



# ZENITH-P SERIES

Increased safety enclosures for applications in potentially explosive atmospheres

[  ATEX-IECEx  
II 2GD ]



 **SCAME**  
electrical solutions

# ZENITH-P Series



## ■ INCREASED SAFETY ENCLOSURES



## ■ GENERAL DESCRIPTION

The ZENITH-P range includes 19 different sizes of enclosures made in glass-reinforced polyester (GRP), 4 mm thick. The polyester ensures excellent mechanical strength and durability: this material is highly resistant to contamination, totally corrosion-proof and suitable for low smoke zero halogen (LSOH).

The material is loaded with carbon black, which reduces the surface resistance of the material and consequently eliminates the risk of ignition sources through static induced sparking resistivity.

The mounting holes are incorporated in the profile of the enclosures, however outside the seal gasket. The wall is thick enough to allow entry holes to be machined directly in the walls, using the proper tools, and represents an excellent alternative to aluminum, stainless steel or cast iron.

## ■ APPLICATION

Enclosures may be supplied with pre-fitted terminals, actuators or as a certified empty enclosure. In the latter, case, the final certification must be obtained from the customer, after the enclosure is filled with the necessary components. The ZENITH-P series offers safe protection in various applications, including the industrial sector and potentially explosive environments featuring extremely adverse conditions. They are perfect for a wide variety of uses, for example: OEM applications, fire protection, tunnel wiring, lighting, and as junction and control boxes.

## ■ CERTIFICATIONS

The products have passed laboratory tests and have obtained the safety certification from accredited ATEX-IECEx certification bodies. Scame guarantees that the enclosures were properly manufactured and that they comply with safety regulations.

## ■ REFERENCE STANDARDS

### IEC/EN 60079-0

Electrical apparatus for potentially explosive atmospheres.  
*Part 0: general requirements.*

### IEC/EN 60079-7

Electrical apparatus for potentially explosive atmospheres.  
*Part 7: equipment protection by increased safety "e".*

### IEC/EN 60079-11

Electrical apparatus for potentially explosive atmospheres.  
*Part 11: intrinsic safety "i".*

### IEC/EN 60079-31

Electrical apparatus for potentially explosive atmospheres.  
*Part 31: equipment dust ignition protection by enclosures "t".*

## ■ TECHNICAL CHARACTERISTICS

ATEX Code:	II 2GD
Ex Protection type: Empty enclosures	<b>Ex e IIC Gb</b> <b>Ex ia IIC Ga</b> <b>Ex t IIIC Db IP6x</b>
Junction boxes	<b>Ex e IIC Tx Gb Ex ia IIC Tx Gb</b> <b>Ex e ia IIC Tx Gb</b> <b>Ex t IIIC Txx°C Db IP6x</b>
Control stations	<b>Ex d e IIC Tx Gb</b> <b>Ex d e mb IIC Tx Gb</b> <b>Ex e mb IIC Tx Gb</b> <b>Ex t IIIC Txx°C Db IP6x</b>
Certificates: - Empty enclosure	<b>Sira 08ATEX3041U</b> <b>IECEx SIR 11.0057U</b>
- Junction boxes	<b>Sira 08ATEX3042</b> <b>IECEx SIR 11.0058</b>
- Control station	<b>Sira 11ATEX3008</b> <b>IECEx SIR 11.0059</b>
Degree of protection:	<b>IP66</b> <b>IP65 (644.0595)</b>
Operating temperature range:	<b>-60°C to +60°C/+75°C</b>
Temperature class and Ambient:	- Standard <b>Ambient 40°C / T6 Class</b> <b>Ambient 60°C / T6 Class</b> - Optional <b>Ambient 40°C / T5 Class</b> <b>Ambient 60°C / T5 Class</b> <b>Ambient 75°C / T4 Class</b>
Impact resistance:	<b>7 J</b>
Material:	<ul style="list-style-type: none"> <li>• <b>Glass Reinforced Polyester (SMC) 4 mm thick</b></li> <li>• <b>Loaded with carbon black for antistatic protection</b></li> </ul>
Surface resistance:	<b>Antistatic properties: &lt; 109 Ω</b>
Finish:	<b>Natural Black RAL 9005</b>

## ■ RESISTANCE TO CHEMICAL AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited resistance	Resistant	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

For specific substances please contact our technical service.

## ■ LID FIXING SCREWS



Corrosion-resistant stainless steel (complete with retaining washer) for flat blade screwdriver and PH screwdriver. The assembly holes are outside the sealed area.

## ■ TERMINAL MOUNTING



Terminals will be mounted on rails or on internal plates. DIN rail (TS 15, TS 35): 1 row. Certified terminals with nominal section from 1.5 mm<sup>2</sup> up to 120 mm<sup>2</sup>. Our assembly service can supply enclosures preassembled with terminals and cable glands, according to the customer's requirements.

## ■ INCLUDED IN THE DELIVERY



- EMPTY ENCLOSURES
- JUNCTION BOXES (with terminals)
- CONTROL STATIONS (with terminals and actuators)

## ■ CERTIFICATION LABEL

Via Costa Erta 15 PARRE BG ITALY

Cod. 644.xxxx-yyyy  
 S/N xxxxxxxx  
 SIR A 11ATEX3008  
 IECEx SIR 11.0059  
 Ex d e IIC Tx Gb  
 Ex d e mb IIC Tx Gb  
 Ex e mb IIC Tx Gb  
 Ex t IIIC Txx°C IP6x Db  
 Ta -xx°C to -xx°C

Year 2011  
 V xxx V  
 I xxxx A  
 P max xxxx W

CE 0051

II 2 GD

DO NOT OPEN WHEN ENERGIZED  
 IN PRESENCE OF EXPLOSIVE ATMOSPHERE

Certified self-adhesive label. On request: stainless steel plate.

