



Control Station in Polyester Resin Series 8146

- Explosion protection to
 - CENELEC
 - IEC
 - NEC
- Can be used in Zone 1 and Zone 2
- Enclosures in glass fibre reinforced polyester resin
- 7 basic enclosure sizes
- Different enclosure heights
- Options:
 - Flanges
 - Cover hinges
 - Flanged enclosure
 - Brass plates for metal cable entries
- Can be combined to larger units
- Equipped with flush-mounted units for snap-in fitting
 - Control units
 - Indicating lamps
 - Illuminated buttons
 - Control switches
 - Ammeters
 - Voltmeters

STAHL

Control, display and regulation devices are assembled in a clear layout in 8146 series control stations. The number of units fitted depends on the control station size and the space required to fit each device. It is not possible to standardize this.

Zone 1 and Zone 2

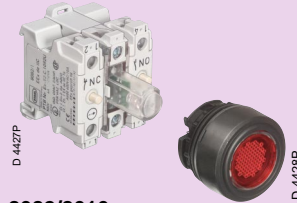
Equipment table for control station 8146, for units with contact spacing of 42 mm



8082
Control unit with actuators Ø 38 mm

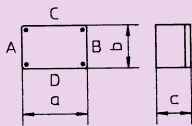


8010
Indicating lamp



8082/8010
Illuminated button

Enclosure



Equipment configuration

Maximum options for build-in units with contact spacing of 42 mm, such as: control unit 8082, indicating lamp 8010 and illuminated button 8082/8010

Ordering code

Weight (empty enclosure)
[kg]

Enclosure size

Dimensions [mm]		
a	b	c
112	112	91

Fig. 3.1



8146/5031-3□

0,64

Side facing down

Enclosure size

Dimensions [mm]		
a	b	c
170	112	91

Fig. 4.1

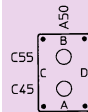


Fig. 4.2

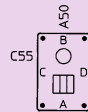
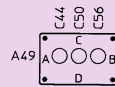


Fig. 4.3



8146/5041-3□

0,70

Side facing down

Enclosure size

Dimensions [mm]		
a	b	c
170	170	91

Fig. 5.1

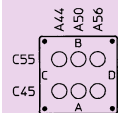


Fig. 5.2

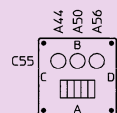


Fig. 5.3

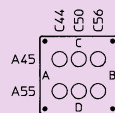
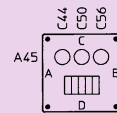


Fig. 5.4



8146/5051-3□

1,10

Side facing down

Enclosure size

Dimensions [mm]		
a	b	c
227	170	91

Fig. 6.1

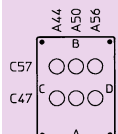


Fig. 6.2

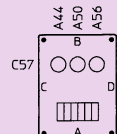


Fig. 6.3

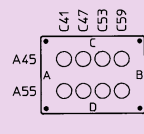
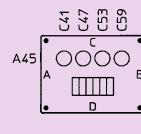


Fig. 6.4



8146/5061-3□

1,40

Side facing down

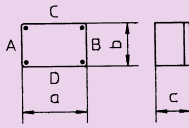
Add. to ordering code:

Specify side facing down

A or D (see above)

Equipment table for control station 8146, for units with contact spacing of 42 mm

Enclosure



Equipment configuration

Maximum options for build-in units with contact spacing of 42 mm, such as: control unit 8082, indicating lamp 8010 and illuminated button 8082/8010

Ordering code

Weight
(empty enclosure)

[kg]

Enclosure size

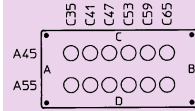
Dimensions [mm]

7

a b c
340 170 91

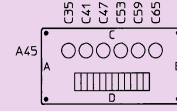
Side facing down

Fig. 7.1



D

Fig. 7.2

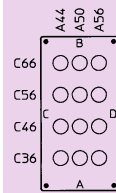


D

8146/5071-3□

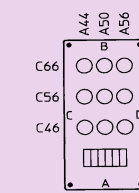
2,0

Fig. 7.3



A

Fig. 7.4



A

Enclosure size

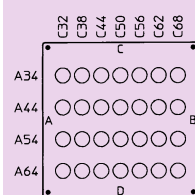
Dimensions [mm]

