

ATEX ENCLOSURES : SA-P



The branch boxes of the SA ... P series are made of fiberglass reinforced polyester; very resistant to contamination by combustible oils and shocks. They are light and practical, they can be installed in all industrial installations in zones 1,2, 21, 22, in particular those presenting a potential risk of explosion or fire because of the presence of combustible gases or dusts. Envelopes are drilled with holes for easy wall mounting; the lid has a silicone seal resistant to low and high temperatures it comes with stainless steel screws, to ensure a seal IP66 type. The SA ... P series enclosures are used as junction boxes to carry analogue or digital signal cables or for control and monitoring, associated with equipment such as motors, fans, pumps or for reading readings such as flow rate, level, pressure, temperature, current, etc. The terminal blocks can be arranged inside the housing in different configurations.

AMBIENT TEMPERATURE RANGE :

AMBIENT TEMPERATURE	TEMPERATURE CLASS	MAXIMUM SURFACE TEMPERATURE	MAXIMUM TERMINAL OPERATING TEMPERATURE
-40°C +40°C	T6	T75°C	+80°C
-40°C +55°C	T5	T75°C	+95°C

HIGH TEMPERATURE RANGE DEPENDING ON THE TEMPERATURE ALLOWED BY THE TERMINALS:

AMBIENT TEMPERATURE	TEMPERATURE CLASS	MAXIMUM SURFACE TEMPERATURE	MAXIMUM TERMINAL OPERATING TEMPERATURE
-40°C +65°C**	T5	T75°C	+95°C

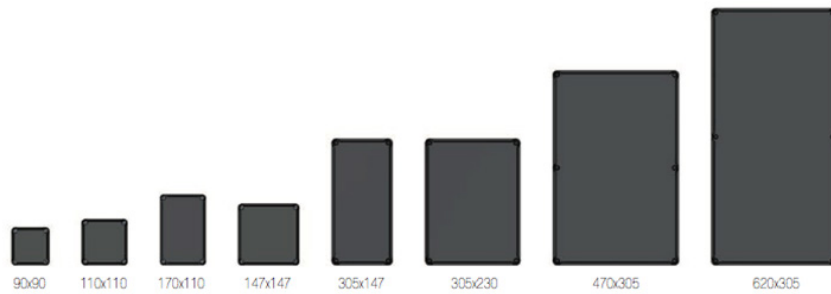
CERTIFICATION DATA FOR BOXES WITH TERMINALS :

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 II 2GD Ex eb IIC T6/T5/T4 Gb - Ex tb IIIC T75°C/T110°C Db IP66			
	CE 0722 II 2GD Ex e ia IIC T6/T5/T4 Gb - Ex ia IIIC T75°C/T110°C Db IP66			
	CE 0722 II 2GD Ex eb ia IIC T6/T5/T4 Gb - Ex tb ia IIIC T75°C/T110°C Db IP66			
Certification:	ATEX	CESI 03 ATEX 333		
	IEC Ex	CES 13.0001	All IEC Ex, TR CU and INMETRO certification data can be downloaded from www.cortemgroup.com	
	TR CU	AVAILABLE		
	INMETRO	DNV 15.0119		
Standards:	CENELEC EN 60079-0: 2012+A11:2013, EN 60079-7: 2015, EN 60079-11: 2012, EN 60079-31: 2014 ed alla DIRETTIVA EUROPEA 2014/34/UE IEC 60079-0: 2011, IEC 60079-7: 2015, IEC 60079-11: 2011, IEC 60079-31: 2013			
Ambient Temp.:	See "ambient temperature range" table			
Degree of protection:	IP66			

ENVELOPE CERTIFICATION DATA FOR CONTROL, MONITORING AND SIGNALING UNITS :

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 II2GD - Ex de IIC T6/T5 Gb - Ex tb IIIC T85°C/T100°C Db - IP66			
	CE 0722 II2GD - Ex e IIC T6/T5 Gb - Ex tb IIIC T85°C/T100°C Db - IP66 (When on the box is installed only ammeter or voltmeter type B-0140)			
Certification:	ATEX	CESI 03 ATEX 115		
	IEC Ex	CES 11.0032	All IEC Ex, TR CU and INMETRO certification data can be downloaded from www.cortemgroup.com	
	TR CU	AVAILABLE		
	INMETRO	DNV 15.0125		
Standards:	CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007, N 60079-31: 2009, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE IEC 60079-0: 2011-06, IEC 60079-7: 2006-07, IEC 60079-11: 2008-11, IEC 60529: 2001			
Ambient Temp.:	-40°C +40°C	With temperature class T6 and maximum surface temperature T85°C.		
	-40°C +55°C	With temperature class T5 and maximum surface temperature T100°C.		
Degree of protection:	IP66			

