

Terminal Boxes Series 8146

- Explosion protection to
 - CENELEC
 - IEC
 - NEC
- Can be used in Zone 1 and Zone 2
- Enclosure of polyester resin
- Can be fitted with terminals up to max. 240 mm²
- 9 basic enclosure sizes with various heights
- Degree of protection IP 66

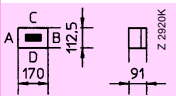
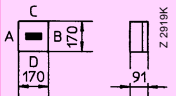
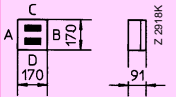
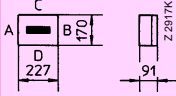
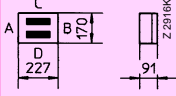
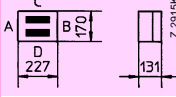
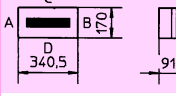
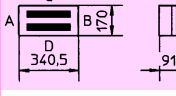
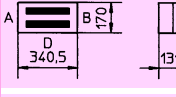
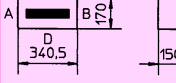
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Series 8146 terminal boxes are supplied with Phoenix Thermoplast terminals as standard. Terminals from other manufacturers can be fitted.

The terminal boxes are fitted to order with terminals and cable entries.

Flanges can be fitted as required on several sides of the enclosure. Size 7, 8 and 9 enclosures can be equipped with flange casings which facilitate optimal fitting of cable entries to the relevant sides of the enclosure.

Zone 1 and Zone 2

Selection table	for terminal boxes with terminals up to max. 35 mm ²																Ordering code	Weight		
	Max. no. of line-up terminals which can be fitted																			
Nominal cross-section [mm ²]	1,5		2,5		4				6		10		16		35		with/without Flanges			
Arrangements	280-991	UK 3 N	264-120	281-991	WDU 2,5	MXK 4 Ex	AK 4/1	UXKK 4	UK 5 N	WDU 4	UK 6 N	WDU 6	UK 10 N	WDU 10	UK 16 N	WDU 16		UK 35-Ex	WDU 35	
	-	18	16	-	-	16	16	-	14	-	-	-	-	-	-	-	-	-	8146/□041	0,81
	18	21	18	18	21	18	18	18	18	18	13	13	11	11	8	8	-	-	8146/□051	0,85/ 0,95
	-	-	30	-	-	30	30	-	-	-	-	-	-	-	-	-	-	-	8146/□051	1,05/ 1,15
	23	27	23	23	27	23	23	23	23	23	17	17	14	13	12	11	-	-	8146/□061	1,06/ 1,26
	-	-	46	-	-	46	46	-	-	-	-	-	-	-	-	-	-	-	8146/□061	1,10/ 1,30
	-	-	46	-	-	46	46	-	-	-	-	-	-	-	-	-	-	-	8146/□062	1,50/ 1,70
	37	44	-	37	41	-	-	35	37	35	26	26	22	20	17	17	-	-	8146/□S71	1,04/ 1,70
	-	-	72	-	-	72	74	-	-	-	-	-	-	-	-	-	-	-	8146/□S71	1,80/ 2,20
	-	-	72	-	-	72	74	-	-	-	-	-	-	-	-	-	-	-	8146/□072	1,90/ 2,20
	37	44	37	37	-	37	37	35	37	35	26	26	22	20	17	17	-	-	8146/□S73	1,40/ 1,70

Add. to ordering code:

Version:

EEx e
EEx i

1
2

Note:

The ordering codes contain the enclosure with carrier rails and PE or PA rail.

State with order: Terminal strips: Number and type

Cable glands: Number, type and side for fitting in enclosure

Flange: Flanges can be fitted to order; please indicate the side on which they are to be fitted.

Terminal boxes fitted with terminals > 35 mm² bis 240 mm² on request.