8

a b c
340 340 91

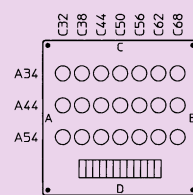
Side facing down

Fig. 8.1



D

Fig. 8.2



D

8146/5081-3□

3,40

Enclosure size

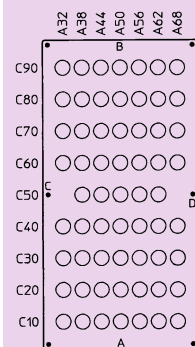
Dimensions [mm]

9

a b c
680 340 91

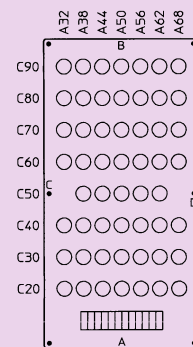
Side facing down

Fig. 9.1



A

Fig. 9.2

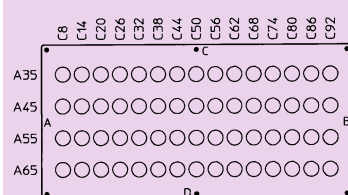


A

8146/5091-3□

7,3

Fig. 9.3



D

Add. to ordering code:

Specify side facing down

A or D (see above)

Equipment table for control station 8146, for units with contact spacing of 42 mm

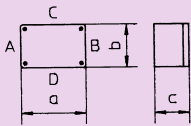


8082
Control unit with actuators Ø > 38 mm

8008
Control switch

8405
Ammeter

Enclosure



Equipment configuration

Maximum options with build-in units with contact spacing of > 42 mm, such as: control unit 8008, ammeter 8405 and control unit 8082, actuator Ø > 38 mm

Ordering code

Weight (empty enclosure)
[kg]

Enclosure size

Dimensions [mm]
a b c
112 112 91

Fig. 3.2

Fig. 3.3

Fig. 3.4

8146/5031-3□

0,64



Side facing down

Enclosure size

Dimensions [mm]
a b c
170 112 91

Fig. 4.4

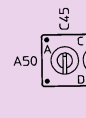
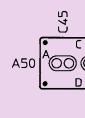
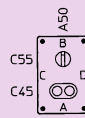
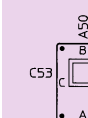
Fig. 4.5

Fig. 4.6

Fig. 4.7

8146/5041-3□

0,70



Side facing down

Enclosure size

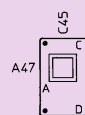
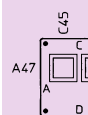
Dimensions [mm]
a b c
170 170 91

Fig. 5.5

Fig. 5.6

8146/5051-3□

1,10



Side facing down

Enclosure size

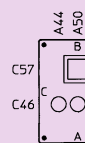
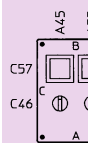
Dimensions [mm]
a b c
227 170 91

Fig. 6.5

Fig. 6.6

8146/5061-3□

1,40



Side facing down

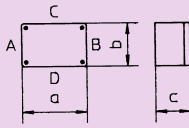
Add. to ordering code:

Specify side facing down

A or D (see above)

Equipment table for control station 8146, for units with contact spacing of 42 mm

Enclosure



Equipment configuration

Maximum options with build-in units with contact spacing of > 42 mm, such as: control unit 8008, ammeter 8405 and control unit 8082, actuator $\varnothing > 38$ mm

Ordering code

Weight (empty enclosure) [kg]

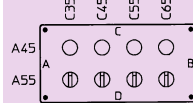
Enclosure size

Dimensions [mm]

7

a b c
340 170 91

Fig. 7.5



8146/5071-3□

2,0

Side facing down

Fig. 7.6

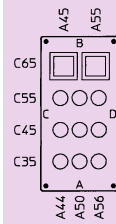
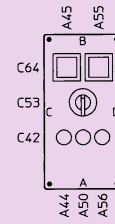


Fig. 7.7



Side facing down

Enclosure size

Dimensions [mm]

8

a b c
340 340 91

Fig. 8.4

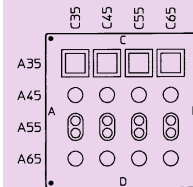
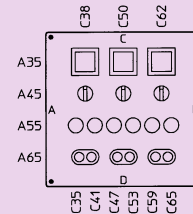


Fig. 8.5



8146/5081-3□

3,40

Side facing down

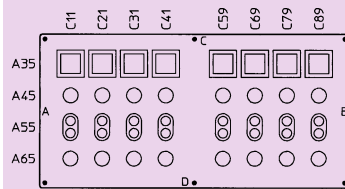
Enclosure size

Dimensions [mm]

