

# Control boxes made of polyester resin

Series 8146



- Practical Ex e control boxes made of glass fibre reinforced polyester resin
- Can be equipped as required with control devices, indicator lamps, illuminated pushbuttons, control switches, ammeters and voltmeters
- Optional: Flanges, cover hinges, flange enclosures, brass plates, cable glands made of metal

E4

## MY R. STAHL 8146F



R. STAHL Series 8146 control boxes are available in eight basic sizes and various enclosure heights; they can be combined to make larger units. They are made of high-quality glass fibre reinforced polyester resin. We equip these with various components according to customer requirements, whereby the following optional accessories are available: Flanges, cover hinges or cable glands made of metal.

	IECEX / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•	•	•	

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Installation in				•		

	CE Code Section 18					
	NEC® 505			NEC® 506		
	Class I					
Zone	0	1	2	20	21	22
Installation in		•				

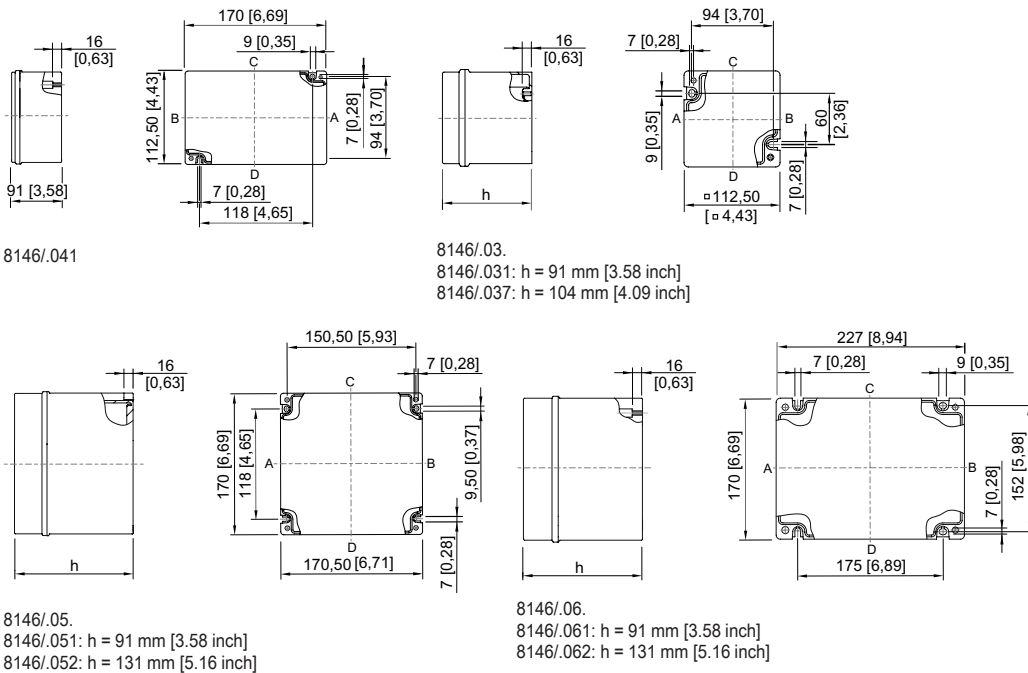
Selection Table								
Silicone-free Certificates			No ATEX (PTB), Brazil (ULB), Canada (FM), Canada (UL), China (NEPSI), IECEX (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM), USA (UL)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
112.5 mm	4.429 in	112.5 mm	4.429 in	91 mm	3.583 in	8146/5031	136885	470 g
170 mm	6.692 in	112.5 mm	4.429 in	91 mm	3.583 in	8146/5041	136678	580 g
Silicone-free Certificates			No ATEX (PTB), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
170 mm	6.692 in	170 mm	6.692 in	91 mm	3.583 in	8146/5051	136697	860 g
		170 mm	6.692 in	131 mm	5.157 in	8146/5052	136777	1.1 kg
227 mm	8.937 in	170 mm	6.692 in	91 mm	3.583 in	8146/5061	136703	1.15 kg
		170 mm	6.692 in	131 mm	5.157 in	8146/5062	136785	1.4 kg
		112.5 mm	4.429 in	91 mm	3.583 in	8146/5241	136964	740 g
340.5 mm	13.406 in	170 mm	6.692 in	91 mm	3.583 in	8146/5071	136723	1.6 kg
		170 mm	6.692 in	131 mm	5.157 in	8146/5072	136817	1.95 kg
		170 mm	6.692 in	150 mm	5.906 in	8146/5073	136911	1.8 kg
		170 mm	6.692 in	190 mm	7.48 in	8146/5075	136942	2.3 kg
		340.5 mm	13.4060 in	91 mm	3.583 in	8146/5081	136746	2.95 kg
		340.5 mm	13.4060 in	131 mm	5.157 in	8146/5082	136824	3.45 kg
		340.5 mm	13.4060 in	150 mm	5.906 in	8146/5083	136924	3.4 kg
		340.5 mm	13.4060 in	190 mm	7.48 in	8146/5085	136947	3.9 kg
		340.5 mm	13.4060 in	230 mm	9.055 in	8146/5086	136955	4.2 kg
		170 mm	6.692 in	91 mm	3.583 in	8146/5S71	136730	1.6 kg
170 mm	6.692 in	150 mm	5.906 in	8146/5S73	136918	1.8 kg		

