

8118/121-805 Art. No. 133114



- Resistant Ex e enclosure, universally usable as connection or junction boxes and/or to safeguard electric distributors up to 6.3 A
- IP66 degree of protection
- With mantle terminals or with a combination of mantle terminals and miniature fuses (optional)

### MY R. STAHL 8118A



R. STAHL Series 8118 junction boxes are equipped with 4, 5 or 8 mantle terminals depending on their design size. As an option, miniature fuses can still be installed in addition. Junction boxes are therefore also suitable for safeguarding. The robust enclosure made from glass fibre reinforced polyester resin can be equipped with plastic or metal cable glands.

## Technical Data

### Explosion Protection

|                                 |                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------|
| Area of application             | European Union (ATEX)<br>IECEx                                                  |
| Application range (zones)       | 1, 2, 21, 22                                                                    |
| IECEx gas certificate           | IECEx PTB 06.0026                                                               |
| IECEx gas explosion protection  | Ex eb IIC T6 / T5 Gb                                                            |
| IECEx dust certificate          | IECEx PTB 06.0026                                                               |
| IECEx dust explosion protection | Ex tb IIIC T80 °C / T95 °C Db                                                   |
| ATEX gas explosion protection   | Ex II 2 G Ex eb IIC T6 / T5 Gb                                                  |
| ATEX dust explosion protection  | Ex II 2 D Ex tb IIIC T80 °C / T95 °C Db                                         |
| Certificates                    | ATEX (PTB), Brazil (ULB), China (NEPSI), IECEx (PTB), India (PESO), Korea (KTL) |
| Ship approval                   | DNV                                                                             |
| Explosion protection note       | For product label, see area of application.                                     |

### Electrical Data

|                                                               |                                                                                                                                                                                          |
|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC rated operational voltage                                  | 750 V                                                                                                                                                                                    |
| Rated operational voltage AC                                  | 0 ... 750 V                                                                                                                                                                              |
| Permissible rated operational current with 7 loaded terminals | For conductor cross-section of 1.5 mm²: 13 A<br>For conductor cross-section of 2.5 mm²: 17 A<br>For conductor cross-section of 4 mm²: 24 A<br>For conductor cross-section of 6 mm²: 32 A |
| Permissible rated operational current with 6 loaded terminals | For conductor cross-section of 1.5 mm²: 14 A<br>For conductor cross-section of 2.5 mm²: 18 A<br>For conductor cross-section of 4 mm²: 25 A<br>For conductor cross-section of 6 mm²: 33 A |
| Permissible rated operational current with 5 loaded terminals | For conductor cross-section of 1.5 mm²: 14 A<br>For conductor cross-section of 2.5 mm²: 20 A<br>For conductor cross-section of 4 mm²: 25 A<br>For conductor cross-section of 6 mm²: 35 A |

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### Electrical Data

|                                                                    |                                                                                                                                                                                          |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Permissible rated operational current with<br>≤ 4 loaded terminals | For conductor cross-section of 1.5 mm²: 16 A<br>For conductor cross-section of 2.5 mm²: 20 A<br>For conductor cross-section of 4 mm²: 25 A<br>For conductor cross-section of 6 mm²: 35 A |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Ambient Conditions

|                     |                                                  |
|---------------------|--------------------------------------------------|
| Ambient temperature | -60 °C ... +40 °C (T6)<br>-60 °C ... +55 °C (T5) |
| Ambient temperature | -76°F ... +104°F (T6)<br>-76°F ... +131°F (T5)   |

### Mechanical Data

|                                                                                                             |                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Degree of protection IP (IEC 60529)                                                                         | IP66                                                                                                                                                                                                                                                                                                                  |
| Enclosure material                                                                                          | Polyester resin, Glass fibre reinforced                                                                                                                                                                                                                                                                               |
| Enclosure colour                                                                                            | Dark grey                                                                                                                                                                                                                                                                                                             |
| Flammability according to                                                                                   | IEC/EN 60695<br>UL 94<br>ASTM D635                                                                                                                                                                                                                                                                                    |
| Silicone-free                                                                                               | No                                                                                                                                                                                                                                                                                                                    |
| Permissible number of conductors per<br>clamping unit, solid                                                | Mantle terminal, M8.5 x 1<br>Conductor cross-section 1.5 mm²: Number of conductors min. 2, max. 7<br>Conductor cross-section 2.5 mm²: Number of conductors min. 2, max. 5<br>Conductor cross-section 4 mm²: Number of conductors min. 2, max. 3<br>Conductor cross-section 6 mm²: Number of conductors min. 2, max. 2 |
| Permissible number of conductors per<br>clamping unit, finely stranded prepared,<br>core end sleeve crimped | Mantle terminal M8.5 x 1<br>Conductor cross-section 1.5 mm²: Number of conductors min. 2, max. 5<br>Conductor cross-section 2.5 mm²: Number of conductors min. 2, max. 3<br>Conductor cross-section 4 mm²: Number of conductors min. 2, max. 5                                                                        |
| Permissible number of conductors per<br>clamping unit, finely stranded unprepared                           | Mantle terminal, M8.5 x 1<br>Conductor cross-section 1.5 mm²: Number of conductors min. 2, max. 5<br>Conductor cross-section 2.5 mm²: Number of conductors min. 2, max. 3<br>Conductor cross-section 4 mm²: Number of conductors min. 2, max. 5                                                                       |
| Permissible number of conductors per<br>clamping unit note                                                  | All conductors of a terminal must have the same cross section and be made of the same material.                                                                                                                                                                                                                       |
| Cover                                                                                                       | Screw-on cover                                                                                                                                                                                                                                                                                                        |
| Cover fixing type                                                                                           | M4 stainless steel screws, With captive screws                                                                                                                                                                                                                                                                        |
| Width                                                                                                       | 115 mm                                                                                                                                                                                                                                                                                                                |
| Width, inches                                                                                               | 4.53 in                                                                                                                                                                                                                                                                                                               |
| Height                                                                                                      | 115 mm                                                                                                                                                                                                                                                                                                                |
| Height in inches                                                                                            | 4.53 in                                                                                                                                                                                                                                                                                                               |
| Depth                                                                                                       | 64 mm                                                                                                                                                                                                                                                                                                                 |
| Depth in inches                                                                                             | 2.52 in                                                                                                                                                                                                                                                                                                               |
| Packaging unit                                                                                              | 1                                                                                                                                                                                                                                                                                                                     |
| Weight                                                                                                      | 570 g                                                                                                                                                                                                                                                                                                                 |
| Weight                                                                                                      | 1.26 lb                                                                                                                                                                                                                                                                                                               |