9

a b c
680 340 91

Fig. 9.4

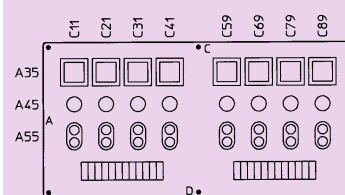


8146/5091-3□

7,3

Side facing down

Fig. 9.5



Side facing down

Add. to ordering code:

Specify side facing down

A or D (see above)

Technical data	
Explosion protection	EEx ed IIC T6
Test certificate	PTB Nr. Ex-95.D.3155 Other certificates: BKI (Hungary), CSA (Canada), FM (USA), SEV (Switzerland), TÜV Vienna (Austria), UL (USA)
Material	polyester resin; glass fibre reinforced; dark grey similar to RAL 7024, impact strength ³ 7 Nm; surface resistance £ 109 ohms; flame-resistant, modified to be self-extinguishing.
Enclosure	
Gasket	EPDM
Flange	Enclosure supplied without flanges. Can be provided with flanges on one or more sides. Specify on order. Material: polyester resin; glass fibre reinforced, can be fitted with components.
Standard Special	
Cover fixing	M6, socket head cap screws with combi-slot, captive; stainless steel with cover hinges
Standard Special	
Rated voltage	max. 1100 V (depending on the equipment installed)
Connection	directly to component units or via terminal block
Degree of protection	IP 66 (depending on the equipment installed)
Ambient temperature	- 20 °C ... + 40 °C
Dimensions	see page 9/67

Accessories and spare parts

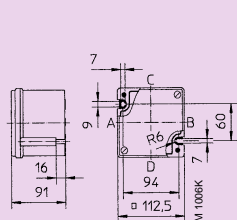
Designation	Illustration	Description	Ordering code	Weight [kg]		
Flange		in plastic				
		Size 1	Versions 2,8 mm thick 5,8 mm thick	81 460 01 49 0 81 460 04 49 0	0,06 0,12	
			for mounting on:			
			enclosure	sides		
			8146/_051;/_052	A/B/C/D		
			8146/_061;/_062	A/B/C/D		
			8146/_071;/_072	A/B/C/D		
			8146/_S71	C/D		
			8146/_081;/_082	A/B/C/D		
			8146/_091;/_092	A/B/C/D		
			Size 2	2,8 mm thick 5,8 mm thick	81 460 05 49 0 81 460 06 49 0	0,25 0,60
			for mounting on:			
	enclosure	side				
	8146/_073;/_075	C/D				
	8146/_S73	C/D				
	8146/_083;/_085;/_86	A/B/C/D				
	8146/_093;/_095	A/B/C/D				
	Size 3	2,8 mm tick 5,8 mm thick	81 460 10 49 0 81 460 11 49 0	0,11 0,19		
	for mounting on:					
	enclosure	side				
	8146/_073;/_075	A/B				



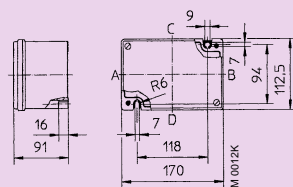
Accessories and spare parts

Designation	Illustration	Description	Ordering code	Weight [kg]		
Brass plate		To earth metal entry glands when using moulded material enclosures and flanges				
		for 8146	Flange Size			
				1	81 460 10 55 0	0,14
				2	81 460 33 55 0	0,70
				3	81 460 54 55 0	0,30
			Size for enclosures			
			Size	Side		
			91 mm	C/D	81 460 17 55 0	0,11
		8146/.03				
		8146/.04.	91 mm	A/B	81 460 17 55 0	0,11
				C/D	81 460 43 55 0	0,17
		8146/.05.	91 mm/131 mm	A/B	81 460 11 55 0	0,15
				C/D	81 460 22 55 0	0,21
		8146/.06.	91 mm/131 mm	A/B	81 460 22 55 0	0,21
				C/D	81 460 16 55 0	0,24
		8146/.07.	91 mm/131 mm	A/B	81 460 22 55 0	0,21
				C/D	81 460 23 55 0	0,42
			150 mm/190 mm	A/B	81 460 39 55 0	0,40
				C/D	81 460 42 55 0	0,82
		8146/.S7.	91 mm	A/B	81 460 11 55 0	0,15
		C/D	81 460 31 55 0	0,42		
	131 mm	A/B	81 460 38 55 0	0,30		
		C/D	81 460 41 55 0	0,80		
8146/.08.	91 mm/131 mm	A/B	81 460 23 55 0	0,32		
		C/D	81 460 31 55 0	0,41		
	150 mm/190 mm	A/B	81 460 40 55 0	0,82		
		C/D	81 460 41 55 0	0,80		
8146/.09.	91 mm/131 mm	A/B	81 460 30 55 0	0,21		
		C1/D1	81 460 10 55 0	0,42		
		C2/D2	81 460 31 55 0	0,21		
	150 mm/190 mm	A/B	81 460 41 55 0	0,40		
		C1/D1	81 460 40 55 0	0,82		
		C2/D2	81 460 41 55 0	0,80		
	Flange-enclosure		81 460 32 55 0	0,46		
Spacer frame		Frame size				
		1	(68 mm x 68 mm)	81 460 03 10 0	0,02	
		2	(128 mm x 68 mm)	81 460 01 10 0	0,03	
		3	(266 mm x 126 mm)	81 460 04 10 0	0,04	
		4	(126 mm x 126 mm)	81 460 11 10 0	0,03	
Flange enclosure		Cover thickness	2 mm	81 460 35 04 0	0,67	
			5 mm	81 460 36 04 0	0,75	
		Can be used on enclosure				
		8146/_71, sides C/D				
		8146/_81, sides A/B/C/D				
		8146/_91, sides A/B/C/D				

