

BOITIER ATEX : SERIE S, SF, SSC AVEC BORNES

CARACTERISTIQUES TECHNIQUES :

Corps et couvercle : Alliage d'aluminium à faible teneur en cuivre. Couvercle à visser avec vis de fixation de sécurité

Joint : Silicone résistant aux acides et aux hydrocarbures, situé entre le corps et le couvercle

Entrées : Filetage GAS UNI ISO 7/1

Etiquette de certification : Etiquette adhésive située sur le couvercle pour 6 et 9 boîtes; sur le corps pour la taille 4

Boulons et vis : Acier inoxydable

Vis de terre : Acier inoxydable. A l'intérieur et à l'extérieur du corps complet



CHART 1

Ex d IIC rated terminal strips			
Ambient temperature	Temperature of terminal operation	Temperature class	Maximum surface temperature
-20°C +40°C -40°C +40°C	≥80°C	T6	T85°C
-20°C +65°C -40°C +65°C	≥100°C	T5	T100°C
-20°C +150°C -40°C +150°C	≥180°C	T3	T200°C



SECTEURS D'APPLICATIONS :



Oil refineries



Chemical and
petrochemical
plants



Onshore
plants



Offshore
plants



Oil loading/
offloading
wharfs



Fuel
depots



Low
temperatures



100%
Cortem
product

CHART 2

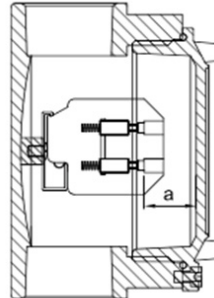
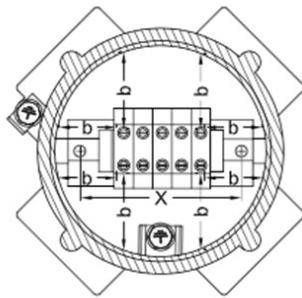
Ex e II or Ex i IIC rated terminal strips (ATEX-certified terminals)

Ambient temperature	Temperature of terminal operation	Temperature class	Maximum surface temperature
-20°C +40°C -40°C +40°C	≥80°C	T6	T85°C
-20°C +65°C -40°C +65°C	≥100°C	T5	T100°C
-20°C +80°C -40°C +80°C	≥130°C	T4	T135°C

Ex d IIC rated enclosures		ZONE TRANSVERSALE ET NOMBRE MAXIMUM DE TERMINAUX								
Enclosure type	Size	1.5	2.5	4	6	10	16	25	35	70
S.1 - SB	14-24	-	-	3	-	-	-	-	-	-
S.1 - SB	16-26-36	8	8	6	-	-	-	-	-	-
S.1	29-39-59-69	16	16	16	9	7	6	4	4	3
SB	49-59-69	16	16	12	10	8	7	5	5	4
Maximum current (A)	at 40°C	10	12.5	20	24	30	48	75	105	175
	at 65°C at 150°C	8	10.5	16	20	24	40	65	88	150
Maximum current density (A/mm ²) for terminals and cables		6.6	5	5	4	3	3	3	3	2.5
Maximum current (A) referring to 35% of the max. number of terminals as given in the table	at 40°C	13	19.5	24	30	50	64	100	140	210
	at 65°C at 150°C	10	12.5	20	24	30	48	75	105	175
Maximum current density (A/mm ²) for terminals and cables referring to 35% of the max. number of terminals as given in the table		8.5	7	6	5	5	4	4	4	3
Min.-max. rated voltage (V)		420 - 750								

DISTANCES MINIMALES POUR LES BOITIERS HOMOLOGUES Ex d IIC AVEC BORNES :

Enclosure type	Size	Minimum surface distance		S.1	SB
		a min.	b+b min.	x	x
S.1 - SB	14-24	6	20	40	40
S.1 - SB	16-26-36			58.5	50
S.1	29-39-59-69			100	85
SB	49-59-69				

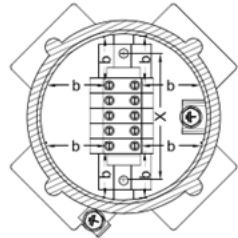
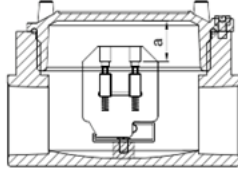


Ex e IIC rated enclosures		CROSS-SECTIONAL AREA AND MAXIMUM NUMBER OF TERMINALS															
Enclosure type	Size	1.5			2.5			4			6			10			
		Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	
S.1 - SB	14-24	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
S.1 - SB	16-26-36	8	8	8	8	8	8	6	6	6	-	-	-	-	-	-	-
S.1	29-39-59-69	16	16	16	16	16	16	16	14	14	9	9	9	7	7	7	
SB	49-59-69	16	16	16	16	16	16	16	14	14	10	10	9	8	7	7	
Maximum current (A)	at 40°C	8			10.5			17			20			24			
	at 65°C	5.5			7.5			12			14			17			
	at 150°C	5.5			7.5			12			14			17			
Maximum current density (A/mm ²) for terminals and cables		6.6			5			5			4			3			
Min.-max. rated voltage (V)		275 - 630															

