

8118/111-401 Art. No. 133077



- 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) 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 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	ATEX (EUK), China (CCC)
Explosion protection note	For product label, see area of application.

#### Electrical Data

Rated operational voltage AC	0 ... 550 V
Rated operational voltage AC	550 V
Permissible rated operational current with 5 loaded terminals	For conductor cross-section of 1.5 mm <sup>2</sup> : 13 A For conductor cross-section of 2.5 mm <sup>2</sup> : 18 A For conductor cross-section of 4 mm <sup>2</sup> : 24 A
Permissible rated operational current with 4 loaded terminals	For conductor cross-section of 1.5 mm <sup>2</sup> : 15 A For conductor cross-section of 2.5 mm <sup>2</sup> : 19 A For conductor cross-section of 4 mm <sup>2</sup> : 25 A
Permissible rated operational current with ≤ 3 loaded terminals	For conductor cross-section of 1.5 mm <sup>2</sup> : 16 A For conductor cross-section of 2.5 mm <sup>2</sup> : 20 A For conductor cross-section of 4 mm <sup>2</sup> : 25 A

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### Ambient Conditions

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

### Mechanical Data

IP degree of protection (IEC 60529)	IP66
Enclosure material	Polyester resin, Glass fibre reinforced
Enclosure colour	Dark grey
Flammability according to	IEC/EN 60695 UL 94 ASTM D635
Silicone-free	No
Permissible number of conductors per clamping unit, solid	Mantle terminal, M7 x 0.75 Conductor cross-section 1.5 mm <sup>2</sup> : Number of conductors min. 2, max. 4 Conductor cross-section 2.5 mm <sup>2</sup> : Number of conductors min. 2, max. 2
Permissible number of conductors per clamping unit, finely stranded prepared, core end sleeve crimped	Mantle terminal M7 x 0.75 Conductor cross-section 1.5 mm <sup>2</sup> : Number of conductors min. 2, max. 3 Conductor cross-section 2.5 mm <sup>2</sup> : Number of conductors min. 2, max. 2
Permissible number of conductors per clamping unit, finely stranded unprepared	Mantle terminal, M7 x 0.75 Conductor cross-section 1.5 mm <sup>2</sup> : Number of conductors min. 2, max. 3 Conductor cross-section 2.5 mm <sup>2</sup> : Number of conductors min. 2, max. 2
Permissible number of conductors per 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	85 mm
Width, inches	3.35 in
Height	85 mm
Height in inches	3.35 in
Depth	55 mm
Depth in inches	2.17 in
Packaging unit	1
Weight	280 g
Weight	0.62 lb

### Mounting / Installation

Tightening torque of cover screw 1	1.4 Nm
Tightening torque of cover screw 1 lbf in	12.4 lbf in

### Components

Entry 1	2 x 8161/7-M20-1304-LT (Provided separately)
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	1 x 8290/3-M20 (Provided separately)

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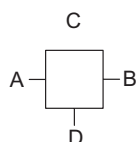
### Components

Entry 2 type	Polyamide stopping plug
Entry 2	M20 x 1.5
Metal entry possible 2	No
Entry 3	provided separately
Entries installation options/side	Size 1: 3x M20 (A+B+D)
Type of terminals 1	4 x Mantle terminal 4 mm <sup>2</sup>

### Technical Drawings – Subject to Alterations

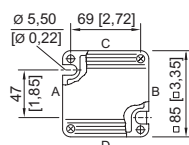
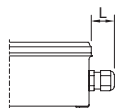
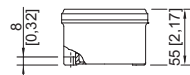


Four terminals



"—" = 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]  
 Projection dimension for cable gland with strain relief  
 of Series HSK-K-MZ  
 For M25: 41 [1.61]

8118/1.  
 Enclosure SZ 1

### Accessories

#### Plastic cable gland



8161/7-M20-1307-LT, Ex e  
 Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm  
 Lot size 50 pieces

Art. No.

239204

#### Stopping plug



8290/3-M20  
 Plastic, M20 x 1.5  
 Lot size 100 pieces

Art. No.

285773

#### Brass plate with thread



8118 SZ 1, plate 37 x 30 mm [1.46 x 1.18 inch]  
 1 x M20 x 1.5 with M4 PE connection (left)  
 Can be installed in enclosures of SZ 1, SZ 2 and SZ 3

Art. No.


168913

# Installation equipment

## Ex e junction box



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	8118 SZ 1, plate 37 x 30 mm [1.46 x 1.18 inch] 1 x M20 x 1.5 with M4 PE connection (right) Can be installed in enclosures of SZ 1, SZ 2 and SZ 3	168914
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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.