GUB-... series Aluminium junction boxes gas group IIC

GUB series junction boxes are suitable for installation in any areas of a plant where there is a risk of explosion and/or fire, or areas where combustible dust is present, classified as Zone 1, 2, 21, 22. The quality of this product is recognized and valued the world over for its specific aluminium alloy and the mechanical properties of its finishes. The GUB series is employed where group IIC gases are present and is mostly used as a box to carry terminals, fuse carriers, transformers, reactors and barriers, though it is also used to produce control and signalling boards, light and power boards and surge arresters, and motor starter boxes with various configurations, which are specially custom made to the requirements of our customers worldwide. The GUB-V enclosure series features a lid with a tempered glass viewing window.

Group labels its products with a non-removable adhesive label featuring a hologram and an alphanumerical univocal code, as a safety measure against the illegal sale of fakes so that all the products are guaranteed as original. Non-compliance with the International standards entails serious risks for the environment, especially for those working daily on the plants.

Application sectors:

Oil refineries | Chemical and petrochemical plants | Onshore plants | Offshore plants | Oil loading/ offloading wharfs | Fuel depots | Low temperatures

CERTIFICATION DATA FOR EMPTY ENCLOSURES

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II 2 GD - Ex db IIC Gb - Ex tb IIIC Db - IP66			
Certification:	ATEX CESI 01 ATEX 034U			
	IEC Ex CES 14.0012U	All IEC Ex certification data contact comm@antideflagrantigce.com		
	TR CU AVAILABLE	All TR CU certification data contact comm@antideflagrantigce.com		
Standards:	CENELEC EN 60079-0: 2009, EN 60079-1: 2007, EN 60439-1, EN 60079-31: 2009, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-20°C +60°C	Standard temperature on all GUB boxes.		
	-60°C +150°C	Special temperature.		
Degree of protection:	IP66			

GUB-... series Aluminium junction boxes gas group IIC

CERTIFICATION DATA FOR ENCLOSURES WITH TERMINALS

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II 2 GD - Ex d IIC T6, T5 Gb - Ex tb IIIC T85, T100°C Db - IP66			
Certification:	ATEX CESI 01 ATEX 035			
	IEC Ex CES 16.0013X	All IEC Ex certification data contact comm@antideflagrantigce.com		
	TR CU AVAILABLE	All TR CU certification data contact comm@antideflagrantigce.com		
	CCoE AVAILABLE	All CCoE certification data contact comm@antideflagrantigce.com		
Standards:	CENELEC EN 60079-0: 2009, EN 60079-1: 2007, EN 60439-1, EN 60079-31: 2009, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-50°C +40°C	With temperature class T6 and maximum surface temperature T85°C.		
	-50°C +55°C	With temperature class T5 and maximum surface temperature T100°C.		
Degree of protection:	IP66			

CERTIFICATION DATA OF ENCLOSURES FOR CONTROL, MONITORING AND SIGNALLING UNITS

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II2GD - Ex db IIC T6, T5 Gb - Ex tb IIIC T85°C, T100°C Db - IP66			
Certification:	ATEX CESI 01 ATEX 036X			
	IEC Ex CES 16.0013X	All IEC Ex certification data contact comm@antideflagrantigce.com		
	TR CU AVAILABLE	All TR CU certification data contact comm@antideflagrantigce.com		
	INMETRO DNV 14.0152	All INMETRO certification data contact comm@antideflagrantigce.com		
Standards:	CENELEC EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-31: 2014, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-20°C +40°C	With temperature class T6 and maximum surface temperature T85°C.		
	-20°C +55°C	With temperature class T5 and maximum surface temperature T100°C.		
	-60°C	On request.		
Degree of protection:	IP66			

comm@antideflagrantigce.com

CERTIFICATION DATA FOR ENCLOSURES SERVING SURGE ARRESTER FUNCTION

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II2GD - Ex db IIC T6, T5 Gb - Ex tb IIIC T85°C, T100°C Db - IP66			
Certification:	ATEX CESI 01 ATEX 036X			
	IEC Ex CES 16.0013X	All IEC Ex certification data contact comm@antideflagrantigce.com		
	TR CU AVAILABLE	All TR CU certification data contact comm@antideflagrantigce.com		
Standards:	CENELEC EN 60079-0: 2012 + A11: 2013, EN 60079-1: 2014, EN 60079-31: 2014, EN 60529: 1991 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-20°C +40°C	With temperature class T6 and maximum surface temperature T85°C.		
	-20°C +55°C	With temperature class T5 and maximum surface temperature T100°C.		
	-60°C	On request.		
Degree of protection:	IP66			

CERTIFICATION DATA OF ENCLOSURES SERVING INTERFACE UNIT CONTROL AND MONITORING FUNCTION

Classification:	Group II	Category 2GD		
Installation: EN 60079.14	zone 1 - zone 2 (Gas)	zone 21 - zone 22 (Dust)		
Marking:	CE 0722 Ex II2(1)GD - Ex d [ia Ga] IIC T... Gb - Ex tb [ia Da] IIIC T...°C Db - IP66			
Certification:	ATEX CESI 03 ATEX 174X			
	IEC Ex CES 16.0015X	Para todos los datos de certificación IEC Ex, contact comm@antideflagrantigce.com		
	TR CU AVAILABLE	All TR CU certification data contact comm@antideflagrantigce.com		
Standards:	CENELEC EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-11: 2007, EN 60079-26: 2007, EN 60079-31: 2009 and EUROPEAN DIRECTIVE 2014/34/UE			
Ambient Temp.:	-20°C +40°C	With temperature class T6 and maximum surface temperature T85°C.		
	-20°C +55°C	With temperature class T5 and maximum surface temperature T100°C.		
	-60°C	On request.		
Degree of protection:	IP66			

