

8118/122-106-0 Art. No. 289844



- Compact, impact-resistant enclosure with increased safety (Ex e) type of protection
- Versions available with integrated metal bracket for optimised installation of metal cable glands
- Pre-installed fixing carrier for WAGO 221 Ex connection terminals
- Simple, fast and safe installation of electrical lines with spring lever technology
- A range of clamping cross-sections from 0.14 to 4 mm<sup>2</sup> can be installed for each connection clamping unit
- Use of core end sleeves not necessary for stranded or finely stranded conductors
- 2-, 3- and 5-way terminal blocks available as accessories

MY R. STAHL 8118D



R. STAHL Series 8118 terminal boxes with WAGO 221 Ex connection terminals are made of glass fibre reinforced polyester resin. They are available in 2 design sizes and can be flexibly equipped with plastic or metal cable glands. They combine the advantages of the simple WAGO 221 connection terminal installation technology with proven R. STAHL enclosures with increased safety (Ex e) type of protection.

### Technical Data

#### Explosion Protection

|                                 |   |
|---------------------------------|---|
| Area of application             | European Union (ATEX)<br>IECEX  |
| Application range (zones)       | 1   |
| 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 certificate            | PTB 99 ATEX 3103  |
| ATEX gas explosion protection   | ⊕ II 2 G Ex eb IIC T6 / T5 Gb   |
| ATEX dust certificate           | PTB 99 ATEX 3103  |
| ATEX dust explosion protection  | ⊕ 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   |
| Declaration of conformity       | China (CCC)   |
| Explosion protection note       | For product label, see area of application.                                     |

#### Electrical Data

|                              |       |
|------------------------------|-------|
| Rated operational voltage AC | 440 V |
|------------------------------|-------|

#### Ambient Conditions

|                     |  |
|---------------------|--|
| Ambient temperature | -55 °C ... +40 °C (T6)<br>-55 °C ... +55 °C (T5) |
| Ambient temperature | -67°F ... +104°F (T6)<br>-67°F ... +131°F (T5)   |

#### Mechanical Data

|                                     |   |
|-------------------------------------|---|
| IP degree of protection (IEC 60529) | IP66                                    |
| Enclosure material                  | Polyester resin, Glass fibre reinforced |
| Enclosure colour                    | Dark grey                               |

8118/122-106-0 Art. No. 289844

#### Mechanical Data

|                               |  |
|-------------------------------|--|
| Flammability according to     | IEC/EN 60695<br>UL 94<br>ASTM D635   |
| Silicone-free                 | No   |
| Connection cross-section      | 4 mm <sup>2</sup>  |
| Cover                         | Screw-on cover   |
| Cover fixing type             | M4 stainless steel screws, With captive screws   |
| Connection cross-section note | Min. clamping range: 0.2 mm <sup>2</sup> (solid, stranded)/0.14 mm <sup>2</sup> (finely stranded).<br>It is possible to connect conductors with different cross sections.<br>Use only in connection with fixing carrier type no. 272625. |
| 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                        | 500 g  |
| Weight                        | 1.1 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 |

#### Components

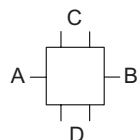
|                                   |  |
|-----------------------------------|--|
| Entry 1                           | 4 x 8161/7-M20-1304-LT<br>with plug                            |
| Entry 1 type                      | Polyamide cable gland, black                                   |
| Entry 1                           | M20 x 1.5  |
| Entry 1 clamping range            | 4 – 13 mm  |
| Entry 1 clamping range, inch      | 0.16 – 0.51 in   |
| Metal entry possible 1            | No   |
| Entry 2                           | 2 x 8290/3-M20<br>(Provided separately)                        |
| Entry 2 type                      | Polyamide stopping plug  |
| Entry 2                           | M20 x 1.5  |
| Metal entry possible 2            | No   |
| Entries installation options/side | Size 2: 6x M20 (A+B+C+D)                                       |
| Terminal rail                     | 35 x 100 mm (1x)   |
| Terminal rail                     | 1,38 x 3,94 " (1x)   |
| Type of terminals 1               | 1 x WAGO 221-482<br>2 conductor 4 mm <sup>2</sup> , light grey |

