



## Terminal Boxes Series 8118

- Explosion protection to
  - CENELEC
  - IEC
- For use in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Marine application
- Enclosure of glass fibre-reinforced polyester resin
- Can be supplied in 3 sizes
- Terminals fitted to order
- Cable entry mounting to order
- Degree of protection IP 66



STAHL











In terminal boxes Series 8118 made of glass-fibre reinforced polyester resin, terminals of different clamping arrangements can be used (e.g. terminal screws, terminals without screws, cutting terminals).

Besides Ex e terminal boxes there are also terminal boxes for Ex i circuits available. These terminal boxes are fitted with blue terminals for a rated cross section of max. 4 mm<sup>2</sup>. Cable glands will be fitted according to customer's order. Cable glands Series 8161 made of plastic moulding material are standard. Metal glands are also possible, they are screwed into brass plates and with these brass plates integrated into the earthing system of the enclosure.

# Zones 1 & 2, 21 & 22



Selection Table					
Version	Carrier-rail	max. numbers of terminals (Size 2.5 / 4 mm <sup>2</sup> )	PE / PA-terminals (Size 2.5 / 4 mm <sup>2</sup> )	Ordering Code	Weight kg
Standard terminal boxes 8118/.12  01588E00	EEx e TS 15	5	2	<b>8118/112-0</b>	0,280
	EEx i TS 15	5	2	<b>8118/212-0</b>	0,280
	EEx e TS 15	5	2	<b>8118/114-099</b>	0,300
Standard terminal boxes 8118/.22  01663E00	EEx e TS 15	11	2	<b>8118/122-0</b>	0,490
	EEx e TS 35	13	2	<b>8118/122-1</b>	0,510
	EEx i TS 15	11	2	<b>8118/222-0</b>	0,490
	EEx i TS 35	13	2	<b>8118/222-1</b>	0,510
	EEx e TS 15	13	2	<b>8118/124-099</b>	0,520
Standard terminal boxes 8118/.32  01662E00	EEx e TS 15	16	2	<b>8118/132-0</b>	0,700
	EEx e TS 35	18	2	<b>8118/132-1</b>	0,730
	EEx i TS 15	16	2	<b>8118/232-0</b>	0,700
	EEx i TS 35	18	2	<b>8118/232-1</b>	0,730
	EEx e TS 15	18	2	<b>8118/134-099</b>	0,730
<p><b>Note:</b> The max. number of terminals refer to terminals MXK4 for TS 15 and UK3 for TS35. Version 8118/..4 is fitted with equipment fuse, Series 8560 in addition to the terminals. The fuse takes up the space of 3 terminals.</p> <p><b>State with order:</b> Quantity and size of terminals and cable entries, equipment fuse quantity, rated current and rated voltage.</p> <p>fuse has to be ordered as accessories (state with order)</p> <p><b>Note:</b> All terminal boxes can be delivered with a diagonally mounted terminal rail. It will then be possible to fit bushings on all sides.</p>					

Technical Data							
Explosion protection							
Gas explosion protection	<table border="0"> <tr> <td>Terminal boxes 8118/..2 without equipment fuse</td> <td>Terminal boxes 8118/..4 with equipment fuse</td> </tr> <tr> <td>Ex e  II 2 G Ex em II T6 / T5 / T4</td> <td>Ex e  II 2 G Ex em II T. <sup>1)</sup></td> </tr> <tr> <td>Ex i  II 2 G Ex ia/ib IIA / IIB / IIC T6 / T5</td> <td><sup>1)</sup> Fuse                    ≤ 2 A                    T6    &gt; 2 A bis ≤ 5 A    T5    ≤ 6,3 A                T4</td> </tr> </table>	Terminal boxes 8118/..2 without equipment fuse	Terminal boxes 8118/..4 with equipment fuse	Ex e  II 2 G Ex em II T6 / T5 / T4	Ex e  II 2 G Ex em II T. <sup>1)</sup>	Ex i  II 2 G Ex ia/ib IIA / IIB / IIC T6 / T5	<sup>1)</sup> Fuse                    ≤ 2 A                    T6 > 2 A bis ≤ 5 A    T5 ≤ 6,3 A                T4
Terminal boxes 8118/..2 without equipment fuse	Terminal boxes 8118/..4 with equipment fuse						
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Dust explosion protection	 II 2 D Ex td A21 IP 66 T80 °C, T95 °C, T130 °C						
Certificates							
Gas explosion protection	PTB 99 ATEX 3103						
Dust explosion protection	PTB 99 ATEX 3103						
Other certificates	IECEX, SIMTARS (Australia), CTB (Russia) Germanischer Lloyd						
Housing	Polyester resin, dark grey ~ RAL 7012, impact strength > 7 Nm, material self-extinguishing and flame resistant IEC 92-1, UL 94, ASTM D 635-77						

