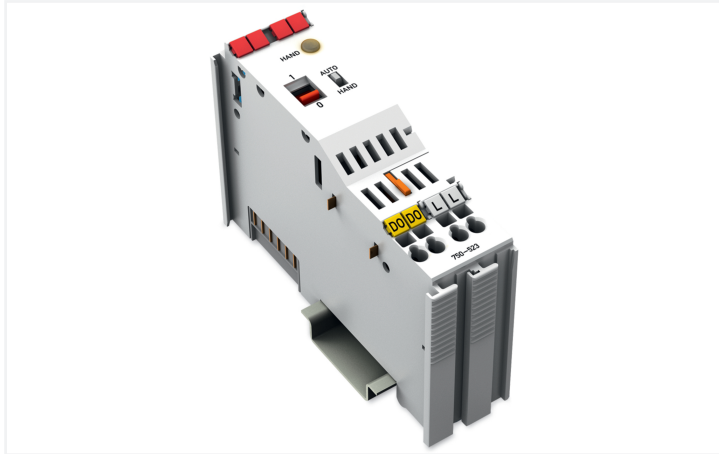


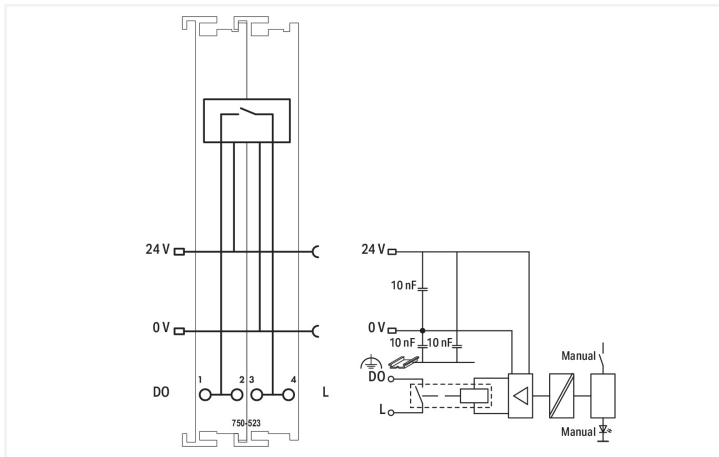
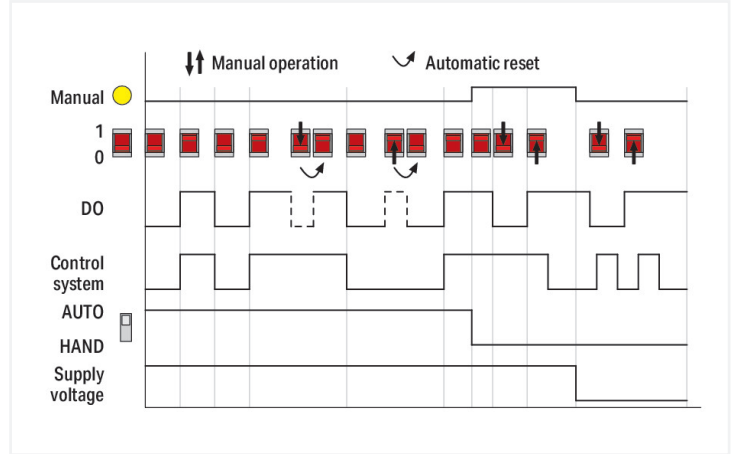
## Data Sheet | Item Number: 750-523

1-channel relay output; AC 250 V; 16 A; Potential-free; 1 make contact

<https://www.wago.com/750-523>



Color: ■ light gray



Switchable lamp loads; 100000 operations / 30000 operations:

