Enclosures

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- Elevator Control Stations (DIR) page 612
- Insulated Plastic Enclosures (IRL) page 613
- Equipped Insulated Plastic Enclosures (IRF) page 614
**Equipped Stainless Steel Enclosure**

**Stainless Steel Enclosure with 2 illuminated pushbuttons also suitable for hygienic applications**

- **Mounting hole diameter:** Ø 4.3mm
- **Actuators:** 2 pushbutton heads ref.RRJVAFT
- **Contacts:** 1 ea. inverter
- **Operating temperature:** -30 °C ... +65 °C
- **Storage temperature:** -50 °C ... +85 °C
- **Connection:** 8-pole M12 female connector
- **Rated voltage:** 1 V ... 30/36 V /AC/DC
- **Rated current:** 0.01 mA ... 100 mA
- **LED rated voltage:** 24 V / AC/DC
- **LED rated current:** 7 /15 mA

Other versions on request:
- **Mounting holes:** 2
- **Equipped:** Yes
- **Panel cut-out:** Ø 22.3 mm
- **Colour:** Stainless steel, brushed finish

**Type:** SVAB22/2_01
Equipped Stainless Steel Enclosure

S4

General Data
Type Reference: S41_01; S42_02; S43_03
Description: Equipped Stainless Steel Enclosure
Approvals: CE emerg.stop, pos.1: 2NC pushbuttons, pos.2/3: 1NO each
IP54 M12 8 poles [m] emerg.stop: pin 1-2 NC1; pin 3-4: NC2 pushbutton: pin 5-6: NO
Contact material: AgNi, gold-plated
Max. storage temperature: -25°C ... 80°C
Max. operating temperature: -25°C ... 70°C
Mechanical life: emerg.stop: 50,000 pushbutton: 1m
Electrical life: emerg.stop: 50,000 pushbutton: 1m
Positive opening contact: < 10ms acc. to EN 60947-5-1, appendix. K (emerg. stop)

General Data
Rated impulse voltage: 800 V (M12 connector)
Positive opening travel: > 3 mm
Release: twist release, left or right (E-stop)
Standards: EN 60947-5-1, EN 60947-5-5, EN ISO 13850

Electrical Features
Operational voltage: 1 V ... 24 V (UL: 30 VDC, 50 mW max)
Operational current: 1 mA ... 250 mA

Note
emerg. stop in stainless steel enclosure emerg. stop and 1 pushbutton in stainless steel enclosure emerg. stop and 2 pushbuttons in stainless steel enclosure
Mounting: fastening clip on top/at the bottom (incl. T-shaped sliding block)
Emerg. stop: FRVKOO_AU (2 NC)
Pushbuttons: SSWTI (1 NO) incl. set of lenses (all colours), without nameplate

Approvals:
emerg. stop: TÜV, UR
Pushbuttons: CCC, VDE, ENEC 10
Equipped Stainless Steel Enclosure

S4

### General Data
- **Type Reference:** S44_04; S45_05; S46_06
- **Illuminated pushbuttons:** S42_08; S43_07; S44_09; S45_10, S46
- **Equipped Stainless Steel Enclosure**
- **Description:**
- **Approvals:** CE
- **Nature of contact:** emerg.stop, pos. 1: 2NC pushbuttons, pos.2...6: 1NO each (optional: with illumination)
- **Degree of protection:** IP54
- **Connection type:** Faston terminals 2.8x0.8 mm
- **Contact material:** AgNi
- **Max. storage temperature:** -25°C ... 80°C
- **Max. operating temperature:** -25°C ... 70°C
- **Mechanical life:** emerg.stop: 50,000 pushbutton: 1m emerg.stop: 50,000 pushbutton: 1m
- **Bouncing time NO:** < 10ms
- **Bouncing time NC:** < 10ms
- **Positive opening contact:** acc. to EN60947-5-1, appendix. K (emerg.stop)

### Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)
- **Utilisation category:** AC15 DC13
- **Rated operating voltage Ue:** 24V 24V
- **Rated operating current Ie:** 3A 2A
- **Breaking capacity:** 10le 1,1le
- **Continuous thermal current:** 5A

### Technical Data - Lamp
- **Lamp socket:** integrated 3 mm LED (applies only to illuminated types)
- **Max. lamp voltage:** 30 V AC/DC
- **Max. lamp output:** 14mA (at 24 V DC)
- **Definition:** X1...anode, X2...cathode

### General Data
- **Positive opening travel:** > 3 mm
- **Release:** twist release, left or right (E-stop)
- **Standards:** EN 60947-5-1, EN 60947-5-3, EN ISO 13850

### Note
- emerg.stop and 3 pushbuttons in stainless steel enclosure, glanded
- emerg.stop and 4 pushbuttons in stainless steel enclosure, glanded
- emerg.stop and 5 pushbuttons in stainless steel enclosure, glanded
- emerg.stop and 2 illuminated pushbuttons in stainless steel enclosure, glanded emerg. stop and 1 illuminated pushbutton in stainless steel enclosure, glanded emerg. stop and 3 illuminated pushbuttons in stainless steel enclosure, glanded

### Mounting:
- fastening clip on top/at at the bottom (incl. T-shaped sliding block)
- Mounting:
- Cable gland:
- Emerg. stop:
- Pushbuttons:
  - SSWTI (1 NO) incl. set of lenses (all colours), without nameplate or SSWTLI (1 NO, illuminated) incl. set of lenses (all colours), without nameplate

### Approvals:
- emerg.stop: TÜV, UR
- Pushbuttons: CCC, VDE, ENEC 10

Use partially or fully insulated Faston clamps

The user has to make sure that the contact blocks mounted in the enclosure are properly connected in order to comply with the requirements regarding clearance and creepage distances in normal use.