GUB-... series Aluminium junction boxes gas group IIC

MECHANICAL FEATURES

Body and lid:	Low copper content aluminium alloy. Screw-on lid with safety fastening grub screw
Gasket:	Resistant to acids, hydrocarbons and high temperatures, located between body and lid
Certification label:	Adhesive label located inside on empty enclosures; aluminium label riveted onto body on other versions
Bolts and screws:	Stainless steel
Earth screws:	Stainless steel. On inside and outside of body complete with anti-rotation brackets
Mounting:	Cast aluminium feet
Coating:	Polyester coating RAL 7035 (Light grey)

Corrosion Resistance : The STANDARD of the aluminium alloy used by manufacturer has passed the tests required by standards EN 60068-2-30 (hot/humid cycles) and EN 60068-2-11 (salt mist tests)

ACCESSORIES AVAILABLE ON REQUEST/ SPECIAL REQUESTS

Internal anti-condensation coating RAL 2004 (pure orange)
Possible drilling of the enclosure bottom
Breather valve Code ECD-210S
Drain valve Code ECD-210S
External polyester coatings in different colour
GUB-...V series enclosures with round viewing window on lid
Special version for GUB-05 enclosure with M-0..-series control device (code GUB-05/M)
Internal mounting plate: 2.5 mm-thick aluminium (code TF-...). See accessories section
2.5 mm-thick electrogalvanized steel (code TF-...AC)
Control and signalling devices installed on body. For GUB-05, handles can be installed on lid.
Thread options:

- NPT threads ANSI B1.20.1
- GAS UNI ISO 7-1 thread
- Metric threads ISO 261/965

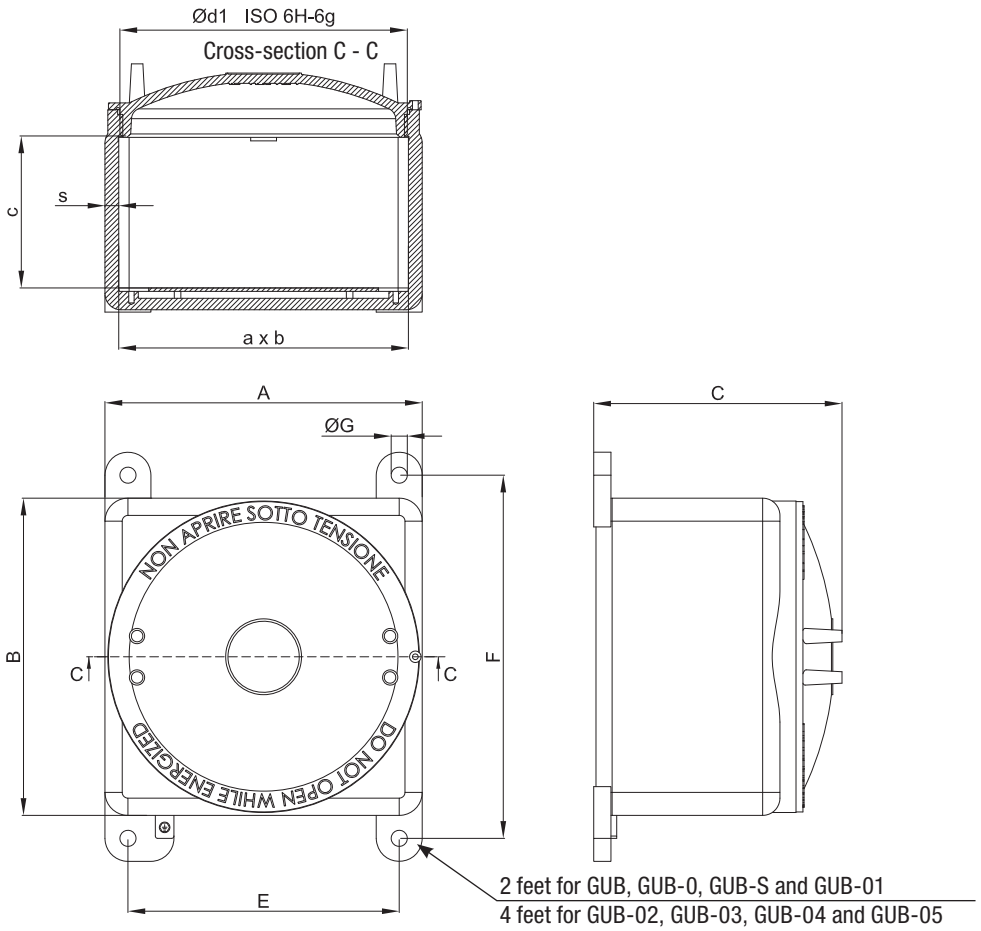
manufactures any type of custom-made products according to customer specifications and in compliance with the certification data.

