INTEGRATED SOLUTIONS · LOW VOLTAGE SYSTEMS

Product	Installation in Zone						Series	Page	WebCode
	0	1	2	20	21	22			
Lighting and Heating Panels									
Lighting and Heating Panel CUBEx		•	•		•	•	8264	635	8264A
Standard Lighting and Heat-Trace Panels		•	•		•	•	8146	630	8146D
Power Distribution Boards									
Overview Module Technology, Flameproof Enclosures, CUBEx Systems								629	
UPS Uninterrupted Power Supply									
Ex UPS		•	•				8265	637	8265B

For additional products and information please refer to r-stahl.com

Module technology

Flameproof components are built into enclosures designed for “increased safety Ex e”.

- Marine certification with individual acceptance
- Enclosure material: polyester resin or stainless steel
- Enclosure for modular combination
- Comprehensive construction and easy handling
- Installation of flameproof modules (Ex de): fuses, miniature circuit-breakers, switches, contactors, motor protection relay, etc.
- Terminals in Ex e “increased safety” standard
- Mounting frame system for wall-mounting or free-standing with or without protection roof

Flameproof enclosures

Standard industrial equipment can be built into flameproof enclosures of Ex de construction, pressure with standing.

- Marine certification with individual acceptance
- Enclosure material: sheet-steel or stainless steel
- Enclosure for modular combination
- Installation of standard electrical equipment: fuses, switches, contactors, programmable controllers, regulators, etc.
- Mounting frame system for wall-mounting or free-standing with or without protection roof
- Different installation system: indirect entry using Ex e connection chambers, direct entry using Ex d cable glands or conduit material

CUBEx systems

A highlight of the CUBEx system is its enclosure design. Straight walls enable extremely compact enclosure combinations. It is used when installing non-explosion-protected switchgears for control panels and distribution boards as well as for control boxes and terminal boxes.

- Marine certification with individual acceptance
- Entry method direct and indirect
- Compact and easy to combine
- Different installation system: indirect entry using Ex e connection chambers, direct entry using Ex d cable glands or conduit material

Standard Lighting and Heat-Trace Panels
Series 8146

- Standard versions with short delivery times, customer-specific options possible
- With miniature circuit breaker, tripping characteristic C
- With residual current circuit breaker with overcurrent release, tripping characteristic C
- Rated currents 10, 16, 20, 25 A

WebCode 8146D

R. STAHL Series 8146 lighting and heating panels are modular and are therefore available in a large number of standard variants which are available for rapid delivery. Customer-specific options are also possible. The circuit breakers are installed beneath a inspection window and can also be actuated from the outside, even under voltage. The switching position is visible at all times.

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

Selection Table

Product Description Built-in unit 2		Circuit distribution board light With miniature circuit breaker 6 x Miniature circuit breaker 1-pole 16A / C / 6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
32 A (T6)	1 x 8161/7-M40-2812	6 x 8161/7-M25-1707	1 x 8161/7-M16-0902	06	8146/5-ExV-06-06L16C1P-D	137135	13	25.000
Product Description Built-in unit 2		Circuit distribution board light With miniature circuit breaker 12 x Miniature circuit breaker 1-pole 16A / C / 6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
64 A (T6)	1 x 8161/7-M50-3516	12 x 8161/7-M25-1707	1 x 8161/7-M16-0902	02	8146/5-ExV-02-12L16C1P-T	137118	13	37.000
Product Description Built-in unit 2		Circuit distribution board light With miniature circuit breaker 18 x Miniature circuit breaker 1-pole 16A / C / 6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
80 A (T6)	1 x 8161/7-M50-3516	18 x 8161/7-M25-1707	1 x 8161/7-M16-0902	03	8146/5-ExV-03-18L16C1P-T	137124	13	50.000
Product Description Built-in unit 2		Circuit distribution board light With miniature circuit breaker 24 x Miniature circuit breaker 1-pole 16A / C / 6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
80 A (T6)	1 x 8161/7-M50-3516	24 x 8161/7-M25-1707	1 x 8161/7-M16-0902	04	8146/5-ExV-04-24L16C1P-T	137130	13	70.000
Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 8 x With residual current circuit breaker 1-pole 16 A+N/30 mA/B/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
48 A (T4)	1 x 8161/7-M40-2812	8 x 8161/7-M25-1707	1 x 8161/7-M16-0902	02	8146/5-ExV-02-08H16B1N-T	137146	13	37.000