### Data Sheet
- **art.no.:** 615403902

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# Equipped Stainless Steel Enclosure

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>593 x 450</td>
<td><strong>Equipped Stainless Steel Enclosure with M12 cable entry (8 poles) for profile rail mounting</strong>&lt;br&gt;1 emergency stop FRVKOO&lt;br&gt;1 pushbutton SSWTI&lt;br&gt;incl. lenses (clear, red, green, yellow, blue)&lt;br&gt;mounting holes 2&lt;br&gt;equipped Yes&lt;br&gt;colour stainless steel, brushed finish</td>
<td>S41_01</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>450 x 360</td>
<td><strong>Equipped Stainless Steel Enclosure with M12 cable entry (8 poles) for profile rail mounting</strong>&lt;br&gt;2 pushbuttons SSWTI&lt;br&gt;incl. lenses (clear, red, green, yellow, blue)&lt;br&gt;mounting holes 3&lt;br&gt;equipped Yes&lt;br&gt;colour stainless steel, brushed finish</td>
<td>S43_03</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>360 x 270</td>
<td><strong>Equipped Stainless Steel Enclosure with M12 cable entry (8 poles) for profile rail mounting</strong>&lt;br&gt;1 emergency stop FRVKOO&lt;br&gt;1 pushbutton SSWTI&lt;br&gt;incl. lenses (clear, red, green, yellow, blue)&lt;br&gt;mounting holes 2&lt;br&gt;equipped Yes&lt;br&gt;colour stainless steel, brushed finish</td>
<td>S42_02</td>
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</table>
Equipped Stainless Steel Enclosure

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<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>594 x 150</td>
<td>Equipped Stainless Steel Enclosure, glanded for profile rail mounting</td>
<td></td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>1 emergency stop FRVKOO 3 pushbuttons SSWTI incl. lenses (clear, red, green, yellow, blue) mounting holes 4 equipped Yes colour stainless steel, brushed finish</td>
<td>S44.04</td>
<td></td>
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<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>594 x 150</td>
<td>Equipped Stainless Steel Enclosure, glanded for profile rail mounting</td>
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</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>1 emergency stop FRVKOO 4 pushbuttons SSWTI incl. lenses (clear, red, green, yellow, blue) mounting holes 5 equipped Yes colour stainless steel, brushed finish</td>
<td>S45.05</td>
<td></td>
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<tr>
<td><img src="image5.png" alt="Image" /></td>
<td>594 x 150</td>
<td>Equipped Stainless Steel Enclosure, glanded for profile rail mounting</td>
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</tr>
<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>1 emergency stop FRVKOO 4 pushbuttons SSWTI incl. lenses (clear, red, green, yellow, blue) mounting holes 6 equipped Yes colour stainless steel, brushed finish</td>
<td>S46.06</td>
<td></td>
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</table>
## Insulated Plastic Enclosures

**SIL**... enclosures with M12 connection and special assemblies on request.

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Insulated Plastic Enclosure with 1 mounting hole" /></td>
<td>595 x 732</td>
<td>Insulated Plastic Enclosure with 1 mounting hole</td>
<td><strong>SIL16/1</strong></td>
</tr>
<tr>
<td><img src="image2" alt="Insulated Plastic Enclosure with 1 mounting hole" /></td>
<td>595 x 732</td>
<td>High Insulated Plastic Enclosure with 1 mounting hole</td>
<td><strong>SILH16/1</strong></td>
</tr>
<tr>
<td><img src="image3" alt="Insulated Plastic Enclosure with 1 mounting hole" /></td>
<td>595 x 732</td>
<td>Insulated Plastic Enclosure with 1 mounting hole</td>
<td><strong>SIL22/1</strong></td>
</tr>
<tr>
<td><img src="image4" alt="Insulated Plastic Enclosure with 1 mounting hole" /></td>
<td>595 x 732</td>
<td>High Insulated Plastic Enclosure with 1 mounting hole</td>
<td><strong>SILH22/1</strong></td>
</tr>
</tbody>
</table>

**Dimensions**
- Mounting holes 1
- Weight: 96 g, 104 g
- Cable entry: Break-through wall M20
- Mounting depth: 59 mm, 66 mm
- Panel cut-out: Ø 16.2 mm, Ø 22.3 mm
- Colour: Black bottom part/yellow cover
### General Data

<table>
<thead>
<tr>
<th>Type Reference:</th>
<th>MT... Modular Contact Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Modular Contact Block</td>
</tr>
<tr>
<td>Approvals:</td>
<td>CCC, CSA, ENEC05, KEMA, CE, TÜV_Sud, UL</td>
</tr>
<tr>
<td>Protection class:</td>
<td>II (protective insulation)</td>
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<tr>
<td>Operation travel:</td>
<td>6 mm</td>
</tr>
<tr>
<td>Connection type:</td>
<td>screw connection 2x2.5mm²</td>
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<tr>
<td>Contact material:</td>
<td>AgNi</td>
</tr>
<tr>
<td>Max. storage temperature:</td>
<td>-30°C ... 85°C</td>
</tr>
<tr>
<td>Max. operating temperature:</td>
<td>-30°C ... 55°C, using incandescent lamps</td>
</tr>
<tr>
<td>Contact resistance NO:</td>
<td>&lt; 20 mOhm</td>
</tr>
<tr>
<td>Min. current:</td>
<td>1 mA (under laboratory conditions)</td>
</tr>
<tr>
<td>Min. voltage:</td>
<td>5 V</td>
</tr>
<tr>
<td>Bouncing time NO:</td>
<td>&lt; 10 ms</td>
</tr>
<tr>
<td>Bouncing time NC:</td>
<td>&lt; 10 ms</td>
</tr>
<tr>
<td>Positive opening contact:</td>
<td>acc. to EN60947-5-1, appendix. K</td>
</tr>
</tbody>
</table>

#### Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

| Utilisation category: | AC15 A600 / DC13 Q600 |
| Rated insulation voltage Ui: | 600 V / 440V |
| Rated operating voltage Ue: | 240V / 440V |
| Rated operating current Ie: | 3A / 1.6A |
| Continuous thermal current: | 10A |

#### Electrical data acc. to IEC/EN 61058-1 (VDE 0630 Sect. 1)

| Rated voltage Ue: | 250 V~ / 440 V~ |
| Rated current Ie: | 16(A) / 10(A) |

#### Technical Data - Lamp

| Lamp socket: | BA9s |
| Max. lamp voltage: | 250 V / (CSA max. 150V) |
| Max. lamp output: | 2 W |
| Definition: | X1...anode, X2...cathode |

#### Electrical Features - 5μm gold-plating, type addition ...AU

| Switching voltage: | 20mV ... 42V AC/DC |
| Switching current: | 1mA ... 250mA |
| Contact resistance (new state): | < 50 mOhm |

#### General Data

| Tightening torque (screw terminal): | 0.8...1.0 Nm |

#### Note

- Min. operating temperature when assembled with KRJ...actuators: -40°C ...;
- Data Sheet does not apply to the following type: MTOSFE

#### Electrical Data acc. to UL 508

| Ratings: | A600, 600 V AC |
# Equipped Insulated Plastic Enclosures

**SIL...enclosures with M12 connection and special assemblies on request**

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
</table>
| ![Emergency-stop Control Station](image) | | *Emergency-stop Control Station*  
with switching position indicator and yellow anti-lock collar, twist release,  
acc. to EN ISO 13850, VDE 0660, sect.200,  
IEC/EN 60947-5-1 and IEC/EN 60947-5-5  
For technical data on the appropriate contact blocks refer to previous page.  
Mounting hole dia. 4.2 mm  
equipped Yes  
cable entry break-through wall M20  
Contact equipment 2NC  
colour black bottom part/yellow cover | **SIL_QRBUVOO** |
| ![Emergency-stop Control Station, illuminated](image) | | *Emergency-stop Control Station, illuminated*  
with switching position indicator and yellow illuminated anti-lock collar, twist release,  
acc. to EN ISO 13850, VDE 0660, sect.200,  
IEC/EN 60947-5-1 and IEC/EN 60947-5-5  
For technical data on the appropriate contact blocks refer to previous page.  
Mounting hole dia. 4.2 mm  
equipped Yes  
cable entry break-through wall M20  
Contact equipment 2NC  
colour black bottom part/yellow cover | **SIL_QRBLUVOO** |
| ![Emergency-stop Control station](image) | | *Emergency-stop Control station*  
with switching position indicator and yellow protective shroud, twist release,  
acc. to EN ISO 13850, VDE 0660, sect.200,  
IEC/EN 60947-5-1 and IEC/EN 60947-5-5  
For technical data on the appropriate contact blocks refer to previous page.  
Mounting hole dia. 4.2 mm  
NOTE: The user must ensure the emergency stop with protective shroud to be easy accessible!  
equipped Yes  
cable entry break-through wall M20  
Contact equipment 2NC  
colour black bottom part/yellow cover | **SIL_QRSKUVOO** |
| ![Emergency-stop Control Station for hygienic application](image) | | *Emergency-stop Control Station for hygienic application*  
twist release E-stop, compliant to BG acc. to DIN EN 1672-2 and GS-FW 01/01  
For technical data on the appropriate contact blocks refer to previous page.  
Mounting hole dia. 4.2 mm  
equipped Yes  
cable entry break-through wall M20  
Contact equipment 2NC  
colour black bottom part/yellow cover | **SIL_QRUVPOO** |
## General Data

<table>
<thead>
<tr>
<th>Type Reference:</th>
<th>ASI_SAW16A, ASI_SAW16E, ASI_SAW22A, ASI_SAW22E, AS-Interface Slave (Safety at Work)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>ASI_SAWxxA, S7.B.E, ASI_SAWxxE, S0.B.E</td>
</tr>
<tr>
<td>Approvals:</td>
<td>&lt; 1s</td>
</tr>
<tr>
<td></td>
<td>via 2-pole IDC connector (3.96mm) with lock mechanism and strain relief</td>
</tr>
<tr>
<td></td>
<td>via integrated connector or separate addressing connector *)</td>
</tr>
</tbody>
</table>

### Note

**Communication**
- AS-Interface specification: V 2.1
- Slave profile: ASI_SAWxxA S7.B.E, ASI_SAWxxE S0.B.E
- Standby delay time: < 1s
- Input delay: < 5ms
- Connection: via 2-pole IDC connector (3.96mm) with lock mechanism and strain relief
- Addressing: via integrated connector or separate addressing connector *)

**Ambient Conditions**
- Operating temperature: -25 °C ...+70 °C
- Humidity: up to 95%, non-condensing
- Degree of protection /slave: IP20
- Pollution degree: 2 (acc. to IEC 60947-1)

**Electrical Data**
- Operating voltage: 26.5...3.6 V, through the AS-Interface line
- Total power consumption: ASI_SAWxxA: <= 60 mA, ASI_SAWxxE: <= 50 mA
- Reverse polarity protection: available
- Contacts: two positive opening contacts acc. to IEC60947-5-5
- Safety integrity level: SIL 3
- Output (not safe): for the control of a LED *)
  - Rated voltage: 24 V DC (+10%)
  - Max. power consumption: approx. 15mA
  - Short circuit/overload: LED output
  - Connection cable: type ref.: "VK_JST025BKL", "VK_JST034"