ENCLOSURE SELECTION CHART

Code	Outside dimensions			Inside dimensions					Mounting			Weight
	A	B	C	a	b	c	Ød1	s	E	F	ØG	kg
GUB	120	120	116	96	96	60	95x2	12	100	145	9	[1]
GUB-S	120	120	145	96	96	93	95x2	12	100	145	9	[1]
GUB-0	150	150	130	126	126	68	130x2	12	126	174	10	
GUB-01	174	174	140	146	146	78	150x2	12	150	195	10	[1]
GUB-02	230	230	165	204	204	92	200x3	12	196	267	14	[1]
GUB-03	276	276	217	250	250	135	250x3	12	236	316	14	[1]
GUB-04	430	430	290	398	398	158	390x3	16	390	480	14	[1]
GUB-05	520	520	327	480	480	164	460x3	20	480	570	14	

[1] OFF MANUFACTURING. AVAILABLE ONLY WHILE STOCKS LAST

DIMENSIONAL DRAWING



Dimensions in mm

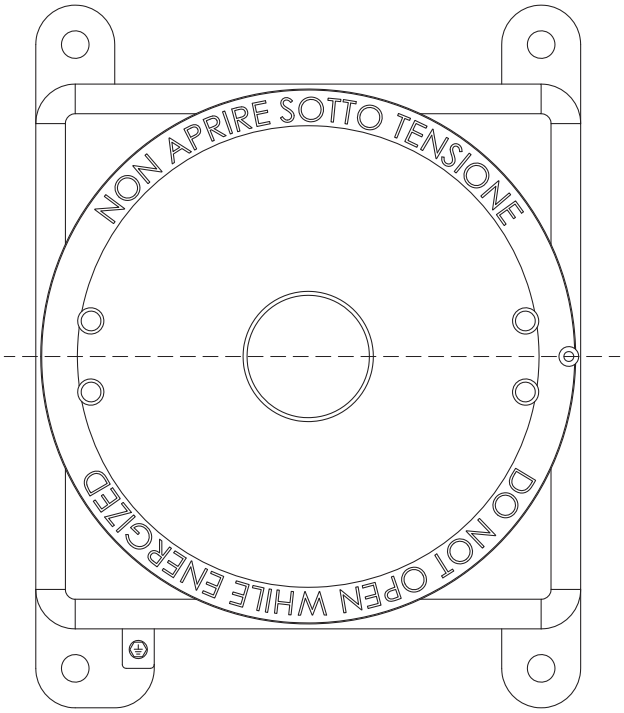
GUB-... series Body drilling data

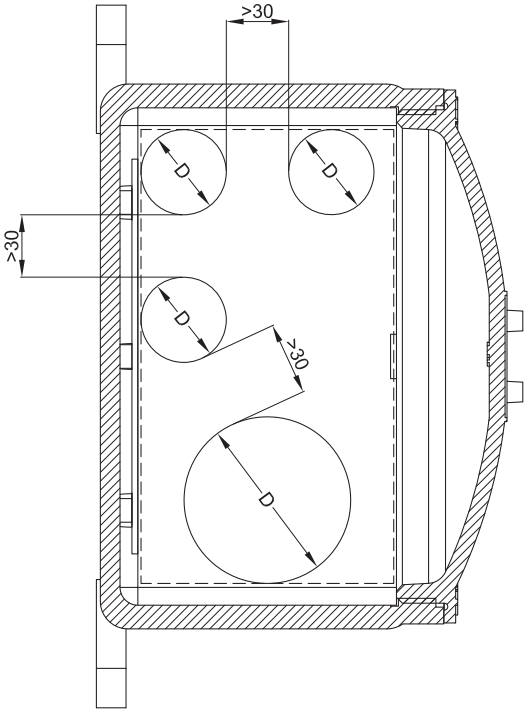
THREAD COMPARISON CHART									
ISO 7-1	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
ANSI B.20.1 NPT	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	(*)	(*)	(*)
ISO 261/965	20x1.5	25x1.5	32x1.5	40x1.5	50x1.5	63x1.5	75x1.5	90x1.5	
D Thread diameter	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**10**

