



- Wide range of Ex i terminal boxes in various sizes and materials
- Degree of protection IP66
- Customised equipping in accordance with customer specifications
- Enclosures with captive cover screws
- If required, flange on enclosure sides is possible

WebCode **8146T**



R. STAHL Series 8146 terminal boxes, made of high-quality, glass fiber-reinforced polyester resin, are ideal for use in harsh operating conditions. With eight basic sizes in various heights, they are universally usable. If requested by the customer, they are equipped with series terminals up to 300 mm² and, as an option, a flange on several enclosure sides is possible.

	NEC® 500 CEC Appendix J						CEC Section 18						IECEX / ATEX					
	Class I		Class II		Class III		NEC® 505 Class I			NEC® 506			Zone		Ex interface		Installation in	
Division	1	2	1	2	1	2	0	1	2	20	21	22	0	1	2	20	21	22
Ex interface																		
Installation in	•	•	•	•	•	•		•	•		•	•		•	•		•	•

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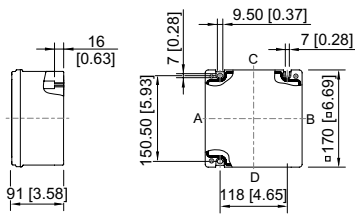
Selection Table							
Product Description		Ex i terminal box					
Figure	Terminal	Terminal rail	PA terminal	Max. no. of terminals 2.5 mm ² / AWG 14	Product Type	Art. No.	Weight lb
	1 x Phoenix UT 2-conductor, 2.5 mm ² , blue	35 x 133 mm (1x)	1 x Phoenix UT 2.5 mm ² grey	19	8146/2051	278806	2.2
	1 x Phoenix UT 2-conductor, 2.5 mm ² , blue	35 x 189 mm (1x)	1 x Phoenix UT 2.5 mm ² grey	27	8146/2061	278807	3.09
	1 x Phoenix UT 2-conductor, 2.5 mm ² , blue	35 x 301 mm (1x)	1 x Phoenix UT 2.5 mm ² grey	49	8146/2073	278808	4.01
	1 x Phoenix UT 2-conductor, 2.5 mm ² , blue	35 x 301 mm (1x)	1 x Phoenix UT 2.5 mm ² grey	51	8146/2083	278809	10.49

The enclosures are equipped with mounting rails, PE terminals and 1 terminal block of the specified type.

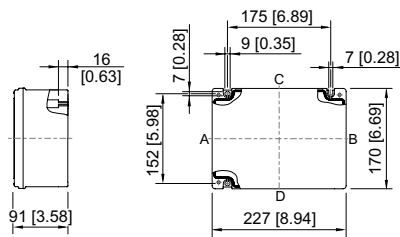
Technical Data	
Explosion Protection	
USA marking	Class I, Div. 1,2, Groups A,B,C,D; Class II, Div. 1,2, Groups E,F,G; Class I, Zone 1, Group IIC T6; Class III

Technical Data	
Explosion Protection	
CAN marking	Class I, Div. 1,2, Groups A,B,C,D; Class II, Div. 1,2, Groups E,F,G; Class I, Zone 1, Group IIC T6; Class III
IECx gas explosion protection	Ex ia ib IIC T6 Gb
IECx dust explosion protection	Ex tb IIIC T80 °C Db
Certificates	ATEX (PTB), Brazil (ULB), China (NEPSI), IECEx (PTB), India (PESO), Korea (KGS), Taiwan (ITRI)
Ship approval	BVIS
Electrical Data	
Rated operational voltage AC IEC	60 V
Notes	depend on the terminal type used and the explosion protected components
Ambient Conditions	
Ambient temperature °F	-58 °F ... +167 °F
Ambient temperature °C	-50 °C ... +75 °C
Mechanical Data	
Degree of protection (IP)	IP66
Degree of protection note	according to IEC/EN 60529
Enclosure material	Polyester resin, Glass fiber reinforced
Silicone-free	No
Components	
Notes	Please observe the information of the terminal manufacturer, e.g. the tightening torque