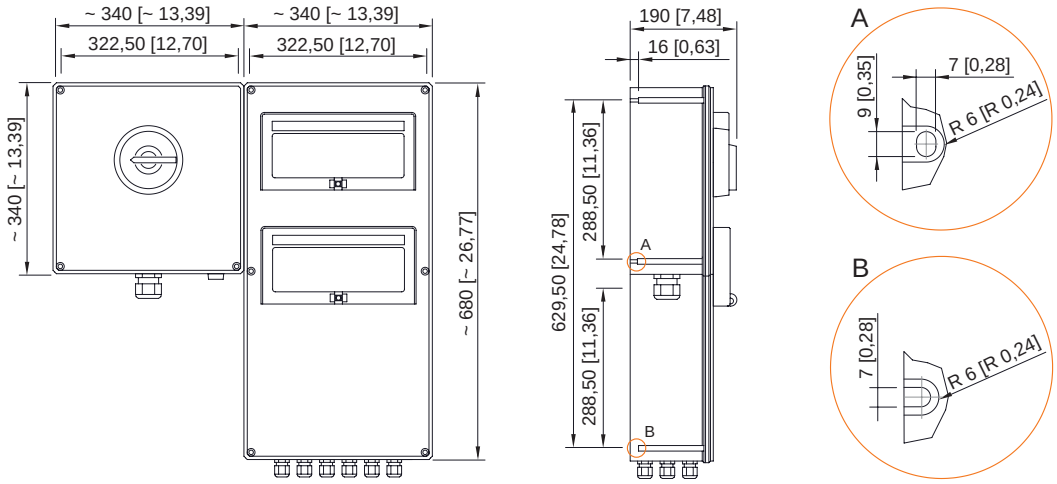
Selection Table

Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 8 x With residual current circuit breaker 1-pole 16 A+N/30 mA/C/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
48 A (T4)	1 x 8161/7-M40-2812	8 x 8161/7-M25-1707	1 x 8161/7-M16-0902	07	8146/5-ExV-07-08H16C1N-D	137173	13	37.000
Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 12 x With residual current circuit breaker 1-pole 16 A+N/30 mA/B/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
64 A (T4)	1 x 8161/7-M50-3516	12 x 8161/7-M25-1707	1 x 8161/7-M16-0902	03	8146/5-ExV-03-12H16B1N-T	137152	13	50.000
Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 12 x With residual current circuit breaker 1-pole 16 A+N/30 mA/C/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
64 A (T4)	1 x 8161/7-M50-3516	12 x 8161/7-M25-1707	1 x 8161/7-M16-0902	03	8146/5-ExV-03-12H16C1N-T	137164	13	50.000
Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 24 x With residual current circuit breaker 1-pole 16 A+N/30 mA/B/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
80 A (T4)	1 x 8161/7-M50-3516	24 x 8161/7-M25-1707	1 x 8161/7-M16-0902	05	8146/5-ExV-05-24H16B1N-T	137157	13	95.000
Product Description Built-in unit 2		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 24 x With residual current circuit breaker 1-pole 16 A+N/30 mA/C/6 kA						
Rated operational current	Entry 1	Entry 2	Entry 3	Layout No.	Product Type	Art. No.	PS	Weight kg
80 A (T4)	1 x 8161/7-M50-3516	24 x 8161/7-M25-1707	1 x 8161/7-M16-0902	05	8146/5-ExV-05-24H16C1N-T	137167	13	95.000