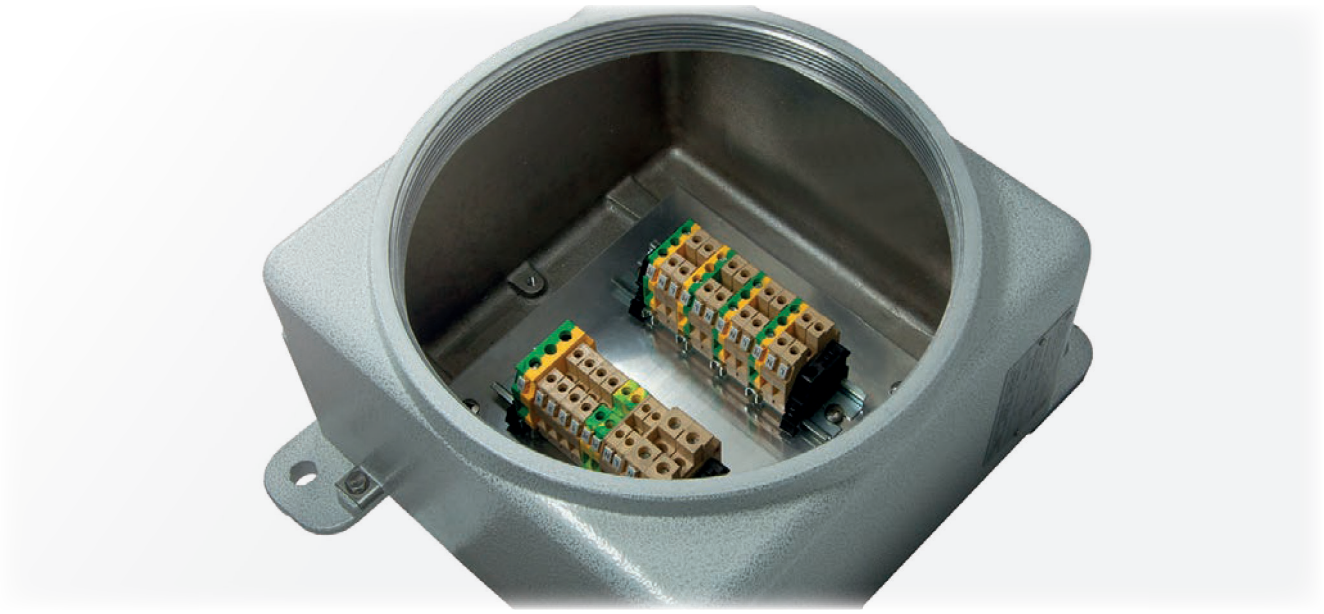
As required by the current standard, holes can be drilled by manufacturer or by authorized partners who hold a production notification in accordance with ATEX Directive .

TYPE OF ENCLOSURE	HOLE DRILLING IN BODY								
	One side								
	Drilling area mm	MAXIMUM QUANTITY PER HOLE TYPE								
		1	2	3	4	5	6	7	8	10
GUB	80x50	2	2	1	1	1	-	-	-	-
GUB-S	80x80	4	2	2	1	1	-	-	-	-
GUB-0	115x60	3	3	2	2	1	-	-	-	-
GUB-01	135x70	5	3	2	2	2	1	-	-	-
GUB-02	180x85	8	6	5	3	2	2	2	-	-
GUB-03	230x130	15	12	8	6	6	3	2	2	1
GUB-04	375x120	21	14	12	10	9	4	3	3	2
GUB-05	455x140	27	24	14	12	11	7	4	4	3

(*) 2 1/2" - 3" - 4" NPT holes can be drilled only on GUB-05







These enclosures are customized based on size, on the number of terminals or cables they are due to accommodate, or taking into account the number of cable entries and cabling requirements inside a system. Hence we can produce tailor-made solutions as long as you provide us with the appropriate parameters required at the quote request stage, such as the number of cable glands, unions or sealing fittings to be installed, so that we can determine the most suitable size of enclosure. All terminals can be fitted with your requested accessories and mounted on special rails that are fastened to the enclosure's internal mounting frames. Terminal strips can be arranged in various ways, as specified by the customer and always within the limits allowed by the certificate. The options are vertical, horizontal, in a number of rows, or on different levels using suitable spacers.

ELECTRICAL FEATURES

Rated voltage: 24 / 800 V
Rated frequency: 50 / 60 Hz

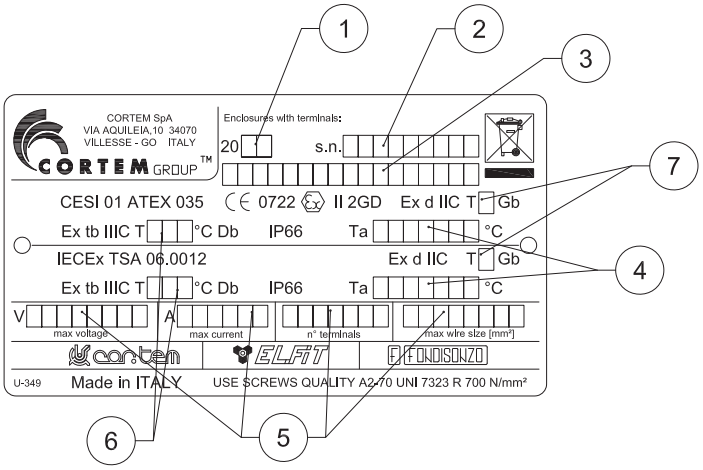
Modular terminals

Terminal cross-sectional area: 2.5; 4; 6; 10; 16; 25; 35; 70; 95; 120; 185; 240 mm^2
Rated current: 12.5 - 400 [A]
Max. current density: 1.65 - 7 [A/mm^2]

Multi-pole terminals

Terminal cross-sectional area: 3x16; 4x16; 3x25; 4x25; 3x40; 3x40; 4x40; 3x70; 4x70; 3x125; 3x200; 4x200; 3x315 [mm^2]
Rated current: 48 - 252 [A]
Max. current density: 0.8 - 3 [A/mm^2]