## ■ APPLICATION EXAMPLES



# ZENITH-P Series

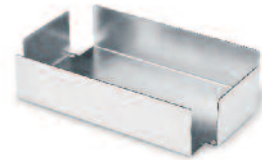


## RANGE AND ACCESSORIES

### ENCLOSURE



### EARTH CONTINUITY PLATE

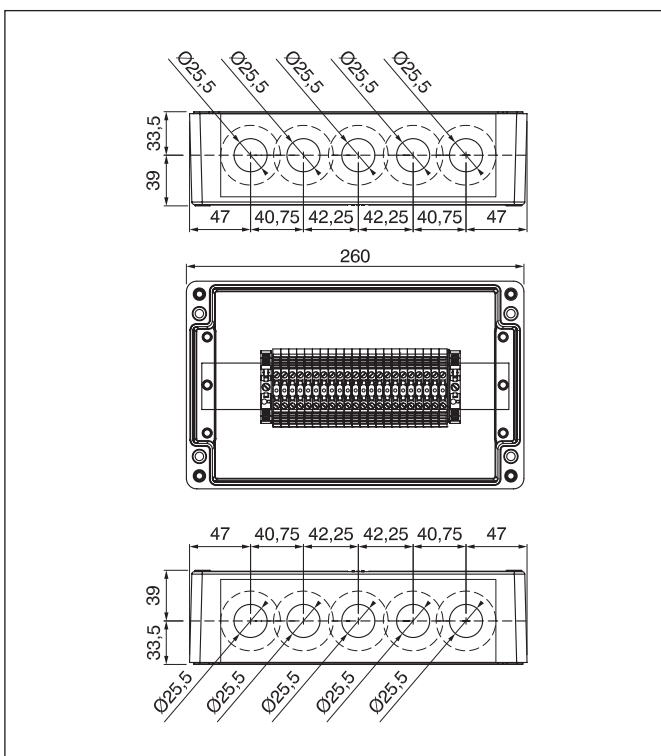


(A)

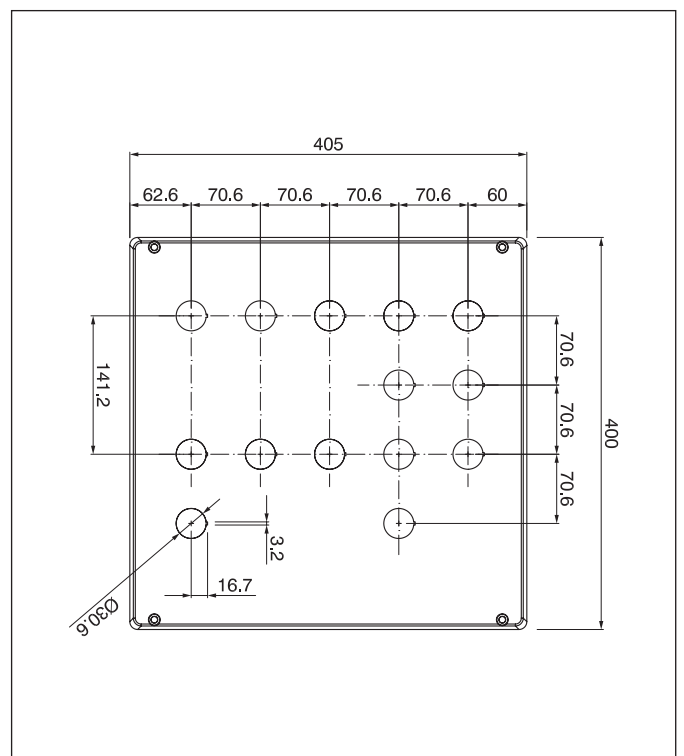
H	W	JUNCTION BOXES		CONTROL STATIONS			EARTH CONTINUITY PLATE				
		55	75	90	120	165	55	75	90	120	165
80		644.0100	644.0200				644.A0100	644.A0200			
		644.0110	644.0210				644.A0110	644.A0210			
75	160	644.0120	644.0220				644.A0120	644.A0220			
	190	644.0130	644.0230				644.A0130	644.A0230			
	230	644.0140	644.0240				644.A0140	644.A0240			
120	122			644.0345					644.A0345 (•)		
	220			644.0350					644.A0350 (•)		
160	160			644.0360					644.A0360 (•)		
	260			644.0370					644.A0370 (•)		
	360			644.0380					644.A0380 (•)		
	560			644.0390					644.A0390 (•)		
	255				644.0465					644.A0465	
250	400				644.0485					644.A0485	
	405	400				644.0595					644.A0595

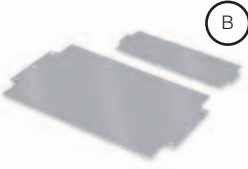
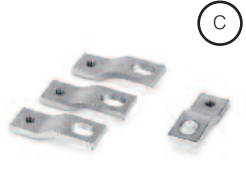



(•) Cable glands  $\geq$  M40 with earth continuity plate cannot be used on the short side.

## JUNCTION BOX



## CONTROL STATION



INTERNAL MOUNTING PLATE	EXTERNAL MOUNTING BRACKETS	EXTERNAL MOUNTING VERTICAL FEET	EARTH STUD (*)	EXTERNAL HINGES (*)
				
55-75-90-120-165	55-75-90-120-165	55-75-90-120-165	55-75-90-120-165	55-75-90-120-165
644.B00				
644.B10				
644.B20	644.C075	644.D075		
644.B30				
644.B40				
644.B45	644.C120	644.D120		
644.B50				
644.B60			644.E650	644.F001
644.B70				
644.B80		644.D160		
644.B90	644.C160			
644.B65				
644.B85		644.D250		
644.B95		644.D405		

(\*) Machining is required.

