. (ORDINARY LOCATIONS) | UL 508                 | E175199             |

#### Declarations of conformity and manufacturer's declarations

| Approval                                           | Standard | Certificate Name |
|----------------------------------------------------|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

Approvals for marine applications



| Approval                                                        | Standard               | Certificate Name  |
|-----------------------------------------------------------------|------------------------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping                         | -                      | 22-2219060        |
| BSH<br>Bundesamt fuer See-<br>schifffahrt und Hydrogra-<br>phie | -                      | 1104              |
| 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/1101/880590/23 |
| RINA<br>RINA Germany GmbH                                       | -                      | ELE343521XG001    |

Approvals for hazardous areas



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

Downloads

Environmental Product Compliance

| Compliance Search                                          |
|------------------------------------------------------------|
| Environmental Product Compliance 750-437 <a href="#">↓</a> |

Documentation

| Manual                                 |                       |                   |                   |
|----------------------------------------|-----------------------|-------------------|-------------------|
| Product Manual 8-channel, 24VDC, 0.2ms | V 2.0.0<br>07.09.2022 | pdf<br>2771.80 KB | <a href="#">↓</a> |
| System Manual Series 750/753           |                       |                   | <a href="#">↓</a> |

| System Description                                      |  |                  |                   |
|---------------------------------------------------------|--|------------------|-------------------|
| 750/753 Series I/O-System – General Product Information |  | pdf<br>953.35 KB | <a href="#">↓</a> |
| Overview on WAGO-I/O-SYSTEM 750 approvals               |  | pdf<br>770.48 KB | <a href="#">↓</a> |

| Bid Text |            |                 |                   |
|----------|------------|-----------------|-------------------|
| 750-437  | 19.02.2019 | xml<br>3.84 KB  | <a href="#">↓</a> |
| 750-437  | 12.07.2017 | doc<br>25.00 KB | <a href="#">↓</a> |

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

**CAD/CAE-Data**

| CAD data             |  | CAE data                  |  |
|----------------------|--|---------------------------|--|
| 2D/3D Models 750-437 |  | EPLAN Data Portal 750-437 |  |
|                      |  | WSCAD Universe 750-437    |  |
|                      |  | ZUKEN Portal 750-437      |  |

**Device Files**

| Device Driver                                      |                       |                   |  |
|----------------------------------------------------|-----------------------|-------------------|--|
| WAGO USB Service Kabel Treiber / Serie 750 und 857 | 6.5.3.0<br>10.09.2014 | zip<br>4721.96 KB |  |

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 DIN-rail**

**1.1.1.1 Mounting accessories**

|                                                                                                                                                              |                                                                                                                                                       |                                                                                                                                                      |                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Item No.: 210-196</b><br/>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored</p>               | <p><b>Item No.: 210-198</b><br/>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored</p>         | <p><b>Item No.: 210-508</b><br/>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored</p> | <p><b>Item No.: 210-197</b><br/>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored</p>                     |
| <p><b>Item No.: 210-506</b><br/>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored</p>       | <p><b>Item No.: 210-114</b><br/>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored</p>            | <p><b>Item No.: 210-118</b><br/>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored</p>         | <p><b>Item No.: 210-115</b><br/>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</p> |
| <p><b>Item No.: 210-112</b><br/>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</p> | <p><b>Item No.: 210-504</b><br/>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored</p> | <p><b>Item No.: 210-113</b><br/>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored</p>          | <p><b>Item No.: 210-505</b><br/>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored</p>      |

**1.1.2 Marking**

**1.1.2.1 Group marker carrier**

|                                                          |
|----------------------------------------------------------|
| <p><b>Item No.: 750-107</b><br/>Group marker carrier</p> |
|----------------------------------------------------------|

1.1.2.2 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

1.1.2.3 Marker carrier



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

1.1.3 Shield termination

1.1.3.1 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

### 1.1.4 Supply module

#### 1.1.4.1 Supply module



**Item No.: 750-612**

Power Supply; 0 ... 230 V AC/DC



**Item No.: 750-602**

Power Supply; 24 VDC



**Item No.: 750-601**

Power Supply; 24 VDC; fuse holder



**Item No.: 750-610**

Power Supply; 24 VDC; fuse holder; Diagnostics

### 1.1.5 System enclosure

#### 1.1.5.1 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); 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



**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