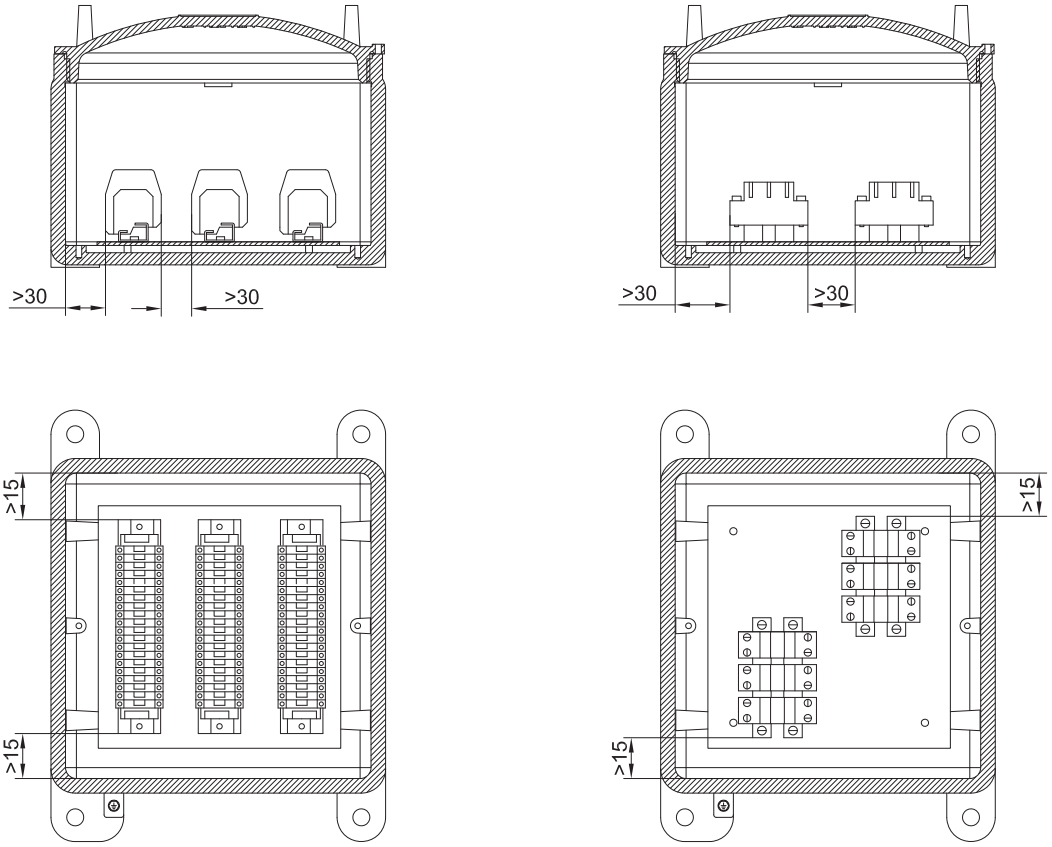
ATEX - IECEx label for terminal enclosures



Data filled in:
1. year of manufacture
2. serial number
3. product code
4. ambient temperature:
   Ta -20°C +40°C, Ta -20°C +55°C
   Ta -50°C +40°C, Ta -50°C +55°C
5. electrical specs
6. maximum surface temperature:
   T85°C (for Ta +40°C)
   T100°C (for Ta +55°C)
7. temperature class:
   T6 (for Ta +40°C)
   T5 (for Ta +55°C)

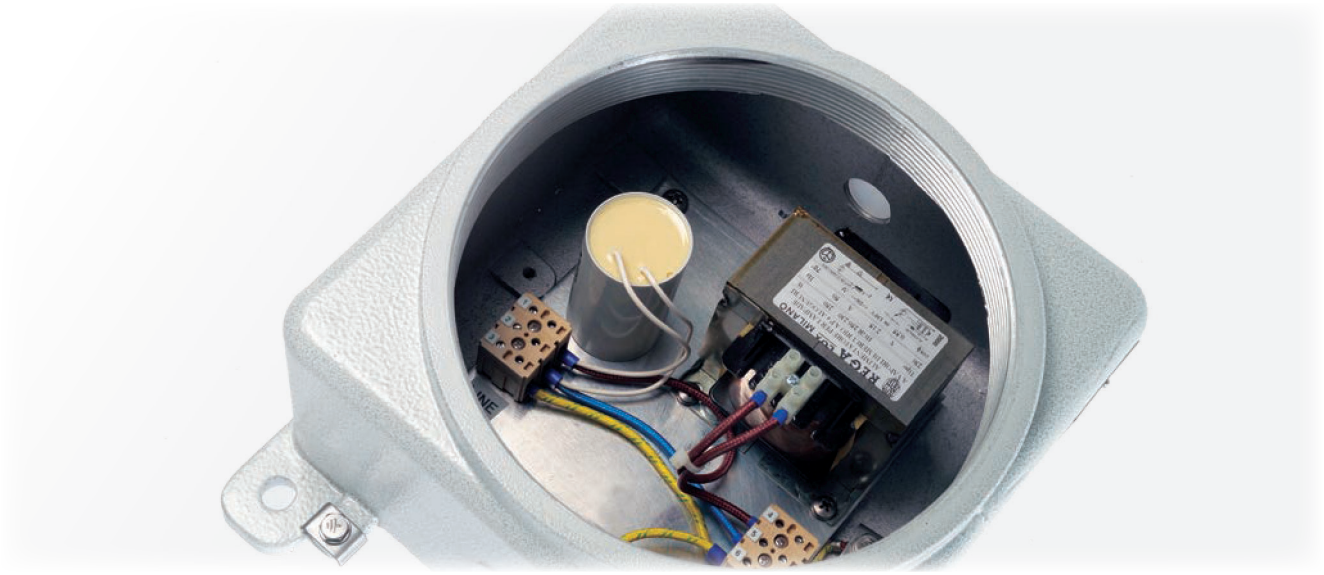
GUB-... series Features of junction boxes with terminals

