# 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)





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	😥 II 2 G Ex ia ib IIC T6 Gb	
ATEX dust certificate	PTB 99 ATEX 3103	
ATEX dust explosion protection	ⓑ II 2 D Ex tb IIIC T80 °C Db	
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	

Ex i junction box

Entry 2

Entry 2

Entry 1 type Entry 1

Entry 1 clamping range

Entry 1 clamping range, inch Metal entry possible 1

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

Ambient Conditions			
Ambient temperature	-40 °C +75 °C (T6)		
Ambient temperature	-40°F +167°F (T6)		
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 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	330 g		
Weight	0.73 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	3 x 8161/8-M20-1304		

Entry 2 type

R. STAHL Schaltgeräte GmbH | Am Bahnhof 30 | 74638 WALDENBURG Tel. +49 7942 943 1700 | +49 7942 943 1777 | Email: sales.de@r-stahl.com | r-stahl.com

Polyamide cable gland, blue

M20 x 1.5 7 – 17 mm

M20 x 1.5

No

0.28 – 0.67 in

1 x 8290/3-M20 (Provided separately)

Polyamide stopping plug



Ex i junction box

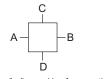
# 8118/211-403 Art. No. 133104

### 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 mm <sup>2</sup>

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





即

of Series HSK-K-MZ For M25: 41 [1.61]

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]

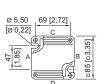
Length L

Projection dimension for cable gland of Series 8161:

Projection dimension for cable gland with strain relief

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





8118/.1. Enclosure SZ 1

## Accessories

# Plastic cable glandArt. No.Image: Stopping plug8161/8-M20-1304, Ex i<br/>Plastic, M20 x 1.5, cable outer diameter 4 to 13 mm<br/>Lot size 50 pieces239164Image: Stopping plugArt. No.Image: Stopping plugArt. No.

8290/3-M20	285773
Plastic, M20 x 1.5	
Lot size 100 pieces	

Brass plate with thread		Art. No.	
<b>B</b>	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.