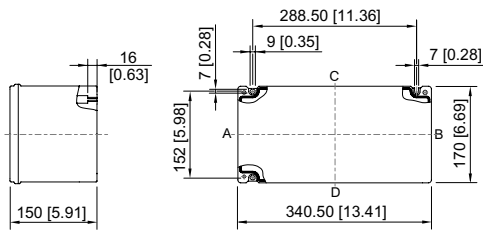
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



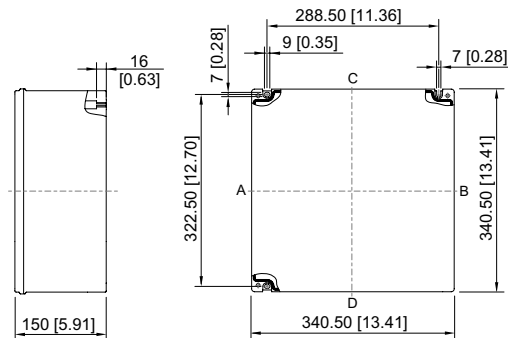
8146/.051



8146/.061



8146/.073



8146/.083

Installation of 8166/11 Conduit Hubs or Cable Glands

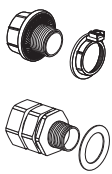
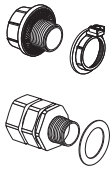
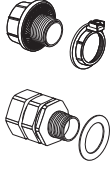
Table for max. numbers of entry openings either installed with conduit hubs 8166/11 or cable glands.

CAUTION:

The max. possible number of entries which can be installed on the sides of the enclosures depends on the number of terminal columns installed.

With horizontally installed columns, there are no side entries possible or only limited, depending on enclosure size.

With vertically installed columns there are no bottom or top entries possible, or only limited, depending on enclosure size. For installation with metallic glands additional reinforcement / grounding measures should be considered. Please consult factory.

Cable gland	Enclosure size															
	8146/.031		8146/.041		8146/.051/.052				8146/.061/.062				8146/.071/.072			
																
	without flange		without flange		without flange		with flange		without flange		with flange		without flange		with flange	
Size	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D
1/2"	1	1	1	2	2	3	-	2	3	4	2	2	3	6	2	4
3/4"	1	1	1	2	1	2	-	2	2	3	2	2	2	5	2	4
1"	-	1	1	1	1	2	-	1	2	2	1	1	2	4	1	2
1-1/4"	-	-	1	1	1	1	-	-	1	2	-	-	1	3	-	-
1-1/2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-1/2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8146/.073/.075				8146/S071				8146/.S73				8146/.081/.082			
	without flange		without flange		without flange		with flange		without flange		with flange		without flange		with flange	
Size	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D
1/2"	6	12	4	11	2	7	-	4	5	14	-	11	6	7	4	4
3/4"	5	9	4	9	1	6	-	4	3	12	-	9	5	6	4	4
1"	4	8	2	4	1	4	-	2	2	8	-	4	4	4	2	2
1-1/4"	2	5	1	4	1	4	-	-	1	5	-	4	3	4	-	-
1-1/2"	2	4	1	3	-	-	-	-	1	4	-	3	-	-	-	-
2"	1	3	1	2	-	-	-	-	1	3	-	2	-	-	-	-
2-1/2"	1	2	1	2	-	-	-	-	-	3	-	2	-	-	-	-
3"	1	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-
	8146/.083/.085/.086				8146/.091/.092				8146/.093/.095							
	without flange		without flange		without flange		with flange		without flange		with flange					
Size	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D
1/2"	12	14	11	11	7	12	4	8	14	28	11	22				
3/4"	9	12	9	9	6	10	4	8	12	19	9	18				
1"	8	8	4	4	4	8	2	4	8	16	4	8				
1-1/4"	5	5	4	4	4	7	-	-	5	11	4	8				
1-1/2"	4	4	3	3	-	-	-	-	4	7	3	6				
2"	3	3	2	2	-	-	-	-	3	6	2	4				
2-1/2"	2	3	2	2	-	-	-	-	3	4	2	4				
3"	2	2	-	-	-	-	-	-	2	4	-	-				