Examples of terminal strips with minimum installation distances



TYPE OF ENCLOSURE	MAXIMUM NUMBER OF TERMINALS HOUSED								
	TERMINAL CROSS-SECTIONAL AREA								
	2.5	4	6	10	16	35	70	120	185
GUB	10	9	7	6	-	-	-	-	-
GUB-S	10	9	7	6	-	-	-	-	-
GUB-0	18	16	9	7	6	-	-	-	-
GUB-01	21	15	11	9	7	5	-	-	-
GUB-02	2x22	2x19	2x15	2x12	2x10	6	-	-	-
GUB-03	2x32	2x27	2x22	2x17	2x14	8	-	-	-
GUB-04	3x40	3x30	2x28	2x23	2x18	12	10	6	4
GUB-05	4x50	4x44	4x35	4x26	4x22	2x17	2x12	2x8	7

Eg. 2x22= 2 rows of 22 terminals (total 44 terminals). The maximum number of standard terminals refers to the mounting of CABUR terminals



Control, monitoring and signalling units are used to produce control boards that, when positioned near the electrical equipment being controlled, enable the electrical system to operate correctly and guarantee the safety of personnel when maintenance is being performed on the system. Because they are fitted with a Manual/Automatic selector, they allow operators to select the appropriate conditions to enable work to be performed entirely safely. They offer protection and control for electrical equipment and control circuits located in explosion hazard areas and in particularly aggressive environments. They are used to hold electrical equipment, such as switches, indicators, contactors, transformers, analogue and digital components, etc.... with the option of external control by using body-mounted building control and signalling devices, such as control levers, pushbuttons, indicator lights, etc.... building designs, develops and supplies full cabling for one or more enclosures tailored to your specific requirements, producing panel boards - including even extremely complex solutions - and providing a full inspection and testing service on request.

ELECTRICAL FEATURES

Rated voltage: 24 / 1000 Vac 12 / 250 Vdc (500 Vdc with MCCB Compact NSX630F-MP1-630A)
Max. current on contacts: 650 A
Rated frequency: 50 / 60Hz

Features of equipment that can be installed inside enclosures to produce control and monitoring units.
Table of standard electrical features of components that can be installed in enclosures to produce control, monitoring and signalling units.
(The values refer to the catalogues of the leading manufacturers of electrical/electronic components available on the market)

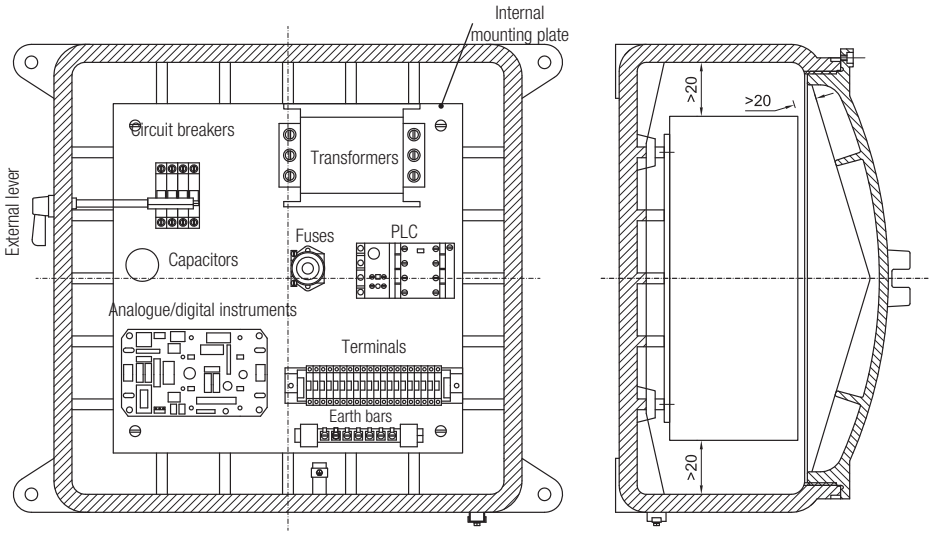
COMPONENT TYPE	Max. V (Volts)	Max. I (Amperes)	Max. power (Watts)
Analogue and digital instruments	660	5	10
Electronic inverters/reactors	400	-	10
PLCs Multiplexers and amplifiers	240	-	80
Testing and measuring devices	240	-	100
Circuit breakers	660	650	-
Fuses	660	400	-
Relays	500	10	12
Electronic control devices	660	-	100
Contactors	660	650	30
Timers	240	10	5
Twilight relays	240	-	2
Capacitors	660	-	-
Transformers	660	-	200
Resistors	240	-	300
Terminals	660	-	-
Reactors	277	7.5	40