## ■ ACCESSORIES

- A) Earth Continuity Plate (ECP) made in zinc-plated steel.
- B) Component assembly plate made of zinc-plated steel.
- C) External mounting brackets (4 sets) made of stainless steel AISI 316L.
- D) Vertical feet for external mounting (2 sets) made of stainless steel AISI 316L.
- E) Earth stud made of brass. Also available in stainless steel AISI 316L (\*).
- F) External hinges (2 sets) made of thermoplastic material (\*).

The enclosures can be machined and drilled upon request - cable gland holes from M12 to M63.

(\*) machining is required



# ZENITH-P Series



## ■ EMPTY ENCLOSURE



The ZENITH-P family, empty enclosure, made of glass reinforced polyester, offers 19 standard dimensions. Empty enclosures are approved as components ("U"). This partial certificate can be used as a base for the certification of a complete system or to ensure IP65/IP66 protection and/or for Zone 2/22 in applications with self-certifications. They are suited for installation in dangerous areas for the presence of gas in Zone 1/2 and/or for dust in Zone 21/22.

## ■ ACCESSORIES

- Plate bottom in zinc-plated steel

---

- Fixing bracket in stainless steel AISI 316L

---

- External hinges in thermoplastic material

---

- Earth continuity plate (internal) in zinc-plated steel

---

- Earth stud (pin, nuts and washer) in brass (available in stainless steel AISI 316L)

---

- Drain and breather valve with separate certification

---

- Cable glands / plugs with separate ATEX-IECEX certification

---

- Actuators/components with separate ATEX-IECEX certification

---

- Analog instruments with separate ATEX-IECEX certification

## ■ JUNCTION BOX



The ZENITH-P family, junction box, made of glass reinforced polyester, offers 19 different standard enclosure sizes. The modular dimensions and coupling flanges allow quick construction of personalized enclosures in a wide range of dimensions and forms. The terminals used to interconnect the supply are certified separately, including the use of drain and/or breather valves. Junction boxes can be equipped with Ex terminals and earth terminals, DIN rails, internal bottom plate and cable glands (plastic, brass, nickel-plated brass, stainless steel). They are suited for installation in dangerous areas for the presence of gas in Zone 1/2 and/or dust Zone 21/22.

## ■ CERTIFICATION LABEL



Via Costa Erta 15 PARRE BG ITALY

Cod. 644.xxxx-yyy  
 S/N xxxxxxxx  
 SIR A 08ATEX3042  
 IECEX SIR 11.0058  
 Ex e IIC Tx Gb  
 Ex ia IIC Tx Ga  
 Ex e ia IIC Tx Gb  
 Ex t IIIC Txx°C IP6x Db  
 Ta -xx°C to +xx°C

Year 2011  
 V xxx V  
 I xxxx A  
 P max xxxx W  
 CE 0051  
 Ex II 2 GD

DO NOT OPEN WHEN ENERGIZED  
 IN PRESENCE OF EXPLOSIVE ATMOSPHERE



Empty enclosure



Junction box



Pre-drilled enclosure

## ■ CONTROL STATION



The ZENITH-P family, control station, made of glass reinforced polyester, offers 19 standard dimensions. The control stations can be assembled to hold a wide range of actuators and components with separate ATEX-IECEEx certification, including drain and/or breather valves. The control stations can be installed in Zone 1/2 (gas) and/or Zone 21/22 (dust).

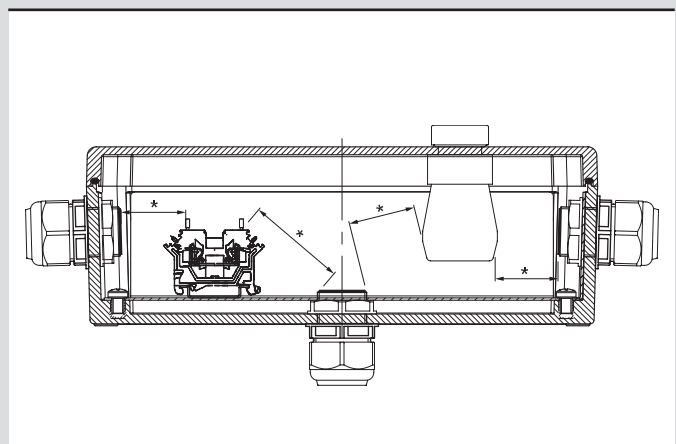
## ■ CUSTOMIZED SOLUTIONS



Scame has an in-house design service (CIT), that can carry out fast feasibility analyses at the customer's request. Moreover, it features equipment and qualified personnel for the construction, mounting and assembly of ZENITH-P Series control boxes.

## ■ SAFETY DISTANCES (EN 60079-7)

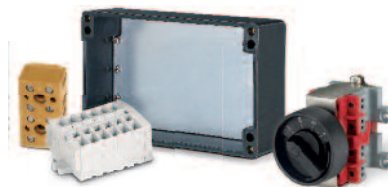
MINIMUM CREEPAGE		MINIMUM CLEARANCE	
250 V	6.3 mm	250 V	5 mm
400 V	10 mm	400 V	6 mm
500 V	12.5 mm	500 V	8 mm
630 V	16 mm	630 V	10 mm
800 V	20 mm	800 V	12 mm
1000 V	25 mm	1000 V	14 mm



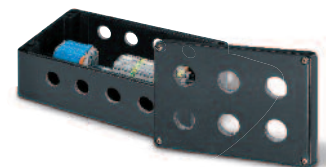
(\*) Safety distances.