Incandescent lamp; 1.25 kW / 2.5 kW

Fluorescent lamp, not compensated; 1.2 kW / 2.5 kW

Fluorescent lamp, parallel compensated; 650 W/70 µF / 1.3 kW/140 µF

Fluorescent lamp, dual circuit; 2 x 1.2 kW / 2 x 2.5 kW

Halogen lamp (230 VAC); 1.2 kW / 2.5 kW

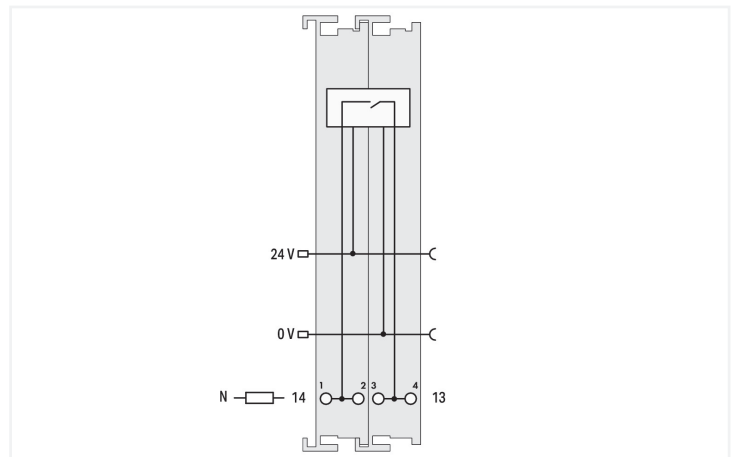
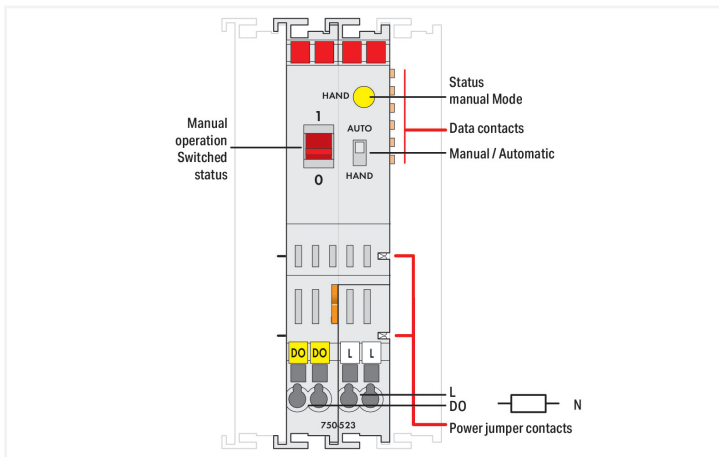
Low voltage halogen lamp with transf.; 500 VA / 500 VA

Mercury arc/Sodium discharge lamp, not compensated; 1 kW / 2 kW

Mercury arc/Sodium discharge lamp, parallel compensated; 1 kW/70 µF / 2 kW/140 µF

Dulux lamp, not compensated; 800 W / 1.6 kW

Dulux lamp, parallel compensated; 560 W/70 µF / 1.1 kW/140 µF



This relay module switches a connected actuator or load. The 24 VDC supply is derived from the power jumper contacts to trigger the relays. The switched status of the relay is shown by the manual switch (1/0). The operating mode can be set using a manual/automatic selector switch. The mode status is indicated by an LED and via status bits in the process image.

Manual: Coil triggering is interrupted. Operation is only possible via the red manual operating switch.

Auto: The relay is operated via the control system. Manual status changeover via manual operating switch is canceled by the control system in less than 500 ms. The manual switch can also be used without 24 V supply to switch the output ON.

The relay meets both international standards of IEC and DIN EN 61810 part 1 /VDE 0435 part 201, as well as overload and short circuit requirements of IEC and

DIN EN 61036 /61037.