Selection Table								
Silicone-free Certificates			No ATEX (PTB), Brazil (ULB), Canada (FM), China (NEPSI), IECEx (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
681.5 mm	26.831 in	340.5 mm	13.4060 in	91 mm	3.583 in	8146/5091	136754	5.6 kg
		340.5 mm	13.4060 in	131 mm	5.157 in	8146/5092	136846	6.3 kg
		340.5 mm	13.4060 in	150 mm	5.906 in	8146/5093	136930	6.2 kg
		340.5 mm	13.4060 in	190 mm	7.48 in	8146/5095	136952	6.9 kg
Silicone-free Certificates			No ATEX (PTB), Canada (UL), IECEx (PTB), USA (UL)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
170 mm	6.692 in	170 mm	6.692 in	91 mm	3.583 in	8146/5051-C2569	297641	2 kg
Silicone-free Certificates			No ATEX (PTB), IECEx (PTB)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
227 mm	8.937 in	170 mm	6.692 in	91 mm	3.583 in	8146/5061-C2179	262775	-
Silicone-free Certificates			Yes ATEX (PTB), Canada (FM), Canada (UL), China (NEPSI), IECEx (PTB), India (PESO), Korea (KGS), USA (FM), USA (UL)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
112.5 mm	4.429 in	112.5 mm	4.429 in	91 mm	3.583 in	8146/5031	225813	470 g
170 mm	6.692 in	112.5 mm	4.429 in	91 mm	3.583 in	8146/5041	225206	580 g
Silicone-free Certificates			Yes ATEX (PTB), Canada (FM), China (NEPSI), IECEx (PTB), India (PESO), Korea (KGS), USA (FM)					
Width	Width, inches	Height	Height in inches	Depth	Depth in inches	Product Type	Art. No.	Weight
170 mm	6.692 in	170 mm	6.692 in	91 mm	3.583 in	8146/5051	225802	860 g
227 mm	8.937 in	170 mm	6.692 in	91 mm	3.583 in	8146/5061	225803	1.15 kg
		112.5 mm	4.429 in	91 mm	3.583 in	8146/5241	225822	740 g
340.5 mm	13.406 in	170 mm	6.692 in	91 mm	3.583 in	8146/5071	225804	1.6 kg
		170 mm	6.692 in	131 mm	5.157 in	8146/5072	225810	1.95 kg
		340.5 mm	13.4060 in	91 mm	3.583 in	8146/5081	225806	2.95 kg
		340.5 mm	13.4060 in	131 mm	5.157 in	8146/5082	225811	3.45 kg
		340.5 mm	13.4060 in	150 mm	5.906 in	8146/5083	225816	3.4 kg
		170 mm	6.692 in	91 mm	3.583 in	8146/5S71	225805	1.6 kg
681.5 mm	26.831 in	170 mm	6.692 in	150 mm	5.906 in	8146/5S73	225815	1.8 kg
		340.5 mm	13.4060 in	91 mm	3.583 in	8146/5091	225807	5.6 kg

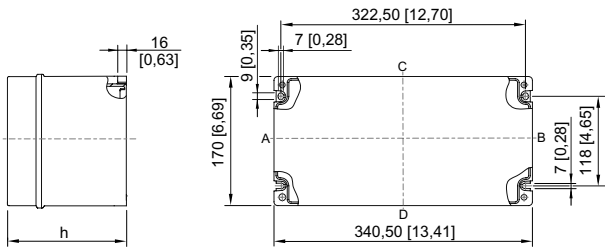
Technical Data		
Variant	not silicone-free	silicone-free
Explosion Protection		
Area of application	European Union (ATEX) IECEX	European Union (ATEX) IECEX
IECEX gas certificate	IECEX PTB 06.0090	IECEX PTB 06.0090
IECEX dust explosion protection	Ex tb IIIC T80 °C ... T130 °C Db	Ex tb IIIC T80 °C ... T130 °C Db
ATEX gas explosion protection	⊕ II 2 G Ex eb IIC T6 ... T4 Gb	⊕ II 2 G Ex eb IIC T6 ... T4 Gb
ATEX dust explosion protection	⊕ II 2 D Ex tb IIIC T80 °C ... T130 °C Db	⊕ II 2 D Ex tb IIIC T80 °C ... T130 °C Db
Notes	Product label may vary. Series devices are labelled with ATEX and IECEx.	
Electrical Data		
Rated operational voltage AC	0 ... 1000 V	0 ... 1000 V
Rated operational current	0 – 630 A	0 – 630 A
Notes	Depending on the built-in components.	