Enclosure + ECP



Enclosure + internal plate



Junction and terminal box without cable glands

# ZENITH-P Series



## ■ MAXIMUM POWER DISSIPATION ALLOWED

	Code	Enclosure size	Ambient 40°C class T6		Ambient 60°C class T6		Ambient 40°C class T5		Ambient 60°C class T5		Ambient 75°C class T4	
			(▲)	(●)	(▲)	(●)	(▲)	(●)	(▲)	(●)	(▲)	(●)
JUNCTION BOXES	644.0100	75x80x55	2.50	4.50	1.30	1.50	2.55	4.90	2.50	2.90	2.55	4.90
	644.0200	75x80x75	2.60	4.60	1.30	1.50	2.90	5.20	2.60	3.10	2.90	5.20
	644.0110	75x110x55	3.20	5.00	1.35	1.60	3.60	6.00	2.85	3.50	3.60	6.00
	644.0210	75x110x75	3.40	5.10	1.35	1.65	4.00	6.40	3.00	3.80	4.00	6.40
	644.0120	75x160x55	4.50	6.00	1.40	1.75	5.80	8.20	3.55	4.80	5.80	8.20
	644.0220	75x160x75	4.70	6.10	1.45	1.80	6.00	8.40	3.60	4.90	6.00	8.40
	644.0130	75x190x55	5.40	6.60	1.50	2.00	7.00	9.40	4.00	5.60	7.00	9.40
	644.0230	75x190x75	5.50	6.70	1.55	2.05	7.20	9.85	4.05	5.70	7.20	9.85
	644.0140	75x230x55	6.50	7.50	1.55	2.20	8.90	11.30	4.60	6.70	8.90	11.30
	644.0240	75x230x75	6.60	7.60	1.60	2.25	9.20	11.60	4.70	6.80	9.20	11.60
CONTROL STATIONS	644.0345	120x122x90	3.85	5.92	1.46	1.85	6.03	8.42	3.42	3.86	6.03	8.42
	644.0350	120x220x90	3.75	7.00	2.30	2.00	8.25	16.00	3.80	4.50	8.25	16.00
	644.0360	160x160x90	3.00	6.40	2.50	1.70	6.00	14.50	3.20	4.00	6.00	14.50
	644.0370	160x260x90	6.30	8.50	2.80	2.50	13.5	19.70	5.10	5.60	13.5	19.70
	644.0380	160x360x90	7.20	7.40	2.75	2.75	n/a	n/a	n/a	n/a	n/a	n/a
	644.0390	160x560x90	11.70	11.20	3.80	4.20	n/a	n/a	n/a	n/a	n/a	n/a
	644.0465	250x255x120	7.44	9.70	1.87	2.80	15.27	17.76	5.88	6.41	15.27	17.76
	644.0485	250x400x120	9.57	11.94	2.12	3.36	n/a	n/a	n/a	n/a	n/a	n/a
	644.0595	405x400x165	9.57	11.94	2.12	3.36	n/a	n/a	n/a	n/a	n/a	n/a

(▲) for cage type terminals. (●) for screw type terminals.

## ■ MAXIMUM NUMBER OF TERMINALS – PHYSICAL DIMENSIONS (JUNCTION BOX)

	Code	Enclosure size	Term. board	Mini 2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	6mm <sup>2</sup>	10mm <sup>2</sup>	16mm <sup>2</sup>	35mm <sup>2</sup>	70/90mm <sup>2</sup>	120/150mm <sup>2</sup>
JUNCTION BOXES	644.0100	75x80x55	6	6								
	644.0200	75x80x75	6	6								
	644.0110	75x110x55	10	12								
	644.0210	75x110x75	10	12								
	644.0120	75x160x55	18	22								
	644.0220	75x160x75	18	22								
	644.0130	75x190x55	24	28								
	644.0230	75x190x75	24	28								
	644.0140	75x230x55	30	35								
	644.0240	75x230x75	30	35								
CONTROL STATIONS	644.0345	120x122x90			12	10	7	6	4	3		
	644.0350	120x220x90			31	26	20	16	12	9		
	644.0360	160x160x90			19	16	12	10	7	5		
	644.0370	160x260x90			32	32	25	20	16	12		
	644.0380	160x360x90			58	49	38	30	24	18		
	644.0390	160x560x90			94	81	63	50	41	30		
	644.0465	250x255x120			36	30	23	19	15	11		
	644.0485	250x400x120			65	54	42	33	27	20		
	644.0595	405x400x165			64	54	41	33	27	20	11	10

The number of terminals (based on Weidmuller terminals) that can be used, which can be fitted in the enclosure (junction box and/or control stations) depend on the internal width. Such number may have to be reduced depending on the actual current flowing in the conductors. If the power dissipation of the terminals exceeds the maximum allowed power specified herein, a different enclosure must be chosen, or the temperature class will need to be changed.



## ■ ATEX-IECEX CERTIFIED TERMINALS

The terminals with separate certification must be selected from the following list of approved manufacturers.

Additional manufacturers are available on requested, subject to approval by our internal laboratory.

Terminal blocks (internal plate mounted) and mini terminals (DIN rail TS15) are suited for use with small enclosures. Standard rail terminals (DIN rail TS35) are suited for use with large enclosures.

When the enclosure is supplied as Ex i (intrinsic safety application), a suitable set of blue terminals is supplied. The terminals can be the screw or spring-cage type.

The cross-section ranges from 1.5 mm<sup>2</sup> to 120 mm<sup>2</sup>.

### WEIDMULLER

Terminal block BK, MK  
Mini terminal AKZ  
Terminal type: WDU, ZDU, SAK, SAK K.

### WAGO

Terminal block 262, 264  
Terminal type: 280, 281, 282, 283, 284 and 2002, 2004, 2006, 2010, 2016.

## ■ METALLIC DIN RAILS

- Steel, cold lamination.
- Electrolytic zinc plating.
- Zinc-plating thickness: 8 micron min.
- Rail length: 2 m.
- Non-drilled rail with drilling points provided.
- Pre-drilled rail with slots.