Terminal Boxes in Polyester Resin Series 8146

Selection table

for terminal boxes up to max. 35 mm²

Nominal cross-section [mm ²]	Max. no. of line-up terminals which can be fitted														Ordering code	Weight [kg]				
	1,5	2,5		4				6		10		16		35						
Enclosure arrangement	280-991	UK 3 N	264-120	281-991	WDU 2,5	MXK 4 Ex	AK 4/1	UXKK 4	UK 5 N	WDU 4	UK 6 N	WDU 6	UK 10 N	WDU 10	UK 16 N	WDU 16	UK 35-Ex	WDU 35		with/ without flange
	16	21	-	16	21	-	-	16	16	17	13	13	10	10	8	8	7	5	8146/□071	1,60/ 1,90
	42	50	-	42	50	-	-	42	42	42	31	31	25	25	21	21	17	16	8146/□081	2,00/ 2,40
	80	94	80	80	94	80	80	80	80	80	58	60	48	48	39	-	-	-	8146/□081	2,40/ 2,80
	120	141	120	120	141	120	120	-	120	-	-	-	-	-	-	-	-	-	8146/□081	2,80/ 3,20
	80	94	80	80	94	80	80	80	80	80	58	60	48	48	39	-	-	-	8146/□082	3,10/ 3,50
	42	50	42	42	50	42	42	42	42	42	31	31	25	25	21	21	17	16	8146/□083	2,60/ 3,00
	80	94	80	80	94	80	80	80	80	80	58	60	48	48	39	-	-	-	8146/□083	3,00/ 3,40
	120	141	120	120	141	120	120	-	120	-	-	-	-	-	-	-	-	-	8146/□083	3,40/ 3,80
	84	100	84	84	100	84	84	84	84	84	62	62	50	50	42	41	34	32	8146/□091	4,00/ 4,80
	160	188	160	160	188	160	160	160	160	160	116	120	96	96	80	-	-	-	8146/□091	4,80/ 5,60

Add. to ordering code:

Version:

EEx e
EEx i

1
2

Note:

The ordering codes contain the enclosure with support rails and PE or PA rail.

State with order: Line-up terminals: number and type

Cable entries: number, type and side in enclosure

Flanges: can be fitted to order; please indicate the side on which they are to be fitted.

Terminal boxes with terminals > 35 mm² up to 240 mm² on request.

STAHL

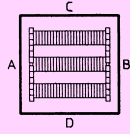
Selection table		for terminal boxes with terminals up to max. 35 mm ²													Ordering code	Weight [kg]					
Nominal cross-section [mm ²]	Enclosure arrangement	Max. no. of line-up terminals which can be fitted																			
		1,5	2,5			4			6		10		16		35						
		280-991	UK 3 N	264-120	281-991	WDU 2,5	MXK 4 Ex	AK 4/1	UXKK 4	UK 5 N	WDU 4	UK 6 N	WDU 6	UK 10 N	WDU 10	UK 16 N	WDU 16	UK 35-Ex	WDU 35		with/ without Flanges
	Z 2800K	240	282	240	240	282	240	240	-	240	-	-	-	-	-	-	-	-	-	8146/□091	5,2/ 6,0
	Z 2809K	160	188	160	160	188	160	160	160	160	160	116	120	96	96	80	-	-	-	8146/□092	6,0/ 6,8
	Z 2808K	84	100	84	84	100	84	84	84	84	84	62	62	50	50	42	41	34	32	8146/□093	4,6/ 5,4
	Z 2807K	160	188	160	160	188	160	160	160	160	160	116	120	96	96	80	-	-	-	8146/□093	5,4/ 6,2
	Z 2806K	240	282	240	240	282	240	240	-	240	-	-	-	-	-	-	-	-	-	8146/□093	5,8/ 8,6
Add. to ordering code:	Version:														EEx e EEx i	1 2					
Note:	The ordering codes contain the enclosure with support rails and PE or PA																				
State with order:	Line-up terminals: number and type																				
	Cable entries: number, type and side in enclosure																				
	Flanges: can be fitted to order; please indicate the side on which they are to be fitted.																				
Terminal boxes with terminals > 35 mm ² up to 240 mm ² on request.																					