### Mounting / Installation

|                                           |             |
|-------------------------------------------|-------------|
| Tightening torque of cover screw 1        | 1.4 N · m   |
| Tightening torque of cover screw 1 lbf in | 12.4 lbf in |

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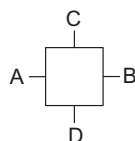
### Components

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| Entry 1                           | 3 x 8161/7-M25-1707-LT<br>(Provided separately) |
| Entry 1 type                      | Polyamide cable gland, black                    |
| Entry 1                           | M25 x 1.5                                       |
| Entry 1 clamping range            | 7 – 17 mm                                       |
| Entry 1 clamping range, inch      | 0.28 – 0.67 in                                  |
| Metal entry possible 1            | No                                              |
| Entry 2                           | 1 x 8290/3-M25<br>(Provided separately)         |
| Entry 2 type                      | Polyamide stopping plug                         |
| Entry 2                           | M25 x 1.5                                       |
| Metal entry possible 2            | No                                              |
| Entries installation options/side | Size 2: 4x M25 (A+B+C+D)                        |
| Type of terminals 1               | 8 x Mantle terminal<br>6 mm <sup>2</sup>        |

### Technical Drawings – Subject to Alterations

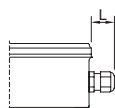
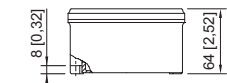


Eight terminals

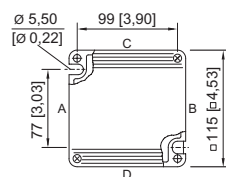


"—" = marking for mounting options

### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Length L  
Projection dimension for cable gland of Series 8161:  
For M20: 25 to 31 [0.98 to 1.22]  
For M25: 27 to 33 [1.06 to 1.3]  
For M32: 32 to 39 [1.26 to 1.54]



8118/2.  
Enclosure SZ 2

### Accessories

#### Plastic cable gland



8161/7-M25-1707-LT, Ex e  
Polyamide, M25 x 1,5 mm, 7 – 17 mm  
Lot size 50 pieces

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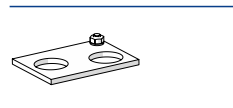
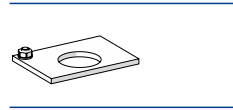
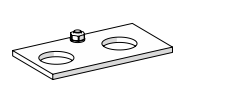
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### Stopping plug

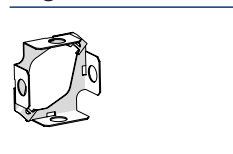
|                                                                                  |                                                                 |                                   |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|
|  | <p>8290/3-M25<br/>Plastic, M25 x 1.5<br/>Lot size 100 piece</p> | <p><b>Art. No.</b><br/>285774</p> |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|

### Brass plate with thread

|                                                                                  |                                                                                                                                                          |                                   |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|  | <p>8118 SZ 2, plate 56 x 40 mm [2.2 x 1.57 inch]<br/>2 x M20 x 1.5 with M4 PE connection (right)<br/>For installation in enclosure SZ 2 and SZ 3</p>     | <p><b>Art. No.</b><br/>244072</p> |
|  | <p>8118 SZ 2, plate 56 x 40 mm [2.2 x 1.57 inch]<br/>1 x M25 x 1.5 with M4 PE connection (left)<br/>For installation in enclosure SZ 2 and SZ 3</p>      | <p><b>Art. No.</b><br/>211341</p> |
|  | <p>8118 SZ 3/B, plate 74 x 40 mm [2.91 x 1.57 inch]<br/>2 x M20 x 1.5 with M4 PE connection (centre)<br/>For installation in enclosure SZ 2 and SZ 3</p> | <p><b>Art. No.</b><br/>244075</p> |

### Spare Parts

#### Angle

|                                                                                    |                                                                                              |                                   |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------|
|  | <p>Bracket 8118 SZ 2, for junction boxes, 4 x M25<br/>For installation in enclosure SZ 2</p> | <p><b>Art. No.</b><br/>202959</p> |
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We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.