EX e - Terminals Ex i  
Terminals from 2.5mm<sup>2</sup> to 95/120mm<sup>2</sup>



Terminal blocks EX e  
Terminals from 2.5mm<sup>2</sup> to 95/120mm<sup>2</sup>

## ■ TYPE Ω TS 35

Dimensions (mm)	Description		
35x7,5x1	Flat DIN rail	40m	865.220
	Slotted DIN rail (18x6.3 - 25)	40m	865.221

Package/Packing.

## ■ TYPE Ω TS 15

Dimensions (mm)	Description		
15x5,5x1	Flat DIN rail	100m	865.240
	Slotted DIN rail (12.2x4.2 - 20)	100m	865.241

Package/Packing.

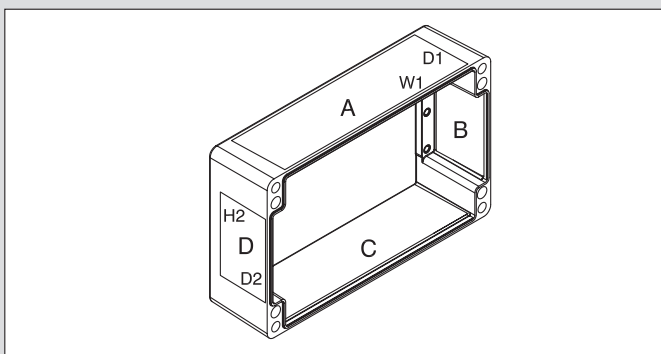
# ZENITH-P Series



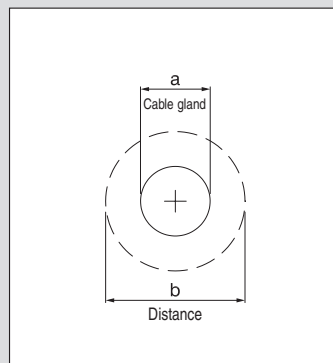
## STANDARD ENTRY ARRANGEMENTS

	Code	Enclosure size	Top/Bottom sides A/C							Left/Right sides B/D								
			M12	M16	M20	M25	M32	M40	M50	M63	M12	M16	M20	M25	M32	M40	M50	M63
JUNCTION BOXES	644.0100	75x80x55	2	1	1	-	-	-	-	-	1	1	-	-	-	-	-	-
	644.0200	75x80x75	4	2	1	1	-	-	-	-	2	2	-	-	-	-	-	-
	644.0110	75x110x55	3	3	2	-	-	-	-	-	1	1	-	-	-	-	-	-
	644.0210	75x110x75	6	6	3	2	1	-	-	-	2	2	-	-	-	-	-	-
	644.0120	75x160x55	5	5	4	-	-	-	-	-	1	1	-	-	-	-	-	-
	644.0220	75x160x75	10	10	5	3	2	-	-	-	2	2	-	-	-	-	-	-
	644.0130	75x190x55	7	6	5	-	-	-	-	-	1	1	-	-	-	-	-	-
	644.0230	75x190x75	14	12	6	4	3	-	-	-	2	2	-	-	-	-	-	-
	644.0140	75x230x55	8	6	4	-	-	-	-	-	1	1	-	-	-	-	-	-
	644.0240	75x230x75	16	12	6	4	2	-	-	-	2	2	-	-	-	-	-	-
CONTROL STATIONS	644.0345	120x122x90	6	5	2	1	1	-	-	-	5	5	4	1	1	-	-	-
	644.0350	120x220x90	14	14	9	4	3	-	-	-	5	4	2	1	1	-	-	-
	644.0360	160x160x90	12	8	6	3	2	1	-	-	6	6	4	2	1	-	-	-
	644.0370	160x260x90	26	16	12	6	4	3	-	-	6	6	4	2	1	-	-	-
	644.0380	160x360x90	38	22	18	9	6	4	-	-	6	6	4	2	1	-	-	-
	644.0390	160x560x90	58	36	28	14	8	6	-	-	6	6	4	2	1	-	-	-
	644.0465	250x255x120	24	18	10	8	4	3	2	2	21	15	8	6	3	2	2	1
	644.0485	250x400x120	42	33	18	16	6	5	4	3	21	15	8	6	3	2	2	1
	644.0595	405x400x165	70	44	27	21	12	10	4	3	65	40	24	21	10	10	4	3

## ENCLOSURE DRILLING ENVELOPE



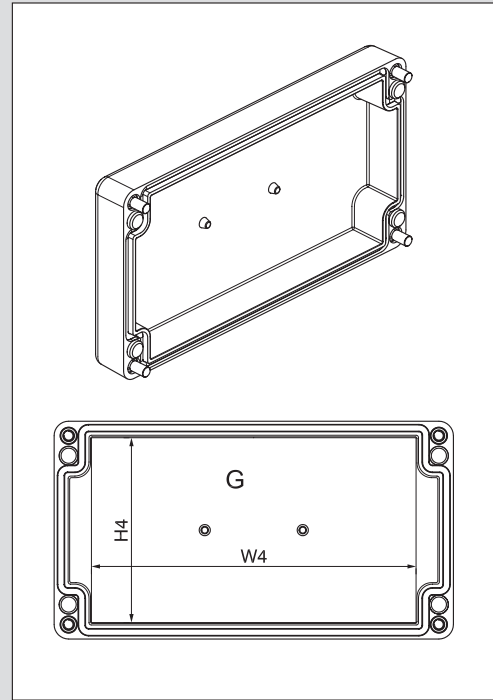
Cable gland dim. A (mm)	B (mm)
12	25
16	32
20	39
25	46
32	58
40	68
50	81
63	96