Technical data		
Explosion protection		EEx e II T6/T5
Test certificate		PTB Nr. Ex-90.C.3145 Other certificates: VDE (Germany), FM (USA), VNIIEF (Russia), FTZU (Czech Republic), BKI (Hungary), LOSC (Australia), SEV (Switzerland), TÜV Vienna (Austria), UL (USA), CSA (Canada), SIMTARS (Australia)
Material	Enclosure	Polyester resin; glass fibre-reinforced; dark grey, similar to RAL 7024, impact strength ≥ 7 Nm; surface resistance ≤ 10 ⁶ Ohm; material flame resistant, self-extinguishing
	Gasket	EPDM foam
Flanges	Standard Special	the enclosures are supplied without flanges in the standard version the enclosures can be fitted on one or more sides with flanges; flange material: Polyester resin, glass fibre-reinforced
Lid lock	Standard Special	M 6, cheese-head screws with combined slot; captive; stainless steel with hinges
Rated voltage		max. 1100 V AC/DC (depending on the terminals fitted)
Degree of protection		IP 66
Ambient temperature		- 20° C ... + 40° C (T6) - 20° C ... + 55° C (T5)
Line-up terminals		Max. usable cross-section 240 mm ²
Dimensions		see page 8/27

Cable entries

Table of maximum number of possible enclosure entries with cable glands 8161



Caution:

The maximum possible number of cable entries which can be fitted in the enclosure sides depends on the number of support rails fitted in the enclosure:

with support rails fitted from side A to side B:

sides A and B cannot be fitted with cable entries, or only to a limited extent;

with support rails from side C to D:

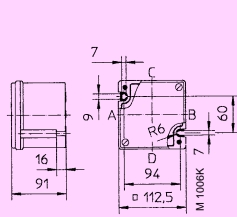
sides C and D cannot be fitted with cable entries, or only to a limited extent

Size	8146/.031		8146/.041		8146/.051/.052				8146/.061/.062				Flange casing	
	without flanges		without flanges		without flanges		with flanges		without flanges		with flanges		for 8146/..7.C/D 8146/.08.A/B/C/D 8146/.09.A/B 8146/.09.C/D (2x)	
	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
M 16	3	6	4	11	6	12	–	7	12	15	7	7	31	
M 20	1	3	3	5	3	6	–	3	6	7	3	3	16	
M 25	1	2	2	4	3	5	–	3	5	6	3	3	13	
M 32	1	1	1	3	2	3	–	2	3	5	2	2	8	
M 40	–	1	1	1	1	2	–	–	2	2	–	–	5	
M 50	–	1	–	1	–	1	–	–	1	2	–	–	4	
M 63	–	–	–	–	–	–	–	–	–	–	–	–	–	

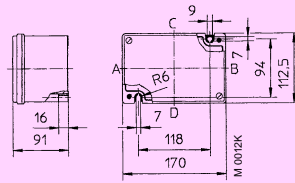
Size	8146/.071/.072				8146/.073/.075				8146/.S71				8145/.S73			
	without flanges		with flanges		without flanges		with flanges		without flanges		with flanges		without flanges		with flanges	
	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D	A/B	C/D
M 16	12	27	7	14	20	45	12	31	9	30	–	14	15	50	–	31
M 20	6	14	3	6	13	28	8	17	4	16	–	6	9	32	–	17
M 25	5	11	3	6	10	22	5	13	3	13	–	6	8	26	–	13
M 32	3	6	2	4	6	14	4	10	2	10	–	4	6	15	–	10
M 40	2	4	–	–	4	8	2	5	1	5	–	–	2	10	–	5
M 50	1	3	–	–	2	5	1	3	1	4	–	–	1	6	–	3
M 63	–	–	–	–	1	3	1	2	–	–	–	–	1	4	–	2