Technical Data		
Variant	not silicone-free	silicone-free
Ambient Conditions		
Ambient temperature	-60 °C ... +40 °C (T6) (T80 °C) -60 °C ... +55 °C (T5) (T95 °C) -60 °C ... +70 °C (T4) (T130 °C)	-20 °C ... +40 °C (T6) (T80 °C) -20 °C ... +55 °C (T5) (T95 °C) -20 °C ... +70 °C (T4) (T130 °C)
Ambient temperature	-76°F ... +104°F (T6) (T80 °C) -76°F ... +131°F (T5) (T95 °C) -76°F ... +158°F (T4) (T130 °C)	-4°F ... +104°F (T6) (T80 °C) -4°F ... +131°F (T5) (T95 °C) -4°F ... +158°F (T4) (T130 °C)
Mechanical Data		
Degree of protection IP (IEC 60529)	IP66	IP66
Enclosure material	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced
Cover fixing type	With captive screws	With captive screws
Cover thickness	2.8 mm	2.8 mm
Cover thickness in inches	0.11 in	0.11 in
Wall thickness	2.8 mm	2.8 mm
Wall thickness in inches	0.11 in	0.11 in
Components		
Flange and plates	Without flange	Without flange

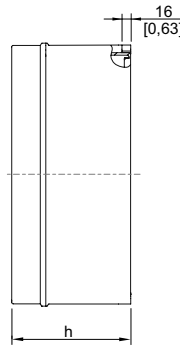
**Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations**



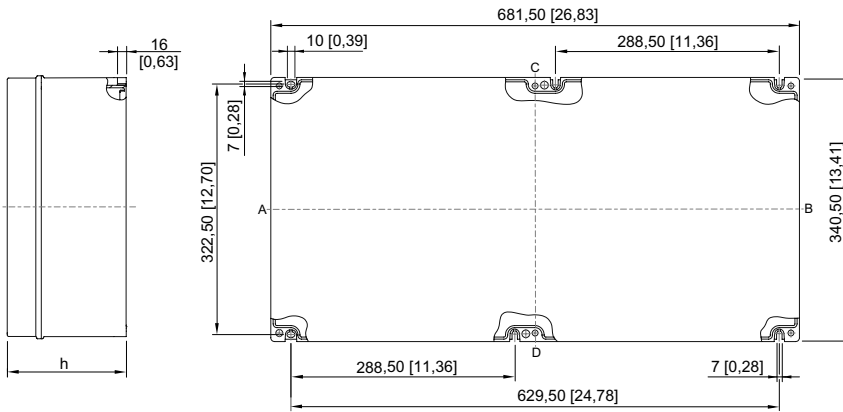
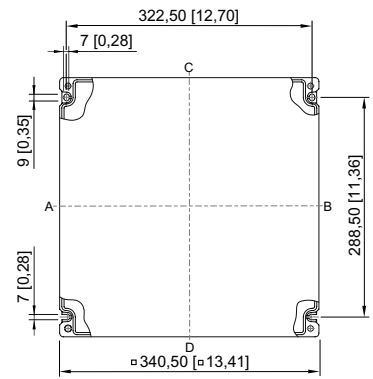
E4



8146/.S7.  
8146/.S71: h = 91 mm [3.58 inch]  
8146/.S73: h = 150 mm [5.91 inch]



8146/.08.  
8146/.081: h = 91 mm [3.58 inch]  
8146/.082: h = 131 mm [5.16 inch]  
8146/.083: h = 150 mm [5.91 inch]  
8146/.084: h = 171 mm [6.73 inch]  
8146/.085: h = 190 mm [7.48 inch]  
8146/.086: h = 230 mm [9.06 inch]



8146/.09.  
8146/.091: h = 91 mm [3.58 inch]  
8146/.092: h = 131 mm [5.16 inch]  
8146/.093: h = 150 mm [5.91 inch]  
8146/.095: h = 190 mm [7.48 inch]