**Norms and Standards**
- Complete AS-Interface Specification, Version 2.11 Rev.1, V3.0 Rev. 0
- IEC 62026-2, IEC 60204-1, IEC 61508, EN 13850, IEC 60947-5-5
- TÜV Type Approval, UL/CSA Approval
- AS-Interface Certificate 62801

*) refers only to types ASI_SAW16A, ASI_SAW22A (with additional addressing connector)
Equipment Insulated Plastic Enclosures

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<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
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</thead>
</table>
| ![Image](image1) | AS-Interface Emergency-stop Control Station | **- Safety at Work -**
ASI slave: ASI_SAW22E
actuator: QRBUV, foolproof acc. to EN ISO 13850
Connection: M12 (4 poles)
equipped: Yes
Contact equipment: bus-compatible
colour: black bottom part/yellow cover
| SILH ASIE QRBUV |
| ![Image](image2) | AS-Interface Emergency-stop Control Station, illuminated | **- Safety at Work -**
ASI slave: ASI_SAW22A
actuator: QRBLUV, foolproof acc. to EN ISO 13850
Connection: M12 (4 poles)
equipped: Yes
Contact equipment: bus-compatible
colour: black bottom part/yellow cover
| SILH ASI QRBLUV |
| ![Image](image3) | AS-Interface Emergency-stop Control Station | **- Safety at Work -**
ASI slave: ASI_SAW22E
actuator: QRUVP for hygienic application, (compliant with BG acc. to DIN EN 1672-2 and GS-FW 01/01)
foolproof acc. to EN ISO 13850
Connection: M12 (4 poles)
equipped: Yes
Contact equipment: bus-compatible
colour: black bottom part/yellow cover
| SILH ASIE QRUVP |
| ![Image](image4) | AS-Interface Emergency-stop Control Station | **- Safety at Work -**
ASI slave: ASI_SAW22E
actuator: QRSKUV, foolproof acc. to EN ISO 13850
Connection: M12 (4 poles)
equipped: Yes
Contact equipment: bus-compatible
colour: black bottom part/yellow cover
| SILH ASIE QRSKUV |
Minibox with Cable Entry M16/M20 for profile rail or wall mounting

**General Data - Contact Module**
- Operating temperature: -25°C ... 70°C
- Storage temperature: -40°C ... 85°C
- Vibration / shock resistance: acc. to EN 60068-2-6/-27
- Environmental conditions: acc. to EN 60068-2

**Technical Data - Switch Element**
- Ratings (gold-plated contacts): 20mV...42V AC/DC
  1mA...250mA
- Ratings (silver contacts) non-illuminated:
  AC15 B300 250V/1.5A, Ith 5A
  DC13 Q300, 250V/0.27A
- Electrical life (rated load): 50,000
- Positive opening contact: EN 60947-5-1, app. K

**Technical Data - LED**
- Operating voltage: 24V DC
- Power consumption: max. 15 mA (at 24 V DC)

Using the fastening clip, the minibox can be mounted both on a profile rail or on a wall.

**Assembly sequence using the example of profile rail mounting with lateral cable entry (not M12 version)**

1. > screw down mounting clip  
2. > attach lower box part  
   > insert cable  
   > contact wire ends  
   > snap in PC board  
3. > snap on upper box part  
4. > ready
### Equipped Insulated Plastic Enclosures

#### minibox

<table>
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<th>Type</th>
</tr>
</thead>
</table>
| ![minibox with lateral cable entry M16](image1) | 26.10 x 2.30 | **minibox with lateral cable entry M16**  
illuminated emergency-stop pushbutton | MBP_FRVKLOO |
| ![minibox with lateral cable entry M16](image2) | 26.10 x 2.30 | **minibox with lateral cable entry M16**  
illuminated emergency-stop pushbutton | MBP_FRVKOO |
| ![minibox with bottom-side cable entry M20](image3) | 26.10 x 2.30 | **minibox with bottom-side cable entry M20**  
illuminated emergency-stop pushbutton | MBW_FRVKLOO |
| ![minibox with bottom-side cable entry M20](image4) | 26.10 x 2.30 | **minibox with bottom-side cable entry M20**  
illuminated emergency-stop pushbutton | MBW_FRVKOO |

- **Equipped Insulated Plastic Enclosures**
- **minibox**

**Illustration**:  
- minibox with lateral cable entry M16  
- minibox with lateral cable entry M16  
- minibox with bottom-side cable entry M20  
- minibox with bottom-side cable entry M20

**Dimensions**:  
- 26.10 x 2.30

**Description**:  
- **minibox with lateral cable entry M16**  
  - illuminated emergency-stop pushbutton
- **minibox with lateral cable entry M16**  
  - illuminated emergency-stop pushbutton
- **minibox with bottom-side cable entry M20**  
  - illuminated emergency-stop pushbutton
- **minibox with bottom-side cable entry M20**  
  - illuminated emergency-stop pushbutton

**Type**:  
- MBP_FRVKLOO
- MBP_FRVKOO
- MBW_FRVKLOO
- MBW_FRVKOO

**Contact Information**:  
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  - Fax: +49 (0) 73 71 / 502 49  
  - info@schlegel.biz  
  - www.schlegel.biz
## Equipped Insulated Plastic Enclosures

### minibox

#### Equipped Insulated Plastic Enclosures
ready-to-connect, M12 connection

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<tbody>
<tr>
<td><img src="image" alt="minibox with M12 cable entry (4 poles)" /></td>
<td></td>
<td>minibox with M12 cable entry (4 poles)</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="minibox with M12 cable entry (8 poles)" /></td>
<td></td>
<td>minibox with M12 cable entry (8 poles)</td>
<td></td>
</tr>
</tbody>
</table>