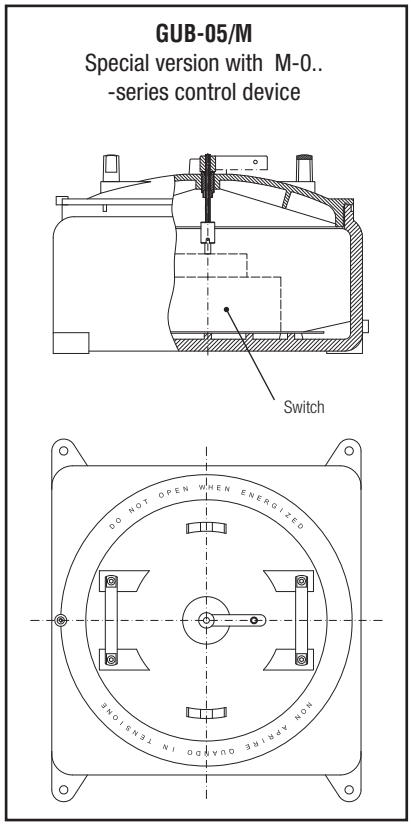
Minimum air gap between components

Component voltage (V ac)	Min. air gap (mm)
60 - 250	6
250 - 380	8
380 - 500	10
500 - 660	12
660 - 1000	20
Component voltage (V dc)	**Min. air gap (mm)**
12 - 250	6

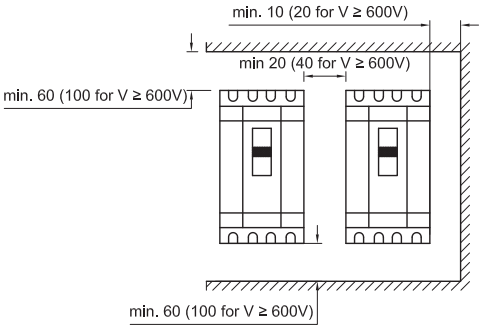
Features of junction boxes for control, monitoring and signalling units

Example of internal layout for GUB-series enclosures.
- Minimum distances -





Minimum distances for 630/650A switches and contactors



Identification and description of special equipment that is suitable for installation inside.

Enclosures with batteries
Option of installing low-capacity batteries ≤1.5Ah, for powering small electronic devices or backup memories. Whatever the case, the minimum distance of 20mm between the components installed and the inside walls of the enclosure must be met.

Enclosures with surge arrestors
Option of installing PRD or similar types of surge arresters, with a maximum protection limit of 65kA; whatever the case, the minimum distance of 20 mm between the arrester and the inside walls of the enclosure must be met.

Enclosures with fibre-optic cables
The enclosures have provision for feeding multiple (not single) fibre-optic cables in and out. The permitted optical power and radiation limits for optical cables are:
- 35mW and 5mW/m^2 for T4 temperature class
- 15mW and 5mW/m^2 for T6 temperature class

Enclosures with radio-frequency sources
Option of installing components with radio-frequency sources in the 9kHz to 60GHz range that can be used for continuous and pulsed transmission of signals. Antennas can be installed inside or outside the enclosure and must:
- comply with one of the protection types indicated in standard EN 60079-0
- be installed outside the hazardous area.

For more information, refer to CESI 01 ATEX 036X.

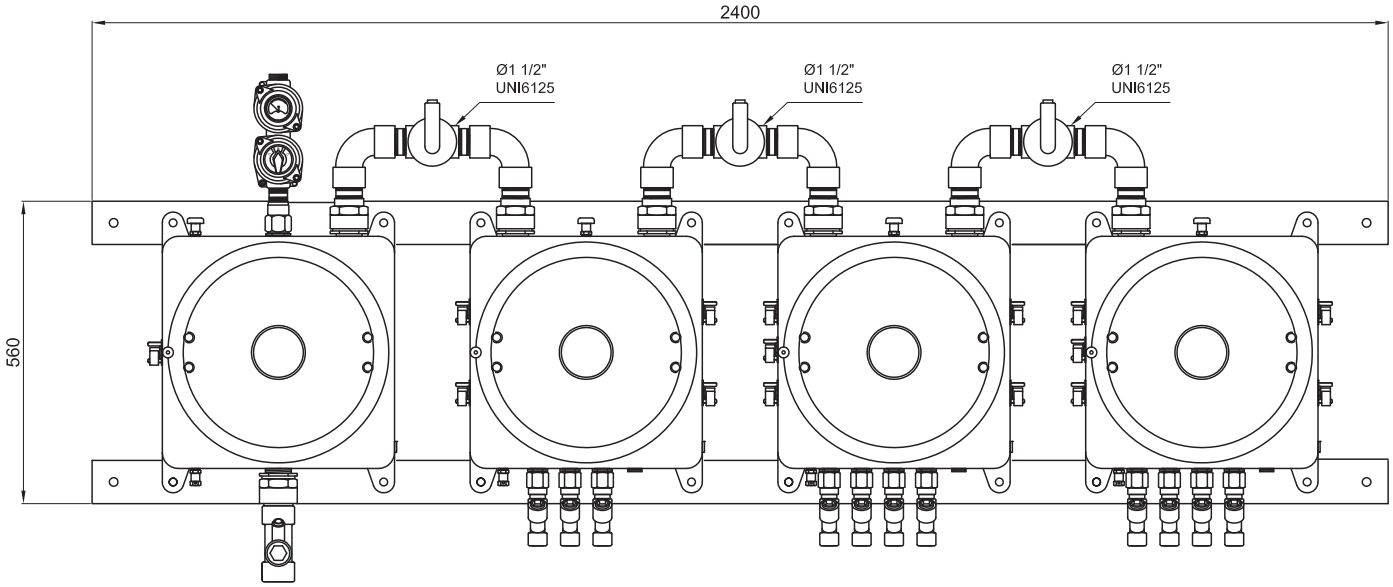
Table with maximum power dissipation values for GUB series enclosures.