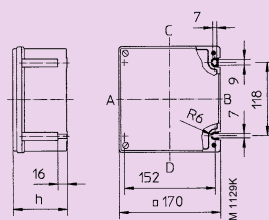
Dimensions, all dimensions in mm – subject to alteration



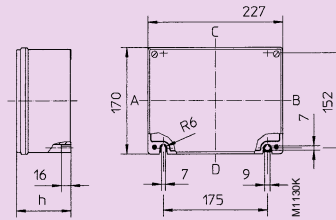
8146/.03.



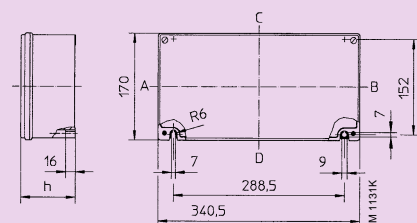
8146/.04.



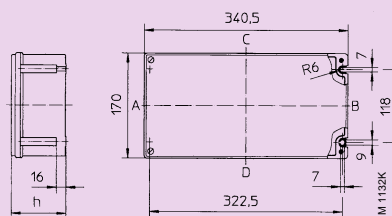
8146/.05.



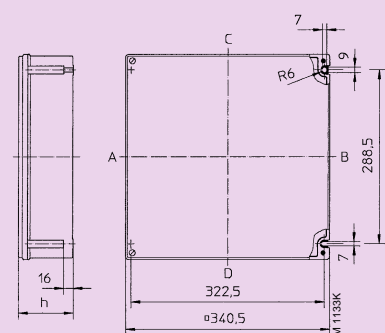
8146/.06.



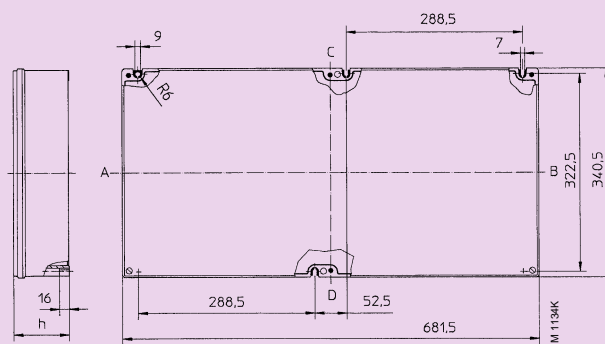
8146/.07.



8146/.S7.



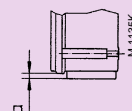
8146/.08.



8146/.09.

Enclosure	Height h					
	1 91 mm	2 131 mm	3 150 mm	4 171 mm	5 190 mm	6 230 mm
8146/.03□	X	–	–	–	–	–
8146/.04□	X	–	–	–	–	–
8146/.05□	X	X	–	–	–	–
8146/.06□	X	X	–	–	–	–
8146/.07□	X	X	X	–	X	–
8146/.S7□	X	–	X	–	–	–
8146/.08□	X	X	X	X	X	X
8146/.09□	X	X	X	–	X	–

X ... available version



Flange thickness [mm]	Dimension a [mm]
2,8	7
5,8	10

Additional dimensions – flange fitted