**Operating temperature:** -25 °C...+70 °C

**Storage temperature:** -25 °C...+85 °C

**Connection:** M12, 4 poles [m]

**Contact material:** AgNi

**Electrical life:** 50,000 at rated load

**Positive opening:** acc. to EN 60947-5-1, appendix K

**Test voltage M12 plug:** 2.0 kV

**Electrical Data acc. to IEC/EN 60947-5-1 (VDE 0660 sect. 200):**

- **Utilisation category:** AC15, DC13
- **Rated operating voltage Ue:** 240V, 250V
- **Rated operating current Ie:** 1.5A, 0.27A
- **equipped:** Yes
- **colour:** dark-grey bottom part/yellow cover

**MBM124_FRVKOO**

**Operating temperature:** -25 °C...+70 °C

**Storage temperature:** -25 °C...+85 °C

**Connection:** M12, 8 poles [m]

**Contact material:** AgNi, gold-plating 5μm

**Electrical life:** 50,000 at rated load

**Positive opening:** acc. to EN 60947-5-1, appendix K

**Test voltage M12 plug:** 1.5 kV

**Electrical Data:**

- **Operating voltage:** 1V...36V
- **Operating current:** 1mA...250mA
- **equipped:** Yes
- **Contact equipment:** 1 NO + 2 NC (positive opening contacts)
- **colour:** dark-grey bottom part/yellow cover

**MBM128_FRVKOOI**
minibox with M12 cable entry (8 poles)
illuminated emergency-stop pushbutton

Operating temperature: -25 °C...+70 °C
Storage temperature: -25°C...+85 °C
Connection: M12, 8 poles [m]
Pin 1,2: NC 1; Pin 3,4: NC 2
Pin 5 [X1/+], Pin6 [X2/-]: LED; Pin 7,8: n.c.
Contact material: AgNi, gold-plated 5μm
Electrical life: 50.000 at rated load
Positive opening: acc. to EN 60947-5-1, appendix K
Test voltage M12 plug: 1.5 kV

Electrical Data
Operating voltage: 1V... 36V
Operating current: 1mA ... 250mA
LED lighting: max. 30 V AC/DC, type 4 mA (at 24 V DC)

equipped Yes
Contact equipment: 2NC, positive opening contact
colour: dark-grey bottom part/yellow cover

MBM128_ FRVKLOO
Equipped Insulated Plastic Enclosures
made in germany

minibox

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image_url" alt="Image" /></td>
<td></td>
<td>minibox with M12 cable entry (8 poles) incl. E-stop and pushbutton</td>
<td></td>
</tr>
</tbody>
</table>

Lenses and nameplates to be ordered separately.

- Operating temperature: -25°C...+70°C
- Storage temperature: -25°C...+85°C
- Switch type: emergency stop: 2 NC (positive opening), 1 NO Pushbutton: 1 NO
- Fixation: with fastening clip on the rear
- Connection: M12 8 poles (m)
  - Pos.1 (emergency stop) NC 1, pin 1-2; NC 2, pin 3-4;
  - NO, pin 5-6
  - Pos.2: (pushbutton) NO, Pin 7-8
- Contact material: AgNi, gold-plated 5μm
- Electr./mech. life: emergency stop: 50,000 at rated load (ambient temp. = 20°C) pushbutton: 1 million (ambient temp. = 20°C)
- Positive opening: opening contact acc. to EN 60947-5-1, appendix K
- Test voltage M12 plug: 1.5kV

**Electrical Data**

- Operating voltage: 1V...36V
- Operating current: 1mA...250mA
- equipped: Yes
- colour: dark-grey bottom part/yellow cover

MB128_NOOITI
## Equipped Insulated Plastic Enclosures

### minibox

**ready-to-connect, M12 connection**

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Illustration" /></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**minibox with 2 pushbuttons and M12 cable entry (8 poles)**

Lenses and nameplates to be ordered separately.

- **Operating temperature:** -25 °C...+70 °C
- **Storage temperature:** -25°C...+85 °C
- **Pushbutton type:** 1 NO and 1 NC (positive opening)
- **Fixation:** with fastening clip on the rear
- **Connection:** M12 8 poles (m)
  - Pos.1 (pushbutton)
  - NO, pin 1-2; lamp, pin 3-4;
  - Pos.2 (pushbutton); NC, pin 5-6;
  - lamp, pin 7-8
- **Contact material:** AgNi, gold-plated 5μm
- **Electrical life:** 1 million at rated load (ambient temp. = 20°C)
- **Mechanical life:** 1 million operations (ambient temp. = 20°C)
- **Positive opening:** NC contact acc. to EN 60947-5-1, appendix K
- **Test voltage M12 plug:** 1.5 kV

**Electrical Data**

- **Operating voltage:** 1V...36V
- **Operating current:** 1mA ... 250mA
- **LED illumination:** max. 30 V AC/DC, typ. 4 mA (at 24 V DC)
- **equipped** Yes
- **colour**
  - dark-grey bottom part/yellow cover
  - dark-grey bottom part/light-grey cover

**Type Index**

- MBM128_TLTLO
- MBM128_GR_TLTLO
Equipped Insulated Plastic Enclosures

minibox with 2 pushbuttons and M12 cable entry (4 poles)

Lenses and nameplates to be ordered separately.