### Technical Data

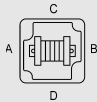
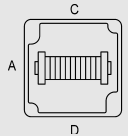
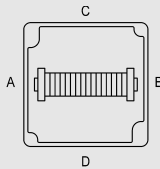
Gaskets	Polyurethan, foam		
Cover fixing	4 x M 4 cheese head screw, stainless steel		
Degree of protection	IP 66 / IP 67		
Rated voltage	max. 1100 V AC/DC depending on terminals used	max. 500 V AC/DC depending on terminals used	
Ambient temperature	- 50 °C ... + 55 °C		
Current reduction of the terminals	depending on number of terminals in EEx e enclosures		

Current [A]	max. number of terminals with cross-section ...								
	8118/112 or 8118/114			8118/122 or 8118/124			8118/132 oder 8118/134		
	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>
3	8	<sup>1)</sup>	<sup>1)</sup>	13	<sup>1)</sup>	<sup>1)</sup>	18	<sup>1)</sup>	<sup>1)</sup>
6		6			13			18	
10			6			11	13		16
16	3			3	7		3	9	
20		3			3			3	11
25			4			4			4

<sup>1)</sup> optional number of terminals (control terminals) up to max. possible number

**Explanation**  
In order to maintain the required temperature class, the max. permissible power loss in the enclosure must not be exceeded. The power loss depends on the current load of the built-in terminals and cables. For temperature class T6, the values in the chart above must be maintained for enclosures 8118. These values apply to rated load factor 1, other rated load and simultaneity factors to IEC 439 can be taken into account. Mixed fitting of terminals with different cross-section and for different currents in one enclosure is permitted.

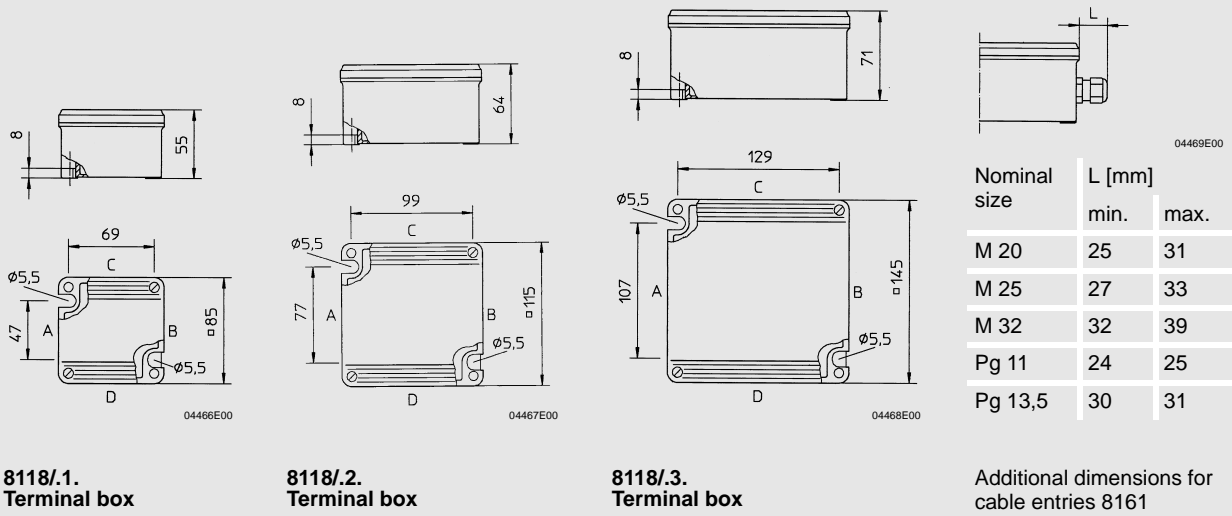
**Cable entry**  
Table of max. cable entry options

		Enclosure size/side		
		8118/.1.	8118/.2.	8118/.3.
				