Ex e IIC rated enclosures		CROSS-SECTIONAL AREA AND MAXIMUM NUMBER OF TERMINALS					
Enclosure type	Size	16			25		
		Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3
S.1 - SB	14-24	-	-	-	-	-	-
S.1 - SB	16-26-36	-	-	-	-	-	-
S.1	29-39-59-69	6	6	6	4	4	4
SB	49-59-69	7	6	6	5	4	4
Maximum current (A)	at 40°C	40			65		
	at 65°C	29			47		
	at 150°C	29			47		
Maximum current density (A/mm ²) for terminals and cables		3			3		
Min.-max. rated voltage (V)		275 - 630					



DISTANCES MINIMALES POUR LES BOITIERS HOMOLOGUES Ex d IIC AVEC BORNES :



NOTES:
 Tab 1 for operating voltage $U \leq 400$
 Tab 2 for operating voltage $U \leq 500$
 Tab 3 for operating voltage $U \leq 630$

Minimum distances for Ex e IIC rated enclosures with terminals

Tab 1	Enclosure type	Size	Minimum surface distance		S.1	SB
			a min.	b+b min.		
	S.1 - SB	14-24	6	20	x	x
	S.1 - SB	16-26-36			40	40
	S.1	29-39-59-69			58.5	50
	SB	49-59-69			100	85

Tab 2	Enclosure type	Size	Minimum surface distance		S.1	SB
			a min.	b+b min.		
	S.1 - SB	14-24	8	25	x	x
	S.1 - SB	16-26-36			40	40
	S.1	29-39-59-69			58.5	50
	SB	49-59-69			100	85

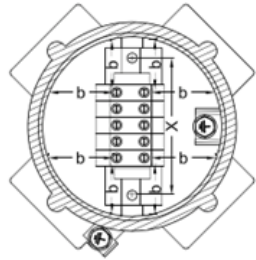
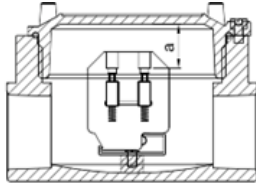
Tab 3	Enclosure type	Size	Minimum surface distance		S.1	SB
			a min.	b+b min.		
	S.1 - SB	14-24	10	32	x	x
	S.1 - SB	16-26-36			40	40
	S.1	29-39-59-69			58.5	50
	SB	49-59-69			100	85

Ex e IIC rated enclosures		CROSS-SECTIONAL AREA AND MAXIMUM NUMBER OF TERMINALS														
Enclosure type	Size	1.5			2.5			4			6			10		
		Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3
S.1 - SB	14-24	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
S.1 - SB	16-26-36	8	8	8	8	8	8	6	6	6	-	-	-	-	-	-
S.1	29-39-59-69	16	16	16	16	16	16	16	14	14	9	9	9	7	7	7
SB	49-59-69	16	16	16	16	16	16	16	14	14	10	10	9	8	7	7
Maximum current (A)	at 40°C	8			10.5			17			20			24		
	at 65°C	5.5			7.5			12			14			17		
	at 150°C	5.5			7.5			12			14			17		
Maximum current density (A/mm ²) for terminals and cables		6.6			5			5			4			3		
Min.-max. rated voltage (V)		275 - 630														

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		Tab 1	Tab 2	Tab 3	Tab 1	Tab 2	Tab 3
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SB	49-59-69	7	6	6	5	4	4
Maximum current (A)	at 40°C	40			65		
	at 65°C	29			47		
	at 150°C	29			47		
Maximum current density (A/mm ²) for terminals and cables		3			3		
Min.-max. rated voltage (V)		275 - 630					



DISTANCES MINIMALES POUR LES BOITIERS HOMOLOGUES Ex d IIC AVEC BORNES :



NOTES:
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Minimum distances for Ex e IIC rated enclosures with terminals

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			a min.	b+b min.		
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SB	49-59-69					

Tab 2	Enclosure type	Size	Minimum surface distance		S.1	SB
			a min.	b+b min.		
			x	x		
S.1 - SB	14-24	8	25	40	40	
S.1 - SB	16-26-36			58.5	50	
S.1	29-39-59-69			100	85	
SB	49-59-69					

Tab 3	Enclosure type	Size	Minimum surface distance		S.1	SB
			a min.	b+b min.		
			x	x		
S.1 - SB	14-24	10	32	40	40	
S.1 - SB	16-26-36			58.5	50	
S.1	29-39-59-69			100	85	
SB	49-59-69					

DONNEES DE CERTIFICATION POUR LES BOITIERS AVEC TERMINAUX :

Classification:	Group II	Category 2GD		
Installation: EN 60079-14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 II 2 GD - Ex d IIC T... Gb - Ex tb IIIC T... Db - IP66/67			
	CE 0722 II 2 GD - Ex e IIC T... Gb - Ex tb IIIC T... Db - IP66/67			
	CE 0722 II 2 GD - Ex i IIC T... Gb - Ex tb IIIC T... Db - IP66/67			
Certification:	ATEX	CESI 02 ATEX 091		
	IEC Ex CES 14.0018X	All IEC Ex certification data can be downloaded from www.cortemgroup.com		
	TR CU	AVAILABLE	All TR CU certification data can be downloaded from www.cortemgroup.com	
	INMETRO	DNV 14.0108	All INMETRO certification data can be downloaded from www.cortemgroup.com	
Standards:	CENELEC EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-11: 2012, EN60079-31: 2009, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-40°C (-20°C) +40°C			
	The boxes can be installed in other ambient temperature ranges. In this case, the terminal strips used must be made from the materials indicated in chart 1 and 2.			
Degree of protection:	IP66/67			