- Operating temperature: -25 °C...+70 °C
- Storage temperature: -25°C...+85 °C
- Pushbutton type: 1 NO and 1 NC (positive opening)
- Fixation: with rear mounting clip
- Connection: M12 4 poles (m)
  Pos. 1 (pushbutton 1) NO, pin 1-2
  Pos. 2 (pushbutton 2) NC, pin 3-4
- Contact material: AgNi
- Mechanical life: 1 million (ambient temp. = 20°C)
- Positive opening: NC contact, acc. to EN 60947-5-1, appendix K
- Test voltage M12 plug: 2.0kV

Electrical Data acc. to IEC/EN 60947-5-1 (VDE 0660 sect. 200)

- Utilisation category: AC15   DC13
- Rated operating voltage Ue: 240V   250V
- Rated operating current Ie: 1.5A    0.27A
- equipped Yes
- colour dark-grey bottom part/yellow cover

MBM124_TITO
### Equipped Insulated Plastic Enclosures

**minibox** ready-to-connect, M12 connection

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="minibox with pushbutton and M12 cable entry (4 poles)" /></td>
<td></td>
<td>minibox with pushbutton and M12 cable entry (4 poles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lenses and nameplates to be ordered separately.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operating temperature: -25°C...+70°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage temperature: -25°C...+85°C</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Pushbutton type: 1 NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree of protection: IP65</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fixation: with rear mounting clip</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connection: M12 4 poles (m) NO, Pin 1-2 lamp, Pin 3 (X1 +) - Pin 4 (X2 -)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact material: AgNi</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical life: 1m (ambient temp. 20°C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bouncing time: &lt; 10ms</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Test voltage M12 plug: 2.0 kV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical Data - Contact Element acc. to IEC/EN 60947-5-1 (VDE 0660 sect. 200)</td>
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<td></td>
<td></td>
<td>Utilisation category: AC15 DC13</td>
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<tr>
<td></td>
<td></td>
<td>Rated operating voltage Ue: 240V / 120V 250V / 125V / 60V / 24V</td>
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<tr>
<td></td>
<td></td>
<td>Rated operating current Ie: 1.5A / 3A 0.27A / 0.55A / 1A / 2A</td>
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<tr>
<td></td>
<td></td>
<td>Breaking capacity: 10le 1.1le</td>
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<tr>
<td></td>
<td></td>
<td>Continuous thermal current: 4A (40°C) 2.5A</td>
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<tr>
<td></td>
<td>Electrical Data - diode LED:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>equipped Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour dark-grey bottom part/light-grey cover</td>
<td></td>
</tr>
</tbody>
</table>

![images](image)

Georg Schlegel GmbH & Co. KG - 88525 Dürmentingen - t +49 (0) 73 71 / 502-0 - Fax: +49 (0) 73 71 / 502 49 - info@schlegel.biz - www.schlegel.biz

MBM124_GR_TLI
## Insulated Plastic Enclosures

The degree of protection depends on the type of control units that are mounted. Other enclosure colours on request.

### Illustration

![Illustration of Insulated Plastic Enclosure](image)

### Dimensions

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Insulated Plastic Enclosure, 1 mounting hole</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>made of polyamide 6, empty or equipped, with front plate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(engraving, printing or laser marking on request)</td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions for fastening holes**

<table>
<thead>
<tr>
<th>Panel cut-out</th>
<th>Colour</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 16.2 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1V-R16</td>
</tr>
<tr>
<td>Ø 16.2 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VGB-R16</td>
</tr>
<tr>
<td>Ø 22.3 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1V-R22</td>
</tr>
<tr>
<td>Ø 22.3 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VGB-R22</td>
</tr>
<tr>
<td>Ø 30.5 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1VDHG-R30</td>
</tr>
<tr>
<td>Ø 30.5 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VDGGB-R30</td>
</tr>
<tr>
<td>23 x 23 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1V-Q23</td>
</tr>
<tr>
<td>23 x 23 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VGB-Q23</td>
</tr>
<tr>
<td>24 x 24 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1V-Q24</td>
</tr>
<tr>
<td>24 x 24 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VGB-Q24</td>
</tr>
<tr>
<td>26 x 26 mm</td>
<td>dark-grey bottom part/light-grey cover</td>
<td>DIRL1V-Q26</td>
</tr>
<tr>
<td>26 x 26 mm</td>
<td>dark-grey bottom part/yellow cover</td>
<td>DIRL1VGB-Q26</td>
</tr>
</tbody>
</table>
### Insulated Plastic Enclosures
The degree of protection depends on the type of control units that are mounted.

Other enclosure colours on request

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Illustration" /></td>
<td><em>Dimensions for fastening holes</em></td>
<td><strong>Insulated Plastic Enclosure, 2 mounting holes</strong>&lt;br&gt;made of polyamide 6, empty or equipped, with front plate (engraving, printing or laser marking on request)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>equipped</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>weight</td>
<td>270 g</td>
</tr>
<tr>
<td></td>
<td></td>
<td>material</td>
<td>polyamide 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cable entry</td>
<td>M20x1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting depth</td>
<td>69 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>without mounting hole</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>Ø 16.2 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>Ø 22.3 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>Ø 30.5 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>23 x 23 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>24 x 24 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mounting holes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel cut-out</td>
<td>26 x 26 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>colour</td>
<td>dark-grey bottom part/light-grey cover</td>
</tr>
</tbody>
</table>

**DIRL2-3V**
**DIRL2V-R16**
**DIRL2V-R22**
**DIRL3V-DGHG-2R30**
**DIRL2V-Q23**
**DIRL2V-Q24**
**DIRL2V-Q26**
Insulated Plastic Enclosures

The degree of protection depends on the type of control units that are mounted. Other enclosure colours on request.

