# Installation equipment

# Ex i junction box



### 8118/211-403 Art. No. 133104



- 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 ia ib IIC T6 Gb	
IECEx dust certificate	IECEx PTB 06.0026	
IECEx dust explosion protection	Ex tb IIIC T80 °C Db	
ATEX gas certificate	PTB 99 ATEX 3103	
ATEX gas explosion protection		
ATEX dust certificate	PTB 99 ATEX 3103	
ATEX dust explosion protection		
Certificates	ATEX (PTB), Brazil (ULB), China (NEPSI), IECEx (PTB), India (PESO)	
Ship approval	DNV	
Declaration of conformity	China (CCC)	
Explosion protection note	For product label, see area of application.	
Electrical Data		
Rated operational voltage AC	0 60 V	
Rated operational voltage AC	60 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		
	40 °C 175 °C (T6)	
Ambient temperature	-40 °C +75 °C (T6)	
Ambient temperature	-40°F +167°F (T6)	
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 mm²: Number of conductors min. 2, max. 4  Conductor cross-section 2.5 mm²: Number of conductors min. 2, max. 2	
Permissible number of conductors per	Mantle terminal M7 x 0.75	
clamping unit, finely stranded prepared,	Conductor cross-section 1.5 mm²: Number of conductors min. 2, max. 3	
core end sleeve crimped	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 mm²: Number of conductors min. 2, max. 3  Conductor cross-section 2.5 mm²: 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	330 g	
Weight	0.73 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	3 x 8161/8-M20-1304 (Provided separately)	
Entry 1 type	Polyamide cable gland, blue	
Entry 1	M20 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-M20 (Provided separately)	
Entry 2 type	Polyamide stopping plug	
Entry 2	M20 x 1.5	

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Components	
Metal entry possible 2	No
Entries installation options/side	Size 1: 4x M20 (A+B+C+D)
Type of terminals 1	4 x Mantle terminal 4 mm²

#### **Technical Drawings – Subject to Alterations**





"—" = marking for mounting options

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





8118/.1.

Enclosure SZ 1

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**

Plastic cable g	land	Art. No.	
	8161/8-M20-1304, Ex i Plastic, M20 x 1.5, cable outer diameter 4 to 13 mm Lot size 50 pieces	239164	
topping plug		Art. No.	
	8290/3-M20 Plastic, M20 x 1.5 Lot size 100 pieces	285773	
Brass plate with thread		Art. No.	
	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	168913	
	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	

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.