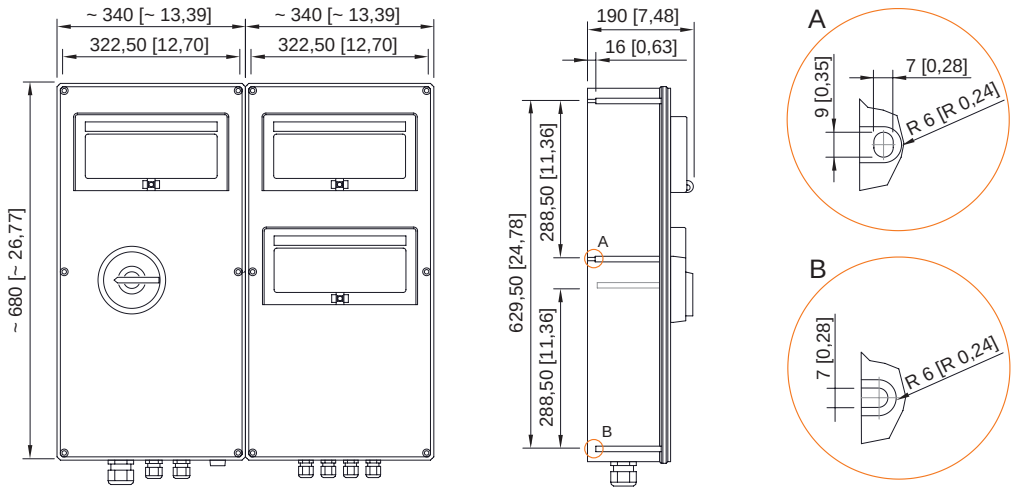
Technical Data

Variant	With residual current circuit breaker	With miniature circuit breaker
Explosion Protection		
IECEx dust explosion protection	Ex tb IIIC T130 °C Db	Ex tb IIIC T80 °C Db
IECEx gas explosion protection	Ex db eb IIC T4 Gb	Ex db eb IIC T6 Gb
ATEX gas explosion protection	Ⓔx II 2 G Ex db eb IIC T4 Gb	Ⓔx II 2 G Ex db eb IIC T6 Gb
ATEX dust explosion protection	Ⓔx II 2 D Ex tb IIIC T130 °C Db	Ⓔx II 2 D Ex tb IIIC T80 °C Db
EAC gas explosion protection	Ex e* IIC...IIA T6 ... T4 Gb X	Ex e* IIC...IIA T6 ... T4 Gb X
EAC dust explosion protection	Ex tb IIIC T80 °C ... T130 °C Db X	Ex tb IIIC T80 °C ... T130 °C Db X
Certificates	ATEX (PTB), Brazil (ULB), Canada (CSA), Canada (FM), China (NEPSI), EAC (LPE), IECEx (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM)	ATEX (PTB), Brazil (ULB), Canada (CSA), Canada (FM), China (NEPSI), EAC (LPE), IECEx (PTB), India (PESO), Korea (KGS), Taiwan (ITRI), USA (FM)
Notes	Product label may vary. Series devices have certification according to ATEX and IECEX.	
Electrical Data		
Rated operational voltage AC	230 – 400 V	230 – 400 V
Notes	depending on terminal types and explosion-protected components used	
Ambient Conditions		
Ambient temperature	-20 °C ... +40 °C	-20 °C ... +40 °C
Mechanical Data		
Degree of protection IP (IEC 60529)	IP66	IP66
Enclosure material	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced
Flame retardant acc.	IEC/EN 60695, UL 94, ASTM D635	IEC/EN 60695, UL 94, ASTM D635
Impact strength	7 J	7 J

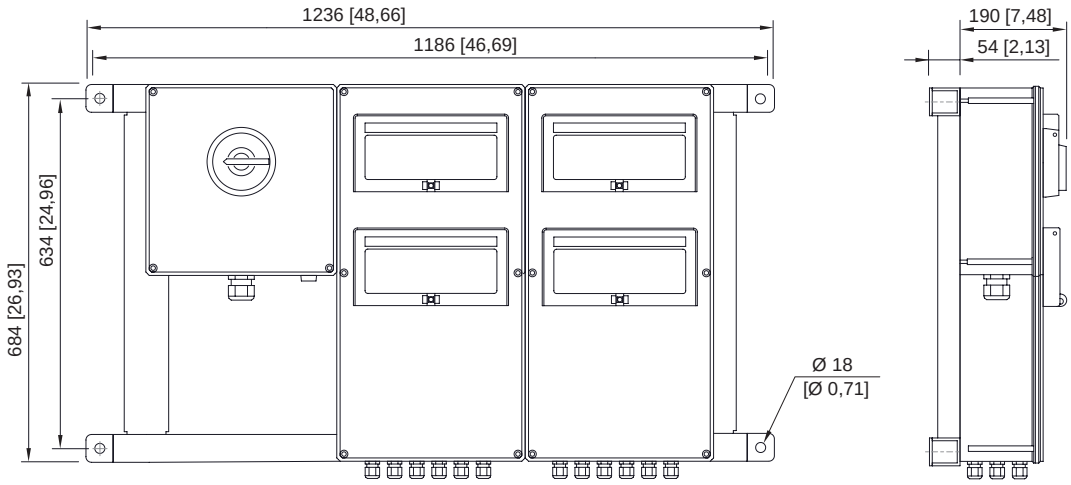
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Layout 02