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
</table>

**Insulated Plastic Enclosure, 3 mounting holes**

made of polyamide 6, empty or equipped, with front plate (engraving, printing or laser marking on request)

- **mounting holes**: 3
- **equipped**: No
- **weight**: 270 g
- **material**: PA6
- **cable entry**: M20x1.5
- **mounting depth**: 69 mm
- **Panel cut-out**: Ø 16.2 mm
- **colour**: dark-grey bottom part/light-grey cover

**DIRL3V-R16**

- **mounting holes**: 3
- **Panel cut-out**: Ø 22.3 mm
- **colour**: dark-grey bottom part/light-grey cover

**DIRL3V-R22**

- **mounting holes**: 3
- **Panel cut-out**: 23 x 23 mm
- **colour**: dark-grey bottom part/light-grey cover

**DIRL3V-Q23**

- **mounting holes**: 3
- **Panel cut-out**: 24 x 24 mm
- **colour**: dark-grey bottom part/light-grey cover

**DIRL3V-Q24**

- **mounting holes**: 3
- **Panel cut-out**: 26 x 26 mm
- **colour**: dark-grey bottom part/light-grey cover

**DIRL3V-Q26**
### Insulated Plastic Enclosures

The degree of protection depends on the type of control units that are mounted. Other enclosure colours on request.

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
</table>
| ![Insulated Plastic Enclosure, 3 resp. 4 mounting holes](image) | **Insulated Plastic Enclosure, 3 resp. 4 mounting holes**  
Made of polyamide 6, empty or equipped, with front plate (engraving, printing or laser marking on request)  
- **Weight**: No  
- **Material**: 310 g  
- **Polyamide 6**  
- **Cable entry**: M25x1.5  
- **Mounting depth**: 69 mm  
- **Panel cut-out**: without mounting hole  
- **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 4  
  - **Panel cut-out**: Ø 16.2 mm  
  - **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 4  
  - **Panel cut-out**: Ø 22.3 mm  
  - **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 3  
  - **Panel cut-out**: Ø 30.5 mm  
  - **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 4  
  - **Panel cut-out**: 23 x 23 mm  
  - **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 4  
  - **Panel cut-out**: 24 x 24 mm  
  - **Colour**: dark-grey bottom part/light-grey cover  
  - **Mounting holes**: 4  
  - **Panel cut-out**: 26 x 26 mm  
  - **Colour**: dark-grey bottom part/light-grey cover |
| ![High Insulated Plastic Enclosure, 4 mounting holes](image) | **High Insulated Plastic Enclosure, 4 mounting holes**  
Same as DIRL4V-R22 but with high lid, accepting 4 control units, each with two contact levels  
- **Mounting holes**: 4  
- **Material**: polyamide 6  
- **Cable entry**: M25x1.5  
- **Mounting depth**: 89 mm  
- **Panel cut-out**: Ø 22.3 mm  
- **Colour**: dark-grey bottom part/light-grey cover  |  
  | DIRL4V-R22-H |

*Dimensions for fastening holes*
## Equipped Insulated Plastic Enclosures

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
</table>
| ![DIRL Image](image1.png) | ![DIRL Dimensions](image2.png) | **Elevator Safety Control Station**
Insulated plastic enclosure made of polyamide 6, printed „STOP“, including 1 emergency-stop pushbutton with yellow arrow marking which clearly defines the switching position, 1 illuminated pushbutton for the hoistway lighting and a Schuko socket
- equipped: Yes
- cable entry: M25x1.5
- colour: dark-grey bottom part/yellow cover | DIR/GRU-I |
| ![DIRL Image](image3.png) | ![DIRL Dimensions](image4.png) | **Elevator Safety Control Station**
Insulated plastic enclosure made of polyamide 6, including 1 illuminated pushbutton for the hoistway lighting, 1 alarm pushbutton and a Schuko socket
- equipped: Yes
- cable entry: M25x1.5
- colour: dark-grey bottom part/light-grey cover | DIR/GRU-II |
| ![DIRL Image](image5.png) | ![DIRL Dimensions](image6.png) | **Elevator Safety Control Station**
Insulated plastic enclosure made of polyamide 6, printed „STOP“, including 1 emergency-stop pushbutton with yellow arrow marking which clearly defines the switching position, 1 illuminated pushbutton for the hoistway lighting, 1 alarm pushbutton and a Schuko socket
- equipped: Yes
- cable entry: M25x1.5
- colour: dark-grey bottom part/yellow cover | DIR/GRU-III |
| ![DIRL Image](image7.png) | ![DIRL Dimensions](image8.png) | **Emergency-stop Station for the elevator cage roof**
Insulated plastic enclosure marked STOP. The yellow arrow on the E-stop clearly defines the switching position. The standard version includes 1 NC (screw connection). Acc. to the EN81 regulations new lifts have to be equipped with an emergency-stop switch with switching position indicator.
- equipped: Yes
- cable entry: M20x1.5
- Panel cut-out: Ø 22.3 mm
- colour: dark-grey bottom part/yellow cover | DIRB1GB_OS |
### Insulated Plastic Enclosures

#### IRL1M
- **Fastening holes:** Ø 5.2mm
- **Mounted holes:** 1
- **Weight:** 165 g
- **Material:** ABS
- **Cable entry:** with PVC cable entry on the top: 22.6 mm dia.
- **Break-through wall at the bottom:** 22.6 mm dia.
- **Panel cut-out:** Ø 22.3 mm
- **Colour:** light-grey

#### IRL1M_GELB
- **Fastening holes:** Ø 5.2mm
- **Mounted holes:** 2
- **Weight:** 195 g
- **Material:** ABS
- **Cable entry:** with PVC cable entry on the top: 22.6 mm dia.
- **Break-through wall at the bottom:** 22.6 mm dia.
- **Panel cut-out:** Ø 22.3 mm
- **Colour:** light-grey

#### IRL2M
- **Fastening holes:** Ø 5.2mm
- **Mounted holes:** 3
- **Weight:** 230 g
- **Material:** ABS
- **Cable entry:** with PVC cable entry on the top: 22.6 mm dia.
- **Break-through wall at the bottom:** 22.6 mm dia.
- **Panel cut-out:** Ø 22.3 mm
- **Colour:** light-grey