8118/122-106-0 Art. No. 289844

### Components

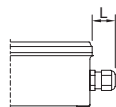
|                                 |  |
|---------------------------------|--|
| <p>Note connection terminal</p> | <p>The connection terminals must be fixed to the fixing carrier.<br/>                 Maximum equipping per fixing carrier: (Max. ten clamping units per fixing carrier)<br/>                 5 x 2-wire connection terminals (275 V),<br/>                 4 x 2-wire connection terminals (440 V),<br/>                 3 x 3-wire connection terminals (440 V),<br/>                 2 x 5-wire connection terminals (440 V).<br/>                 At a rated operational voltage &gt; 275 V, a slot between the each of the connection terminals must remain free. This means that the maximum equipping is reduced to 4 x 2-wire connection terminals per fixing carrier.<br/>                 Number of fixing carriers:<br/>                 max. 3 pieces for enclosure size 8118/2<br/>                 max. 5 pieces for enclosure size 8118/3</p> |
| <p>Note mounting carriers</p>   | <p>A mounting foot must be installed between the fixing carriers in order to maintain the creepage distances and clearances for 440 V.</p>   |

### Technical Drawings – Subject to Alterations






"—" = marking for mounting options

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





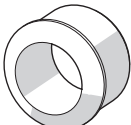



Length L  
 Projection dimension for cable gland of Series 8161:  
 For M20: 25 to 31 [0.98 to 1.22]  
 For M25: 27 to 33 [1.06 to 1.3]  
 For M32: 32 to 39 [1.26 to 1.54]  
 Projection dimension for cable gland with strain relief  
 of Series HSK-K-MZ  
 For M25: 41 [1.61]

### Accessories

| Connection terminal   | Art. No. |
|---|----------|
|  <p>WAGO 221-482 for 2 x 0.2 to 4 mm<sup>2</sup><br/>                     Batch size 100 pieces</p> | 272622   |
|  <p>WAGO 221-483 for 3 x 0.2 to 4 mm<sup>2</sup><br/>                     Batch size 50 pieces</p>  | 272623   |
|  <p>WAGO 221-485 for 5 x 0.2 to 4 mm<sup>2</sup><br/>                     Batch size 25 pieces</p>  | 272624   |

8118/122-106-0 Art. No. 289844

| Connection terminal set  |  | Art. No. |
|--|--|----------|
|    | WAGO 221 installation set<br>Contains<br>2 x fixing carrier 221-501 for 4 mm <sup>2</sup><br>2 x mounting foot 209-120, 6.4 mm<br>4 x connection terminal 221-482 for 2 x 0.2 to 4 mm <sup>2</sup><br>6 x connection terminal 221-483 for 3 x 0.2 to 4 mm <sup>2</sup><br>5 x connection terminal 221-485 for 5 x 0.2 to 4 mm <sup>2</sup> | 288873   |
| Fixing carrier   |  | Art. No. |
|    | WAGO 221-501 for 4 mm <sup>2</sup><br>Batch size ten pieces  | 272625   |
|    | WAGO 221-501 for 4 mm <sup>2</sup> , blue  | 289956   |
| Mounting foot  |  | Art. No. |
|    | WAGO 209-120; 6.4 mm<br>Batch size 25 pieces   | 272626   |
| Plastic cable gland  |  | Art. No. |
|  | 8161/7-M20-1307-LT, Ex e<br>Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm<br>Lot size 50 pieces  | 239204   |
| Reduction sealing insert (standard), EPDM (-40 to +75 °C)<br>For cable glands      |  | Art. No. |
|  | Connection thread: M20 x 1.5    Batch size: 50<br>Clamping range: 4 to 8 mm  | 239446   |
| Stopping plug  |  | Art. No. |
|  | 8290/3-M20<br>Plastic, M20 x 1.5<br>Lot size 100 pieces  | 285773   |

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.