		09101E00	09102E00	09125E00

Type	Size	Sides C/D	Sides C/D	Sides C/D
 8161 cable glands 05864E00	M 16 x 1.5	2	3	5
	M 20 x 1.5	1	3	4
	M 25 x 1.5	--	2	3
	M 32 x 1.5	--	1	2

**Note:** This table applies to cable glands Series 8161, See technical data cable glands Series 8161 in Chapter 13  
The following cable glands are used:  
– for EEx e enclosures 8161/5 (black),  
– for EEx i enclosures 8161/6 (blue).  
The enclosures have punched drillings, the cable glands are secured with lock nuts. Unused openings must be plugged with certified stopping plugs.  
Due to the location of the rail, cable glands can only be fitted in sides C and D.

## Dimension drawings (all dimensions in mm) - subject to alterations




**8118/1.**  
Terminal box

**8118/2.**  
Terminal box

**8118/3.**  
Terminal box

## Accessories and Spare Parts

Designation	Illustration	Description	Ordering Code	Weight kg			
Brass plate with thread		For earth continuity when using metal glands drillings are drilled to order;					
		for glands	size 1	size 2	size 3		
		1 x M 20 x 1,5	Side C/D	Side C/D	Side C/D	<b>8118013550</b>	0,030
		1 x M 25 x 1,5 1 x M 32 x 1,5 1 x M 20 x 1,5		Side C/D	Side C/D	<b>8118010550</b>	0,060
		2 x M 25 x 1,5		Side C/D	Side C/D	<b>8118011550</b>	0,080
		2 x M 32 x 1,5			Side C/D	<b>8118012550</b>	0,140

Accessories and Spare Parts							
Designation	Illustration	Description	Ordering Code	Weight kg			
Fuses	 05736E00	8560/51, 250 V, UC					
		$I_N$ [A]	Packing unit				
		0,032	5 pieces	<b>8560/51-4021</b>	0,210		
		0,05	5 pieces	<b>8560/51-4031</b>	0,210		
		0,063	5 pieces	<b>8560/51-4041</b>	0,210		
		0,08	5 pieces	<b>8560/51-4051</b>	0,210		
		0,1	5 pieces	<b>8560/51-4061</b>	0,210		
		0,125	5 pieces	<b>8560/51-4071</b>	0,210		
		0,16	5 pieces	<b>8560/51-4081</b>	0,210		
		0,2	5 pieces	<b>8560/51-4091</b>	0,210		
		0,25	5 pieces	<b>8560/51-4101</b>	0,210		
		0,315	5 pieces	<b>8560/51-4111</b>	0,210		
		0,4	5 pieces	<b>8560/51-4131</b>	0,210		
		0,5	5 pieces	<b>8560/51-4141</b>	0,210		
		0,63	5 pieces	<b>8560/51-4151</b>	0,210		
		0,8	5 pieces	<b>8560/51-4171</b>	0,210		
		1,0	5 pieces	<b>8560/51-4181</b>	0,210		
		1,25	5 pieces	<b>8560/51-4191</b>	0,210		
		2,0	5 pieces	<b>8560/51-4222</b>	0,210		
		4,0	5 pieces	<b>8560/51-4252</b>	0,210		
				8560/61, 500 V, UC			
				$I_N$ [A]	Packing unit		
				0,08	5 pieces	<b>8560/61-4051</b>	0,210
				0,1	5 pieces	<b>8560/61-4061</b>	0,210
				0,125	5 pieces	<b>8560/61-4071</b>	0,210
				0,2	5 pieces	<b>8560/61-4091</b>	0,210
				0,25	5 pieces	<b>8560/61-4101</b>	0,210
				0,315	5 pieces	<b>8560/61-4111</b>	0,210
				0,4	5 pieces	<b>8560/61-4131</b>	0,210
				0,5	5 pieces	<b>8560/61-4141</b>	0,210