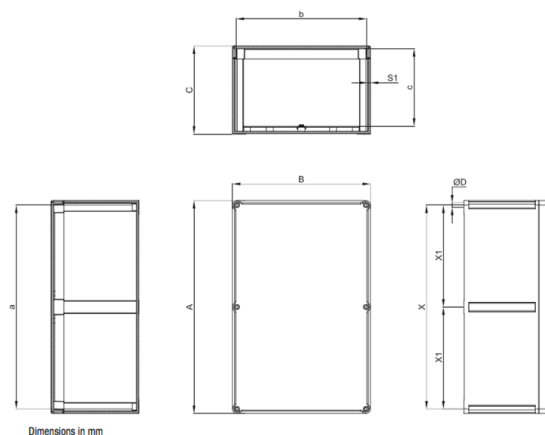
SIZE OVERVIEW :



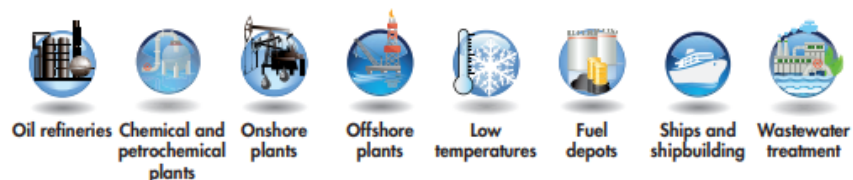
ENCLOSURE SELECTION BOARD :

Code	Outside dimensions			Inside dimensions				Mounting			Weight kg	
	A	B	C	a	b	c	S1	X	Y	X1		ØD
SA090907/P	90	90	73	84	84	52	3	74	74	-	6.5	0.30
SA111108/P	110	110	83	104	104	65	3	94	94	-	6.5	0.40
SA171108/P	170	110	83	164	104	65	3	154	94	-	6.5	0.80
SA141410/P	147	147	100	135	135	79	3	131	131	-	6.5	1.00
SA301410/P	305	147	110	296	138	90	4.5	285	127	-	6.5	1.90
SA302310/P	305	230	110	296	221	90	4.5	285	210	-	6.5	2.50
SA302318/P	305	230	190	296	221	165	4.5	285	210	-	6.5	3.10
SA473018/P	470	305	195	460	295	175	5	450	285	225	6.5	4.70
SA623018/P	620	305	185	608	293	160	5	560	285	260-300	8	6.30

ENCLOSURE SELECTION BOARD :



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THREAD COMPARAISON CHART :

D Thread diameter	1	2	3	4	5	6	7	8
ISO 261/965	20x1.5	25x1.5	32x1.5	40x1.5	50x1.5	63x1.5	75x1.5	85x2
Through hole	Ø20.5	Ø25.5	Ø32.5	Ø40.5	Ø50.5	Ø63.5	Ø75.5	Ø85.5

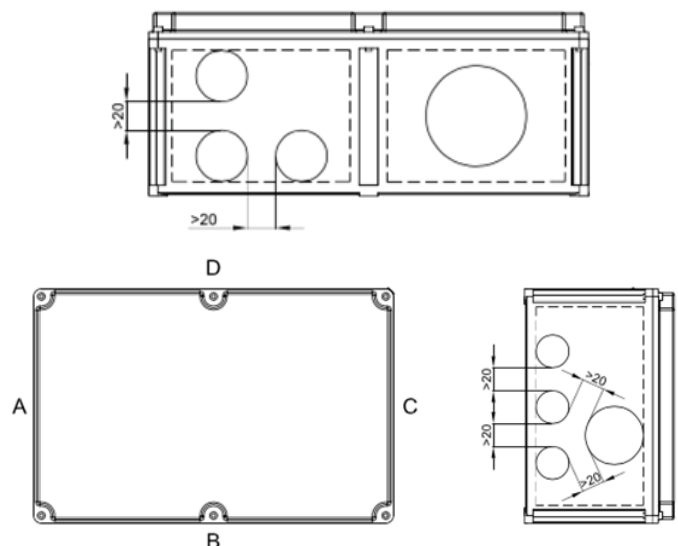


In accordance with the current standard, holes may be drilled by Cortem or by authorized partners holding a production notification in accordance with the ATEX Directive.