#### IRL3M
- **Fastening holes:** Ø 5.2mm
- **Mounted holes:** 5
- **Weight:** 300 g
- **Material:** ABS
- **Cable entry:** with PVC cable entry on the top: 22.6 mm dia.
- **Break-through wall at the bottom:** 22.6 mm dia.
- **Panel cut-out:** Ø 22.3 mm
- **Colour:** light-grey

---

*Fastening hole dimensions*
### General Data

**Description:** Contact Block for base-plate mounting, with positive opening contact

**Approvals:** CE

**Protection class:** II (protective insulation)

**Operation travel:** 6 mm

**Connection type:** screw connection 2x2.5mm²

**Contact material:** AgNi

**Max. storage temperature:** -30°C ... 80°C

**Max. operating temperature:** -30°C ... 70°C

**Mechanical life:** 1 m switching cycles

**Electrical life (rated load):**
- 1 m at 250 V/10(6) A
- 250,000 at 250 V/16(10) A
- 500,000 at 250 V/5 A (AC15)

**Contact resistance NO:** < 20 mOhm (new state)

**Contact resistance NC:** < 20 mOhm (new state)

**Min. current:** 1 mA (under laboratory conditions)

**Min. voltage:** 5 V

**Bouncing time NO:** < 10ms

**Bouncing time NC:** < 10ms

**Positive opening contact:** acc. to EN60947-5-1, appendix. K

### Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

<table>
<thead>
<tr>
<th>Utilisation category</th>
<th>AC15</th>
<th>DC13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated insulation voltage Ui</td>
<td>400V</td>
<td>400V</td>
</tr>
<tr>
<td>Rated operating voltage Ui</td>
<td>250V / 400V</td>
<td>400V / 250V / 125V / 60V / 24V</td>
</tr>
<tr>
<td>Rated operating current Ie</td>
<td>5A / 3A</td>
<td>0.12A / 0.2A / 0.4A / 1A / 2A</td>
</tr>
<tr>
<td>Breaking capacity</td>
<td>10Ie / 1,1Ie</td>
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<tr>
<td>Continuous thermal current</td>
<td>10A</td>
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</tbody>
</table>

### Electrical data acc. to IEC/EN 61058-1 (VDE 0630 Sect. 1)

| Rated voltage Ue | 250 V~ / 400 V~ |
| Rated current Ie | 10(6) A / 6(3) A |

### Note

**Note for emergency-stop contact blocks:**

In case of inverters of the Za form (in terms of EN 60947-5-1), only the NC contact must be used for the remotely controlled safety circuit.

Only for IRF enclosures
## Equipped Insulated Plastic Enclosures

### IRF

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="dimensions1.png" alt="Dimensions" /></td>
<td><strong>Equipped Insulated Plastic Enclosure</strong>&lt;br&gt;Technical data of the appropriate contact blocks see previous page&lt;br&gt;Fastening holes: Ø 4.2mm&lt;br&gt;mounting holes 1&lt;br&gt;equipped Yes&lt;br&gt;weight 115 g&lt;br&gt;material ABS&lt;br&gt;cable entry on the top/bottom: 21 mm dia.&lt;br&gt;on the side/back: 21 mm dia./19 mm dia.&lt;br&gt;Contact equipment 1NC + 1NO&lt;br&gt;Switching function momentary action&lt;br&gt;colour light-grey</td>
<td>IRF1</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="dimensions2.png" alt="Dimensions" /></td>
<td><strong>Equipped Insulated Plastic Enclosure</strong>&lt;br&gt;Technical data of the appropriate contact blocks see previous page&lt;br&gt;Fastening holes: Ø 4.2mm&lt;br&gt;mounting holes 2&lt;br&gt;equipped Yes&lt;br&gt;weight 171 g&lt;br&gt;material ABS&lt;br&gt;cable entry on the top/bottom: 21 mm dia.&lt;br&gt;on the side/back: 21 mm dia./19 mm dia.&lt;br&gt;Contact equipment 1NC + 1NO (per switching point)&lt;br&gt;Switching function momentary action&lt;br&gt;colour light-grey</td>
<td>IRF2</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="dimensions3.png" alt="Dimensions" /></td>
<td><strong>Equipped Insulated Plastic Enclosure</strong>&lt;br&gt;Technical data of the appropriate contact blocks see previous page&lt;br&gt;Fastening holes: Ø 4.2mm&lt;br&gt;mounting holes 3&lt;br&gt;equipped Yes&lt;br&gt;weight 217 g&lt;br&gt;material PA6&lt;br&gt;cable entry on the top/bottom: 21 mm dia.&lt;br&gt;on the side/back: 21 mm dia./19 mm dia.&lt;br&gt;Contact equipment 1NC + 1NO (per switching point)&lt;br&gt;Switching function momentary action&lt;br&gt;colour light-grey</td>
<td>IRF3</td>
</tr>
</tbody>
</table>
Equipped Insulated Plastic Enclosures

Equipped Insulated Plastic Enclosures

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Dimensions</th>
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<th>Type</th>
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</table>

**IP65**

**Equipped Insulated Plastic Enclosure**

4x

Technical data of the appropriate contact blocks see previous page

- Fastening holes: Ø 4.2mm
- Mounting holes: 4
- Equipped: Yes
- Weight: 269 g
- Material: PA6
- Cable entry: on the top/bottom: 21 mm dia.
  - on the side/back: 21 mm dia./19 mm dia.
- Contact equipment: 1NC + 1NO (per switching point)
- Switching function: Momentary action
- Colour: Light-grey

IRF4

* Fastening hole dimensions