### Technical data

|                                                                  |                                                                                                                                                      |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of digital outputs                                        | 1                                                                                                                                                    |
| Total number of channels (module)                                | 1                                                                                                                                                    |
| Signal type                                                      | Digital                                                                                                                                              |
| Actuator connection                                              | 1 x (1-wire)                                                                                                                                         |
| Output circuit design                                            | 1 make contact<br>Relay                                                                                                                              |
| Output characteristic                                            | potential-free                                                                                                                                       |
| Switching voltage (max.)                                         | 440 VAC                                                                                                                                              |
| Switching current (max.)                                         | 16 A                                                                                                                                                 |
| Switching power                                                  | max. 5 kVA                                                                                                                                           |
| Mechanical life                                                  | 10 <sup>6</sup>                                                                                                                                      |
| Input data width (internal) max.                                 | 2 bits                                                                                                                                               |
| Output data width (internal) max.                                | 2 bits                                                                                                                                               |
| Supply voltage (system)                                          | 5 VDC; via data contacts                                                                                                                             |
| Current consumption (system supply)                              | 5 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) |
| Current consumption, field supply (module with no external load) | 80 mA                                                                                                                                                |
| Isolation                                                        | 1500 V (system/field)                                                                                                                                |
| Indicators                                                       | LED yellow: Manual mode                                                                                                                              |
| 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: I/O      | 4 x CAGE CLAMP® (outputs)                    |
| Connectable conductor materials | Copper                                       |
| Connection type                 | Output                                       |
| 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                    | 8 ... 9 mm / 0.31 ... 0.35 inches            |

### Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 24 mm / 0.945 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          | 2.453 MJ                     |
| Weight             | 101.2 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) |
| PU (SPU)              | 1 pcs           |
| Packaging type        | Box             |
| Country of origin     | DE              |
| GTIN                  | 4045454495428   |
| Customs tariff number | 85371098990     |

| Product Classification |                      |
|------------------------|----------------------|
| UNSPSC                 | 39122334             |
| eCl@ss 10.0            | 27-24-26-04          |
| eCl@ss 9.0             | 27-24-26-04          |
| ETIM 9.0               | EC001599             |
| ETIM 10.0              | EC001599             |
| ECCN                   | NO US CLASSIFICATION |

| Environmental Product Compliance   |                                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------|
| CAS-No.                            | 1303-86-2<br>1317-36-8<br>7439-92-1<br>79-94-7                                                |
| REACH Candidate List Substance     | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol<br>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) | 7896f890-eea5-4c2f-be59-494360e0c875                                                          |
| SCIP notification number (Belgium) | 310ed1f6-1c90-4a40-b3a3-528ee237032b                                                          |



| Environmental Product Compliance          |                                      |
|-------------------------------------------|--------------------------------------|
| SCIP notification number (Bulgaria)       | 25fe0bdb-607c-4238-8c3f-c1e020dfd678 |
| SCIP notification number (Czech Republic) | 0d22a6b8-d446-4ce8-a970-148852ada053 |
| SCIP notification number (Denmark)        | 29a3259a-d00b-4b3d-a2be-23e115912ea2 |
| SCIP notification number (Finland)        | ff6450bd-1acb-49b8-8483-3304819631d8 |
| SCIP notification number (France)         | a4cd2bc1-7786-40aa-89bc-c8ceca5dd089 |
| SCIP notification number (Germany)        | 98eda6a7-4c43-40a8-9c7b-c06cae038357 |
| SCIP notification number (Hungary)        | 8e2f7d78-defe-4fb0-ae11-b8431979c52a |
| SCIP notification number (Italy)          | 8920521c-c365-4137-9efb-19990f05b5cc |
| SCIP notification number (Netherlands)    | 66e29eaa-0881-4d7b-b642-cf03b097d4ee |
| SCIP notification number (Poland)         | ea3fb37b-afca-4e9d-8d83-f4dd28f9c5ab |
| SCIP notification number (Romania)        | 2c87f391-0175-4c9e-88cc-b9dc97021b8e |
| SCIP notification number (Sweden)         | 56e1323f-ff8f-487f-83a7-37ab0e17dbc8 |