	Code	Enclosure size	Top/Bottom sides A/C W1xD1	Left/Right sides B/D H2xD2
JUNCTION BOXES	644.0100	75x80x55	48x34	28x28
	644.0200	75x80x75	48x54	27x48
	644.0110	75x110x55	80x34	28x28
	644.0210	75x110x75	80x54	27x48
	644.0120	75x160x55	130x34	28x28
	644.0220	75x160x75	130x54	27x48
	644.0130	75x190x55	160x34	28x28
	644.0230	75x190x75	160x54	27x48
	644.0140	75x230x55	90x34(x2)	28x28
	644.0240	75x230x75	90x54(x2)	27x48
CONTROL STATIONS	644.0345	120x122x90	75x58	60x52
	644.0350	120x220x90	180x58	60x52
	644.0360	160x160x90	110x65	84x56
	644.0370	160x260x90	210x65	84x56
	644.0380	160x360x90	310x65	84x56
	644.0390	160x560x90	240x65(x2)	84x56
	644.0465	250x255x120	200x88	168x81
	644.0485	250x400x120	345x88	168x81
	644.0595	405x400x165	345x133	323x126

## ■ LID DRILLING ENVELOPE

Code	Enclosure size (H x W x D)	Maximum drilling area G (H4 x W4)	Max no. of holes			
			Ø30,5 mm	Ø22,5 mm	Ø32,5 mm	Ø30,8mm (with keyway)
644.0200	75x80x75	55 x 45	/	1	/	1
644.0210	75x110x75	55 x 75	/	1	/	1
644.0220	75x160x75	55 x 125	/	2	/	2
644.0230	75x190x75	55 x 155	/	3	/	2
644.0240	75x230x75	55 x 195	/	3	/	3
644.0345	120x122x90	102 x 80	1	2	1	1
644.0350	120x220x90	102 x 179	2	6	2	2
644.0360	160x160x90	140 x 110	2	4	2	2
644.0370	160x260x90	140 x 210	6	6	6	6
644.0380	160x360x90	140 x 310	8	10	8	8
644.0390	160x560x90	140 x 510	13	18	13	13
644.0465	250x255x120	230 x 205	9	12	9	9
644.0485	250x400x120	230 x 350	15	24	15	15
644.0595	405x400x165	385 x 350	25	40	25	25



## ■ DRAIN AND BREATHER VALVE HOLES DRILLING ENVELOPE

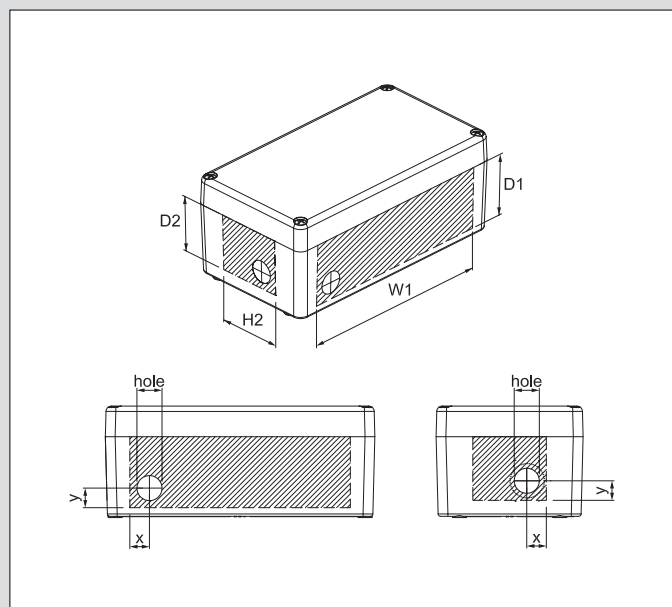
	Code	Enclosure size	Top/Bottom sides	
			A/C W1xD1	Left /Right B/D H2xD2
JUNCTION BOXES	644.0100	75x80x55	48x34	28x28
	644.0200	75x80x75	48x54	27x48
	644.0110	75x110x55	80x34	28x28
	644.0210	75x110x75	80x54	27x48
	644.0120	75x160x55	130x34	28x28
	644.0220	75x160x75	130x54	27x48
	644.0130	75x190x55	160x34	28x28
	644.0230	75x190x75	160x54	27x48
	644.0140	75x230x55	90x34 (x2)	28x28
	644.0240	75x230x75	90x54 (x2)	27x48
CONTROL STATIONS	644.0345	120x122x90	75x58	60x52
	644.0350	120x220x90	180x58	60x52
	644.0360	160x160x90	110x65	84x56
	644.0370	160x260x90	210x65	84x56
	644.0380	160x360x90	310x65	84x56
	644.0390	160x560x90	240x65 (x2)	84x56
	644.0465	250x255x120	200x88	168x81
	644.0485	250x400x120	345x88	168x81
	644.0595	405x400x165	345x133	323x126

Table 1

## ■ HOLE DIAMETER

Hole diameter (mm) M20 x/y position 16	Hole diameter (mm) M25 x/y position 20	Hole diameter (mm) M12 x/y position 15
Ø 20.5/21	Ø 25.5/26	Ø 12.2/12.4

Values refer to all codes in Table 1.



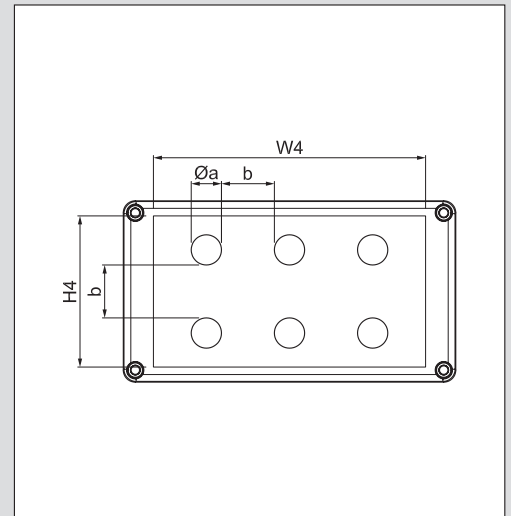
The drain and breather valve must always be assembled on the bottom side of the enclosure.

