

Terminal Boxes Series 8118

- Explosion protection to
 - CENELEC
 - IEC
- Can be used in Zone 1 and Zone 2
- 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

Series 8118 terminal boxes, made of glass fibre-reinforced polyester resin, are supplied as standard with type 8181 equipment terminals from R. STAHL. Terminals from other manufacturers, (e.g. Weidmüller, Phoenix or Wago) can be fitted if required.

In addition to EEx e terminal boxes, terminal boxes for use in EEx i circuits are also available. These have blue terminals rated for a nominal cross-section of max. 4 mm².


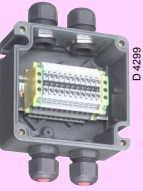
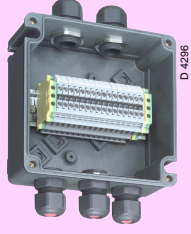
Cable entries are mounted according to order. Standard cable glands type 8161 are made of moulded plastic. Metal cable entries can also be fitted. They are screwed into brass plates and via these incorporated into the earthing system of the enclosure.

Zone 1 and Zone 2

Selection table

Arrangement	Version	Carrier-rail	max. number of terminals	PE/PA-terminals	Ordering code	Weight
			Size 2,5/4 mm ²	Size 2,5/4 mm ²		[kg]

Standard terminal boxes

Size 1 	EEx e	TS15	5	2	8118/112 - 0	0,28
	EEx i	TS15	5	2	8118/212 - 0	0,28
Size 2 	EEx e	TS15	11	2	8118/122 - 0	0,49
	EEx e	TS35	16	2	8118/122 - 1	0,51
	EEx i	TS15	11	2	8118/222 - 0	0,49
	EEx i	TS35	16	2	8118/222 - 1	0,51
Size 3 	EEx e	TS15	16	2	8118/132 - 0	0,70
	EEx e	TS35	20	2	8118/132 - 1	0,73
	EEx i	TS15	16	2	8118/232 - 0	0,70
	EEx i	TS35	20	2	8118/232 - 1	0,73

Terminal boxes with standard holes for metal cable glands

Size 2 	EEx e	TS15	6	2	8118/122 - 231	0,60
	with drillings 4 x M 20 4 x M 25					

Note: The max. number of terminals refers to terminals 8181 for TS 15 and UK3 for TS35.
Version 8118/..4 is fitted with equipment fuse, type 8560 in addition to the terminals. The fuse takes up the space of 3 terminals.

State with order: Quantity and size of terminals and cable entries, equipment fuse quantity, rated current and rated voltage.

Technical data

Version	Terminal boxes with small equipment fuse, 8118/..4
Explosion protection	EEx e II T6 (EEx e-version) EEx ia IIC T6 (EEx i-version)
Test certificate	PTB Nr. Ex – 97.D.3123 Other certificates: SIMTARS (Australia), BKI (Hungary), SEV (Switzerland), VNIIEF (Russia), FTZU (Czech Republic), SZS (Yugoslavia)
Enclosure material	Polyester resin, dark grey ~ RAL 7012, impact strength > 7 Nm, material self-extinguishing and flame resistant to IEC 92-1, UL 94, ASTM D 635-77
Gasket	EPDM
Cover fixing	4 x M 4, cheese head screws, stainless steel
Degree of protection	IP 66
Rated voltage	max. 1000 V AC/DC depending on terminals and fuses used
Ambient temperature	– 20° C ... + 40° C

Current reduction of the terminals

depending on number of terminals in EEx e enclosures

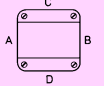
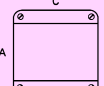
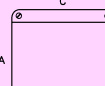

Current [A]	max. number of terminals with cross-section ...								
	8118/112 or 8118/114			8118/122 or 8118/124			8118/132 or 8118/134		
	1,5 mm ²	2,5 mm ²	4 mm ²	1,5 mm ²	2,5 mm ²	4 mm ²	1,5 mm ²	2,5 mm ²	4 mm ²
3		1)	1)		1)	1)		1)	1)
6	8			13			18		
10		6			13		13		18
16	3		6	3	7	11	3	9	16
20		3			3			3	11
25			4			4			4

1) 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 T 6, 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

Gland

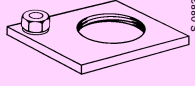
Type	Size	Table of max. cable entry options		
		Enclosure size/side		
		8118/11. 	8118/12. 	8118/13. 
		Sides C/D	Sides C/D	Sides C/D
 8161 Cable gland	M 16 x 1,5	2	3	5
	M 20 x 1,5	1	3	4
	M 25 x 1,5	–	2	3
	M 32 x 1,5	–	2	2

Note:

This table applies to cable glands 8161 (technical data see pages 13/2 and 13/3). The following cable glands are used:

- for EEx e enclosures 8161/3 (grey).
 - for EEx i enclosures 8161/4 (blue).
- The enclosures have punched holes, 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.

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	can be fitted into enclosure			
			size 1	size 2	size 3	
		1 x M20 x 1,5	Side A/B Side C/D	Side A/B Side C/D	Side A/B Side C/D	81 189 09 55 0 0,03
		1 x M25 x 1,5 1 x M32 x 1,5 2 x M20 x 1,5		Side A/B Side C/D	Side A/B Side C/D	81 189 10 55 0 0,06
2 x M25 x 1,5		Side A/B Side C/D	Side A/B Side C/D	81 189 11 55 0 0,08		
2 x M32 x 1,5			Side A Side C/D	81 189 12 55 0 0,14		
<p>Note: In terminal boxes only sides C and D can be used</p>						

Dimensions, all dimensions in mm – subject to alteration