Layout 03



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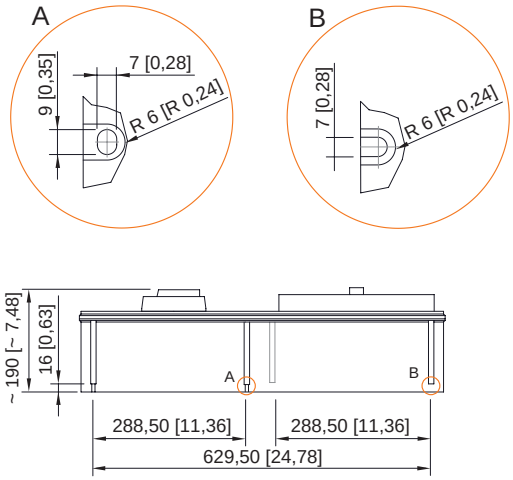
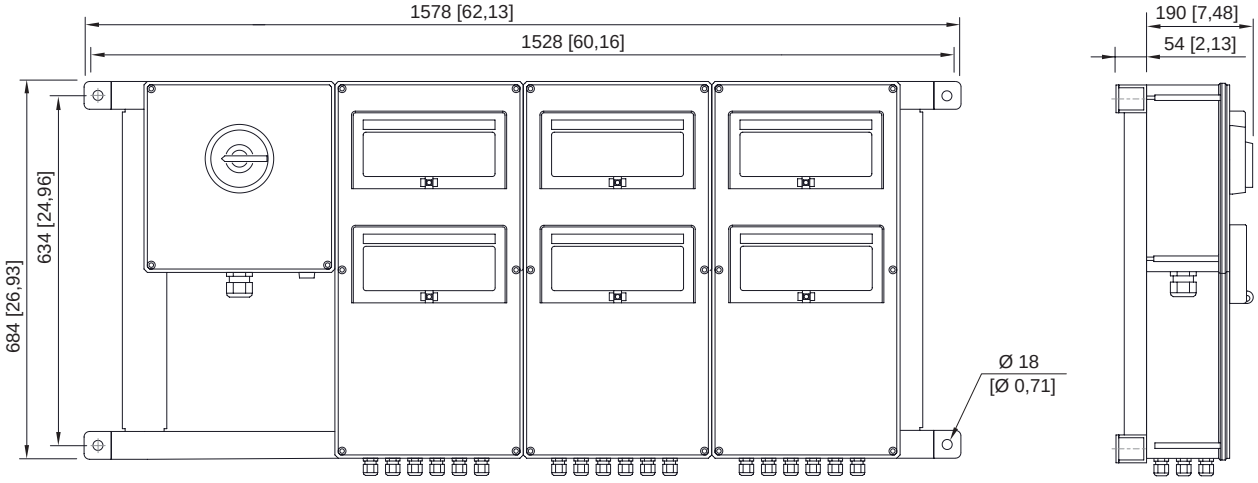
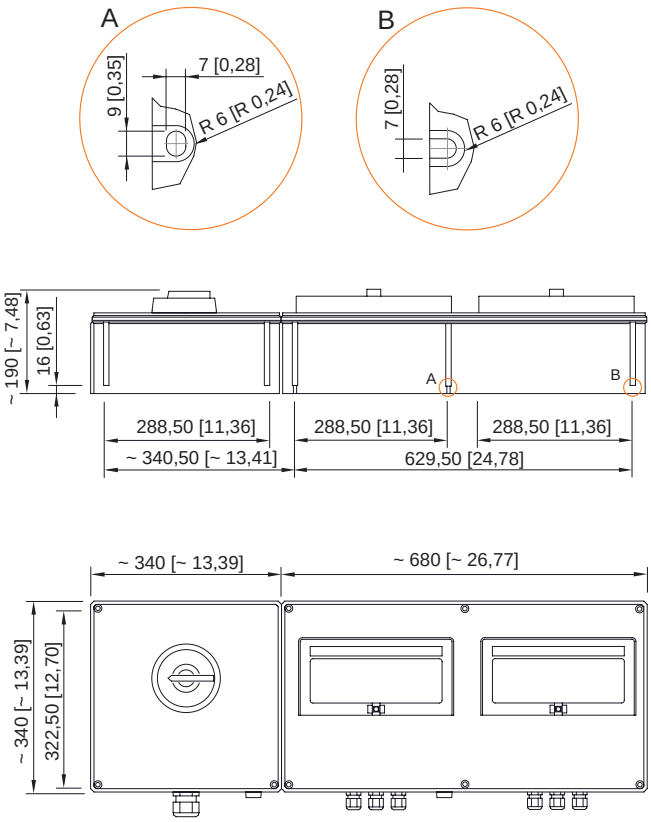