# ZENITH-P Series



## ■ SQUARE LID DRILLING AREA

Code	Enclosure size (H x W x D)	Maximum drilling area G (H4 x W4)	Maximum SQUARE holes		
			Maximum number	Maximum Size	Minimum distance between two holes b - (mm)
<b>644.0345</b>	120x122x90	102 x 80	1	57x53mm	60
<b>644.0350</b>	120x220x90	102 x 179	2	57x53mm	60
<b>644.0360</b>	160x160x90	140 x 110	1	118x95mm	60
<b>644.0370</b>	160x260x90	140 x 210	1	118x95mm	60
<b>644.0380</b>	160x360x90	140 x 310	2	118x95mm	60
<b>644.0390</b>	160x560x90	140 x 510	3	118x95mm	70
<b>644.0465</b>	250x255x120	230 x 205	1	118x95mm	60
<b>644.0485</b>	250x400x120	230 x 350	2	118x95mm	75
<b>644.0595</b>	405x400x165	385 x 350	4	118x95mm	75



## ■ CLEARANCE AND CREEPAGE

Manufacturer Actuator/Control Components	Maximum Mounting Ø a - (mm)	Minimum distance between two holes b - (mm)
BARTECH	Ø30,5	40
TECHNOR	Ø22,5	35
CORTEM	Ø32,5	37
WAROM	Ø30,8 (with keyway)	37
CZ	Ø30,6 (with keyway)	40

## ■ ACTUATORS / ATEX-IECEX



Below is a list of six items that describe the installation and utilization characteristics of the actuators.

- 1) All components, such as pushbuttons, switches and pilot lamps instruments, have separate ATEX-IECEX certificates.
- 2) Installation and maintenance will be carried out as prescribed by the supplier's documents for actuators with separate certification.
- 3) Only use ATEX/IECEX certified actuators with IP degrees proportional to the IP degree of the Zenith-P.
- 4) The position and the holes will be carried out according to the component certificates documentation (see empty enclosure certificates ATEX-IECEX SIRA 08ATEX3041U IECEx SIR 11.0057U).
- 5) Each individual actuator has to comply with the safety distances according to standard EN 60079-7.
- 6) The sum of the dissipated power of installed terminals and actuators must not exceed the maximum power dissipated by the Zenith-P.

## ■ APPLICATION EXAMPLES



# ZENITH-P Series



## ■ DRAIN AND BREATHER VALVES



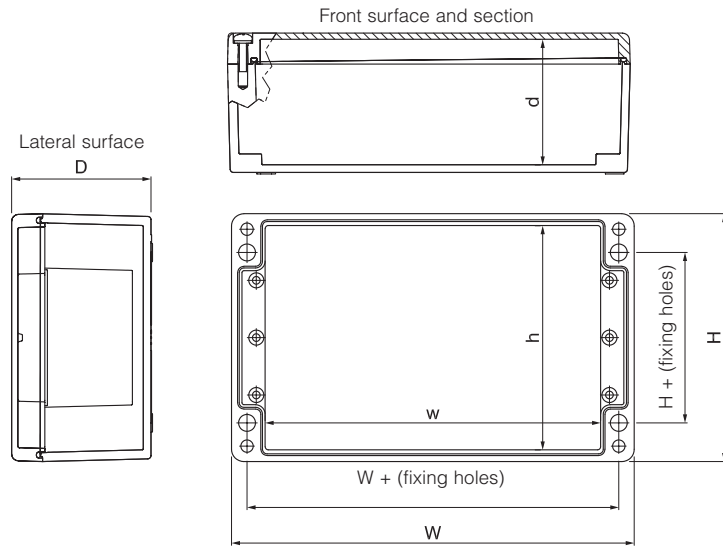
Use only drain valves with separate ATEX-IECEX certification and/or breather valves proportional to the IP degree of the ZENITH-P.

Particularly recommended for humid atmospheres, with wide temperature changes and for the solution of condensate problems. The valve must be fitted in the bottom part of the enclosure, so as to allow the condensate to be eliminated for content protection.