Approvals / Certificates

General approvals

EAC

EAC

KC

UL

| Approval                                                  | Standard               | Certificate Name    |
|-----------------------------------------------------------|------------------------|---------------------|
| EAC<br>GZO Almaty Standart                                | TP TC 004/2011         | EAC CoC 03080       |
| EAC<br>GZO Almaty Standart                                | TP TC 020/2011         | EAC CoC 03083       |
| KC<br>National Radio Research Agency                      | Article 58-2, Clause 3 | MSIP-REM-W43-DOM750 |
| UL<br>Underwriters Laboratories 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 | -        | -                |

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

| Approvals for marine applications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      | Approvals for hazardous areas                                                                  |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------|------------------|
| <div></div> |                      | <div></div> |                  |
| Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Standard             | Certificate Name                                                                               | Certificate Name |
| ABS<br>American Bureau of Shipping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -                    | 25-0415412                                                                                     |                  |
| BSH<br>Bundesamt fuer Seeschifffahrt und Hydrographie                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -                    | 1104                                                                                           |                  |
| BV<br>Bureau Veritas S.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -                    | 30389/C0 BV                                                                                    |                  |
| DNV<br>DNV GL SE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DNV-CG-0339,Aug.2021 | TAA0000194                                                                                     |                  |
| KR<br>Korean Register of Shipping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -                    | KR HMB05880-AC001                                                                              |                  |
| LR<br>Lloyds Register EMEA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -                    | LR22180952TA                                                                                   |                  |
| PRS<br>Polski Rejestr Statków                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -                    | TE/1101/880590/23                                                                              |                  |
| RINA<br>RINA Germany GmbH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -                    | ELE343521XG001                                                                                 |                  |



Downloads

Environmental Product Compliance

| Compliance Search                        |  |  |                   |
|------------------------------------------|--|--|-------------------|
| Environmental Product Compliance 750-523 |  |  | <a href="#">↓</a> |

Documentation

| Manual                                  |         |                  |                   |
|-----------------------------------------|---------|------------------|-------------------|
| Product Manual 1-channel, 230VAC, 1A AC | V 1.0.5 | pdf<br>292.08 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                |            |                 |                   |
|-------------------------|------------|-----------------|-------------------|
| 750-523                 | 11.07.2017 | doc<br>29.50 KB | <a href="#">↓</a> |
| 750-523                 | 19.02.2019 | xml<br>5.34 KB  | <a href="#">↓</a> |
| ausschreiben.de 750-523 |            |                 | <a href="#">↓</a> |

CAD/CAE-Data

| CAD data             |                   |
|----------------------|-------------------|
| 2D/3D Models 750-523 | <a href="#">↓</a> |

| CAE data                  |                   |
|---------------------------|-------------------|
| EPLAN Data Portal 750-523 | <a href="#">↓</a> |
| WSCAD Universe 750-523    | <a href="#">↓</a> |
| ZUKEN Portal 750-523      | <a href="#">↓</a> |

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 | <a href="#">↓</a> |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 DIN-rail

##### 1.1.1.1 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.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored


**Item No.: 210-114**

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.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

#### 1.1.2 Marking

##### 1.1.2.1 Group marker carrier


**Item No.: 750-107**

Group marker carrier

##### 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); Wx-HxD (160x100x160 mm); 9 x M12, 4 x M20



#### Item No.: 850-826

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



#### Item No.: 850-827

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



#### Item No.: 850-828

IP65 enclosure; Aluminium (RAL 7032); Wx-HxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



#### Item No.: 850-826/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



#### Item No.: 850-827/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



#### Item No.: 850-828/002-000

IP65 enclosure; Aluminium (RAL 7035); Wx-HxD (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); Wx-HxD (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); Wx-HxD (200x120x200 mm); without flange plate



#### Item No.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (300x120x200 mm); without flange plate



#### Item No.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (400x120x200 mm); without flange plate



#### Item No.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); Wx-HxD (600x120x200 mm); without flange plate