Layout 06



Layout 05


A
7 [0,28]
9 [0,35]
R 6 [R 0,24]
B
7 [0,28]
R 6 [R 0,24]
~ 190 [~ 7,48]
16 [0,63]
A
B
288,50 [11,36]
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~ 340,50 [~ 13,41]
629,50 [24,78]
~ 340 [~ 13,39]
~ 680 [~ 26,77]
~ 340 [~ 13,39]
322,50 [12,70]

Layout 07

Lighting and Heating Panel CUBEx

Series 8264

- Enclosures with Ex d protection
- With miniature circuit breaker, tripping characteristic C
- With residual current circuit breaker and overcurrent release, tripping characteristic B or C
- Advantage: short delivery time

WebCode 8264A

R. STAHL Series 8264/-ExV CUBEx lighting and heating panels are modular and are therefore available in a large number of standard variants which are available for rapid delivery; further versions are available on request. They are lightweight, seawater-resistant and suitable for a large temperature range. The Ex d enclosures are wall-mounted using screws or rails.

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

Selection Table

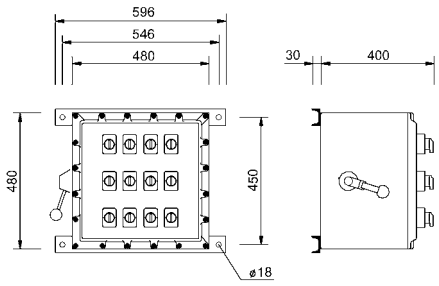
Product Description Built-in unit 1		Circuit distribution board light With miniature circuit breaker 1 x Load and motor switch				
Layout No.	Built-in unit 2	Entry 1	Entry 2	Product Type	Art. No.	PS	Weight kg
01	12 x Miniature circuit breaker 1-pole 16 A / C	1 x M50 x 1.5	12 x M20 x 1.5	8264/5-ExV-01-12L16C1P-D	143210	13	100.000
02	24 x Miniature circuit breaker 1-pole 16 A / C	1 x M50 x 1.5	24 x M20 x 1.5	8264/5-ExV-02-24L16C1P-D	143212	13	156.000
Product Description Built-in unit 1		Heating circuit distribution boards With residual current circuit breaker With overcurrent release 1 x Load and motor switch				
Layout No.	Built-in unit 2	Entry 1	Entry 2	Product Type	Art. No.	PS	Weight kg
01	12 x With residual current circuit breaker 1-pole 16 A+N/30 mA/C	1 x M50 x 1.5	12 x M20 x 1.5	8264/5-ExV-01-12H16C1N-D	143217	13	100.000
02	24 x With residual current circuit breaker 1-pole 16 A+N/30 mA/B	1 x M50 x 1.5	24 x M20 x 1.5	8264/5-ExV-02-24H16B1N-D	143216	13	156.000

Technical Data

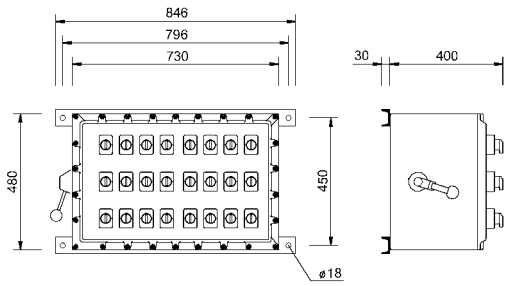
Explosion Protection	
IECEx gas explosion protection	Ex db IIB+H2/IIB T6/T4 Gb
IECEx dust explosion protection	Ex tb IIIC T95 °C ... T130 °C Db
ATEX gas explosion protection	II 2 G Ex db IIB+H2/IIB T6/T4 Gb
ATEX dust explosion protection	II 2 D Ex tb IIIC T95 °C ... T130 °C Db
Certificates	ATEX (DEK), Brazil (ULB), Canada / USA (UL), China (CQST), IECEx (DEK), India (PESO), Korea (KGS), Taiwan (ITRI)
Notes	Product label may vary. Series devices have certification according to ATEX and IECEX.