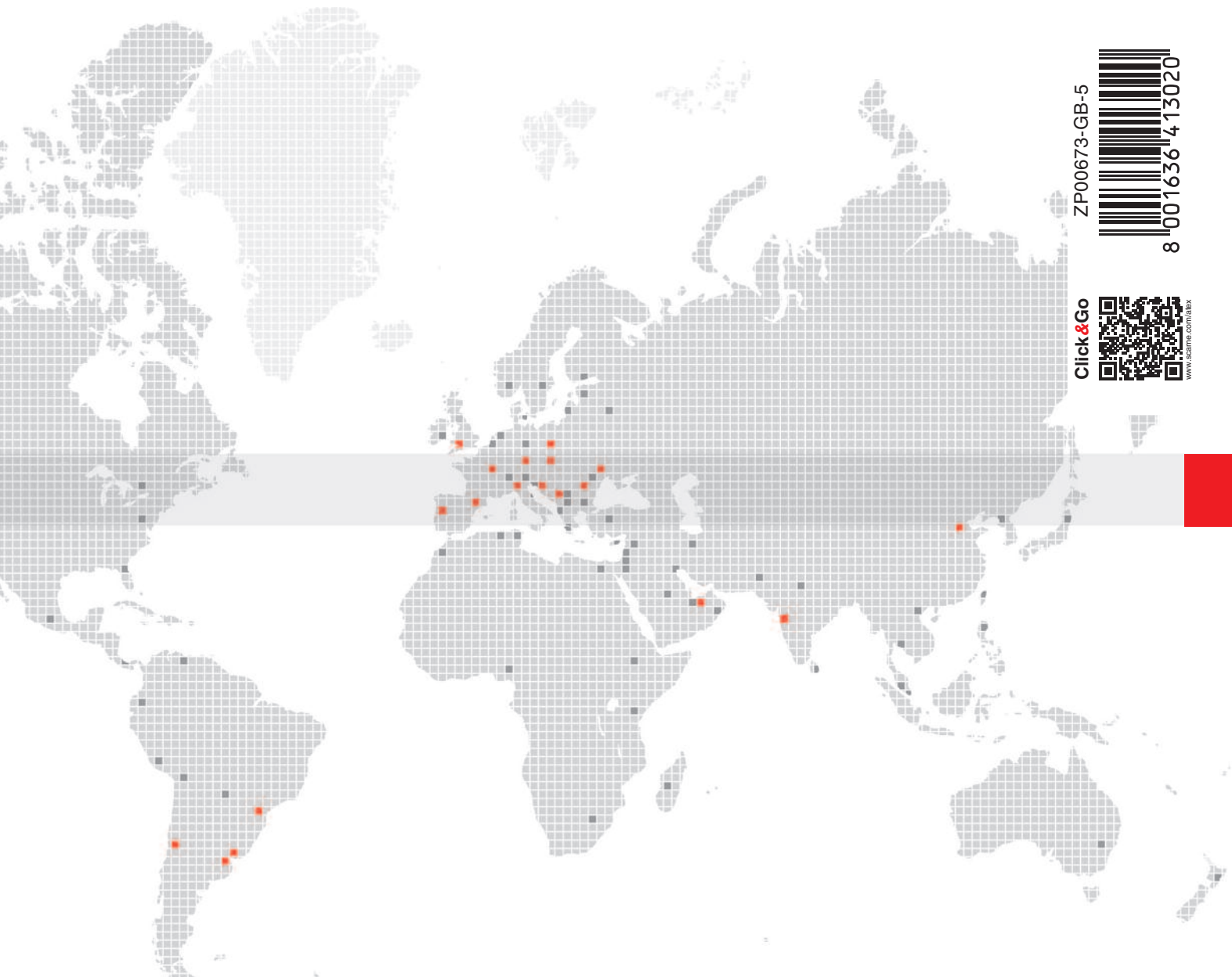
## ■ LIST OF DRAIN AND BREATHER VALVES - ATEX - IECEX

Manufacturer	Type	ATEX certificate IECEX certificate	Thread
Raxton Limited	CT	SIRA 08 ATEX 1288 U	M20x1,5mm
		IEC-Ex SIR 08.0127 U	M25x1,5mm
Raxton Limited	CV	SIRA 00 ATEX 3074 U	M20x1,5mm
			M25x1,5mm
Raxton Limited	CV	SIRA 10 ATEX 3279 U	M20x1,5mm
		IEC-Ex SIR 09.0096 U	M25x1,5mm
Redapt Engineering Company Limited	Breathing / Drainage	SIRA 99 ATEX 3050 U	M20x1,5mm
		IEC-Ex SIR 08.0024 U	M25x1,5mm
Weidmuller	BDSM20	SIRA 04 ATEX 3019 U	M20x1,5mm
GORE	Metal - Vent /PMF100444	IBEXU 05 ATEX 1132 U	M12x1.5mm

## DIMENSIONS



	Code	Size	External			Internal			Fixings		Screws
			H	W	D	h	w	d	H+	W+	
JUNCTION BOXES	644.0100	75x80x55	75	80	55	58	48	46	45	68	M4
	644.0200	75x80x75	75	80	75	58	48	66	45	68	
	644.0110	75x110x55	75	110	55	58	78	46	45	98	
	644.0210	75x110x75	75	110	75	58	78	66	45	98	
	644.0120	75x160x55	75	160	55	58	128	46	45	148	
	644.0220	75x160x75	75	160	75	58	128	66	45	148	
	644.0130	75x190x55	75	190	55	58	158	46	45	178	
	644.0230	75x190x75	75	190	75	58	158	66	45	178	
	644.0140	75x230x55	75	230	55	58	198	46	39	218	
	644.0240	75x230x75	75	230	75	58	198	66	39	218	
CONTROL STATIONS	644.0345	120x122x90	120	122	90	102	104	80	82	106	M6
	644.0350	120x220x90	120	220	90	102	190	80	82	204	
	644.0360	160x160x90	160	160	90	142	112	80	110	140	
	644.0370	160x260x90	160	260	90	142	212	80	110	240	
	644.0380	160x360x90	160	360	90	142	312	80	110	340	
	644.0390	160x560x90	160	560	90	142	512	80	110	540	
	644.0465	250x255x120	250	255	120	230	235	110	200	235	
	644.0485	250x400x120	250	400	120	230	380	110	200	380	
644.0595	405x400x165	405	400	165	385	380	154	355	380		



- SCAME-ARGENTINA** Argentina
- SCAME-SEE** Bosnia Herzegovina
- SCAME-BRASIL** Brazil
- SCAME-CHILE** Chile
- SCAME-CHINA** China
- SCAME-TOP** Croatia
- SCAME-HR** Croatia
- SCAME-CZ** Czech Republic
- SOBEM-SCAME** France
- SCAME-INDIA** India
- SCAME-POLSKA** Poland
- SCAME-PORTUGAL** Portugal
- SCAME-RO** Romania
- SCAME-SK** Slovakia
- SCAME-IBERICA** Spain
- SCAME-EMIRATE** U.A.E.
- SCAME-UK** United Kingdom
- SCAME-UY** Uruguay
- SCAME-UA** Ukraine

ZP00673-GB-5



8 001636 4 13020

Click&Go



[www.scame.com/dlx](http://www.scame.com/dlx)



**ScameOnLine**  
[www.scame.com](http://www.scame.com)  
[atex@scame.com](mailto:atex@scame.com)

**SCAME PARRE S.p.A.**  
 VIA COSTA ERTA, 15  
 24020 PARRE (BG) ITALY  
 TEL. +39 035 705000  
 FAX +39 035 703122