DRILLING HOLES IN THE BODY :

TYPE OF ENCLOSURE	HOLE DRILLING IN BODY																	
	Drilling area mm	Sides A and C								Drilling area mm	Sides B and D							
		MAXIMUM QUANTITY PER HOLE TYPE									MAXIMUM QUANTITY PER HOLE TYPE							
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
SA090907/P	48x45	1	1	-	-	-	-	-	-	48x45	Square box							
SA111108/P	58x55	2	2	1	1	1	-	-	-	58x55	Square box							
SA171108/P	68x55	2	2	1	1	1	-	-	-	128x55	5	3	2	2	2	-	-	-
SA141410/P	100x65	6	3	2	1	1	1	-	-	100x65	Square box							
SA301410/P	100x65	6	3	2	1	1	1	-	-	255x65	12	11	5	4	4	3	-	-
SA302310/P	180x65	8	7	5	3	2	2	-	-	260x65	12	11	5	4	4	3	-	-
SA302318/P	180x140	16	14	9	8	5	4	2	2	258x140	24	22	14	11	8	6	3	2
SA473018/P	258x140	24	18	14	8	8	6	3	2	380x140	36	24	18	12	12	8	6	2
SA623018/P	248x117	18	15	10	8	6	3	2	2	434x117	32	26	16	14	12	6	4	4

All enclosures can be equipped with accessories of your choice and mounted on special rails attached to the internal mounting frames of the housing. The terminal blocks can be arranged in different ways, according to the customer's specifications and always within the limits allowed by the certificate. The options are vertical, horizontal, on a number of rows or on different levels using appropriate spacers.



ELECTRICAL SPECIFICATIONS :

	Standard applications	Signal circuits applications	
		T6/T75°C max. Tamb +60°C	T4/T100°C max. Tamb +85°C
Rated voltage:	1000 Vac/dc	-	-
Rated current:	312 A	1 A for exec. Ex eb 100 mA for exec. Ex ia	10 A for exec. Ex eb 100 mA for exec. Ex ia
Rated frequency:	50/60 Hz	-	-
Terminal section:	1.5 ÷ 300 mm ²	-	-

Marking	Terminal type	Description
Ex II 2GD Ex eb IIC T... Gb - Ex tb IIIC T... Db IP66	Ex e terminals only	Enclosures containing an increase in security terminals to EN 60079-7
Ex II 2GD Ex ia IIC T... Gb - Ex ia IIIC T... Db IP66	Ex e and Ex i terminals	Enclosures containing an increase in security and intrinsically safe terminals
Ex II 2GD Ex eb ia IIC T... Gb - Ex tb ia IIIC T... Db IP66	Ex i terminals only	Intrinsically safe enclosures. Terminals according to EN 60079-11. The speakers are still category 2

MAXIMUM NUMBER OF TERMINAL BOXES :

TYPE OF ENCLOSURE	MAXIMUM NUMBER OF TERMINALS HOUSED						
	TERMINAL CROSS-SECTIONAL AREA						
	1.5	2.5	4	6	10	16	25
SA090907/P	9	7	6	5			
SA111108/P	13	10	8	7	5		
SA171108/P	27	21	17	14	11	9	
SA141410/P	22	16	14	11	9	7	
SA301410/P	57	44	37	30	24	20	15
SA302310/P	2x58	2x44	2x37	2x30	2x24	2x20	2x15
SA302318/P	2x58	2x44	2x37	2x30	2x24	2x20	2x15
SA473018/P	2x97	2x74	2x63	2x51	2x41	2x34	2x25
SA623018/P	2x133	2x101	2x86	2x70	2x56	2x46	2x35

Nominal X-sect. area (mm ²)	Current (A)	Quantity	Capacity
2,5	8	16 (di 46)	34,8%
4	11	12 (di 36)	33,3%
10	26	4 (di 13)	30,8%
Totale			98,9% <100%