Technical Data	
Electrical Data	
Rated operational voltage AC	230 – 400 V
Rated operational current	100 A
Notes	depending on terminal types and explosion-protected components used
Ambient Conditions	
Ambient temperature	-20 °C ... +40 °C (IIB+H2 T6) (T95 °C) -55 °C ... +60 °C (IIB T4) (T130 °C)
Notes	the ambient temperatures are dependent on the components used
Mechanical Data	
Degree of protection IP (IEC 60529)	IP65
Impact strength	7 J
Enclosure material	Aluminium, Seawater-resistant
Material note	Stainless steel variants also available

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



Layout 01



Layout 02

E8

- Ex UPS guard battery monitoring in accordance with IEC/EN 60079 et seq.
- Adjustable buffer time
- Battery function test
- Potential-free signal outputs
- Maximum efficiency
- Increased for reliable triggering of the load fuse

WebCode **8265B**

Systems and data are put at risk from even brief power failures or large fluctuations in voltage. R. STAHL Series 8265 UPS systems offer compact and flexible protection since their stable output voltage ensures maximum availability via an adjustable UPS time. The measurements for battery capacity and the battery function tests provide even greater reliability.

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

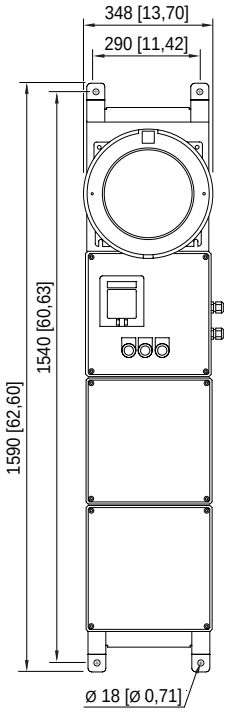
Selection Table							
Input voltage		24 V DC					
Output voltage	Rated operational current	Power	Buffer time max.	Product Type	Art. No.	PS	Weight kg
24 V DC	2.1 A	50 – 200 W	180 min	8265/55-625-113	258203	13	108.000
	10.5 A	250 – 300 W	120 min	8265/56-635-113	258207	13	108.000
Input voltage		100 - 264 V AC					
Output voltage	Rated operational current	Power	Buffer time max.	Product Type	Art. No.	PS	Weight kg
24 V DC	2.1 A	50 – 200 W	180 min	8265/55-625-213	258211	13	119.000
	10.5 A	250 – 300 W	120 min	8265/56-635-213	258216	13	119.000
Input voltage		180 - 264 V AC					
Output voltage	Rated operational current	Power	Buffer time max.	Product Type	Art. No.	PS	Weight kg
120 V DC	2.5 A	300 VA	60 min	8265/56-665-414	258218	13	119.000
230 V DC	1.3 A	300 VA	60 min	8265/56-665-415	259148	13	119.000

Further versions / designs on request

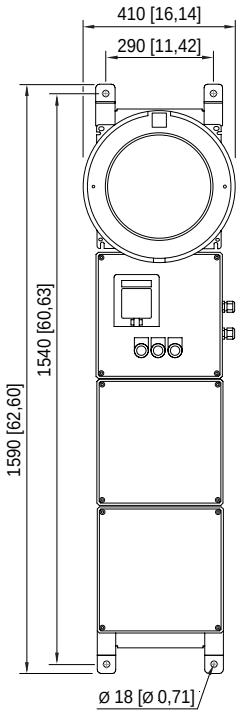
Technical Data	
Explosion Protection	
ATEX gas explosion protection	Ⓔx II 2 G Ex db eb IIC T6 Gb
Certificates	ATEX (PTB)
Electrical Data	
Conduction current	1.5 A
Notes	depending on terminal types and explosion-protected components used

Technical Data	
Ambient Conditions	
Ambient temperature charging	0 °C ... +40 °C
Ambient temperature discharging	-20 °C ... +40 °C
Mechanical Data	
Degree of protection (IP)	IP23
Enclosure material	Polyester resin, Glass fibre reinforced Aluminium, copper-free

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



up to 200 W
8265/55-625-.13



over 200 W
8265/56-635-.13; 8265/56-665-41.

E8