Size	8146/.081/.082				8146/.083/.085/.086				8146/.091/.092				8145/.093/.095			
	without flanges		with flanges		without flanges		with flanges		without flanges		with flanges		without flanges		with flanges	
	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
M 16	27	30	14	14	50	50	31	31	30	55	28	28	50	91	31	62
M 20	14	16	6	6	28	32	17	17	16	30	12	12	32	60	17	34
M 25	11	13	6	6	22	26	13	13	13	25	12	12	26	48	13	26
M 32	6	10	4	4	14	15	10	10	10	17	8	8	15	25	10	20
M 40	4	5	–	–	8	10	5	5	5	8	–	–	10	18	5	10
M 50	3	4	–	–	5	6	3	3	4	7	–	–	6	11	3	6
M 63	–	–	–	–	3	4	2	2	–	–	–	–	4	6	2	4

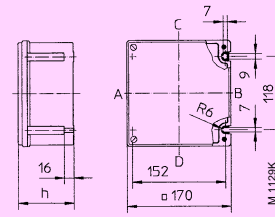
Dimensions, all dimensions in mm – subject to alteration



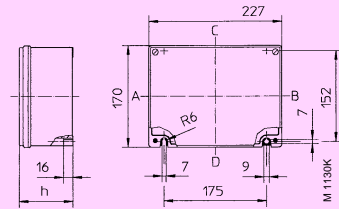
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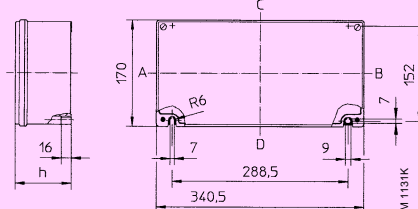
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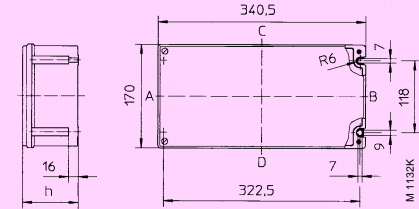
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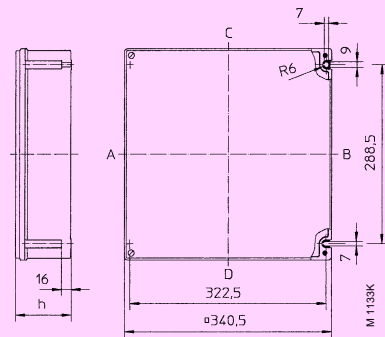
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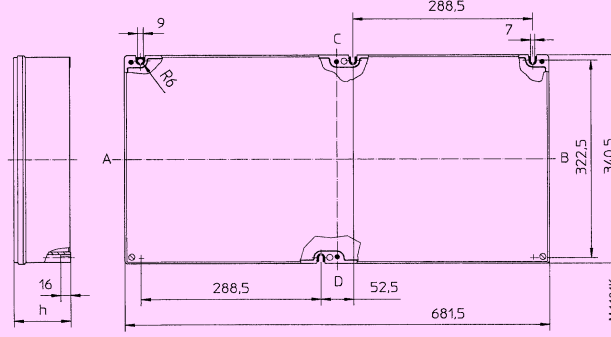
8146/07.



8146/S7.



8146/08.



8146/09.

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

Additional dimension for flange mounting

Enclosure	Height of enclosure h					
	1	2	3	4	5	6
	91 mm	131 mm	150 mm	171 mm	190 mm	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 ... can be supplied

Accessories and spare parts

Designation	Illustration	Description	Ordering code
Flange		Size 1, 2 and 3 Version 2,8 mm thick 5,8 mm thick	on request
Flange casing		with lid can be mounted on enclosure Side 8146/_71 C/D 8146/_81 A/B/C/D 8146/_91 A/B/C/D	81 460 35 04 0 81 460 36 04 0
Brass plate		for earthing metal gland parts when used in moulded plastic enclosures and plastic flanges; various sizes and versions	on request