The temperature classes and maximum surface temperatures of control and monitoring unit enclosures depend on the size of the enclosure, ambient temperature and power dissipation inside the enclosure.

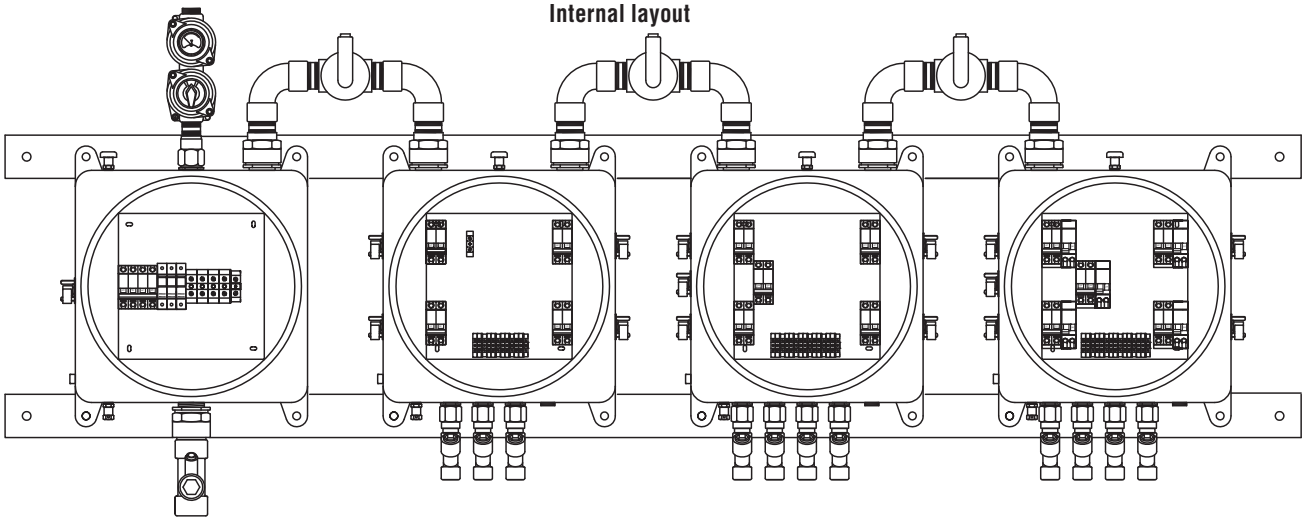
Enclosure type		Maximum power dissipation (Watts) with ambient temperature of			
		+40°C		+55°C	
		T6 class	T5 class	T6 class	T5 class
GUB		4	6	3	4
GUB-S		6	9	5	6
GUB-0	GUB-0V	10	16	8	12
GUB-01	GUB-01V	15	24	13	19
GUB-02	GUB-02V	32	51	26	39
GUB-03	GUB-03V	51	74	37	55
GUB-04	GUB-04V	112	197	84	150
GUB-05		165	250	125	190

Example of control panel with wall-mounting system.

External layout



Internal layout



GUB-... series Features of junction boxes with interface units

ELECTRICAL FEATURES

Rated voltage:	24 / 1000 Vac	12 / 250 Vdc
Max. current on contacts and fuses:	400 A	
Rated frequency:	50 / 60Hz	

GENERAL INSTALLATION INFORMATION

The maximum power dissipation inside the enclosure depends on the maximum current on contacts and fuses, the size of the enclosure, the temperature class (or maximum surface temperature for 2GD category) and ambient temperature, as specified in the maximum power dissipation tables (see previous page).
The maximum power dissipation must not exceed the values given in the table when non-'Ex i' components and 'Ex i' components (with 1.1W maximum power dissipation) are installed together.
The maximum power dissipation possible inside the enclosure will also depend on the maximum power dissipation of terminals, contacts and cables; whatever the case, the current density value allowed in the enclosure is prescribed by EN 60439-1, IEC 60439-1.

Details of barrier mounting inside enclosures

The "omega" rail, in accordance with EN 60079-11, is suitable for mounting barriers inside 'Ex d' enclosures.
Barriers are mounted (according to the manufacturer's directions) 7.5 mm away from the base of the enclosure and are secured to the DIN rail with 2 earth terminals (nominal cross-sectional area 6-10 mm) and 2 standard terminals for omega rails (EN 60079-11).
Up to how many barriers can be installed in the enclosures will depend on the properties of the barriers in question; in addition, the maximum number of barriers must not exceed the limit allowed by the certificate in any case.

Associated equipment can also be mounted on a DIN rail; when it is mounted on the enclosure's internal mounting plate, reference must be made to the minimum prescribed distances. Whether mounted on a rail or mounting plate, associated equipment must meet the following requirements:

Separators

When separators are used, they must be appropriately sized; their thickness and fastening inside the enclosure must be suitably determined and separators must allow air to circulate inside the enclosure.

Incoming cables

Incoming cables for 'Ex i' circuits must be suitably labelled or the area around the entry must be coloured blue RAL 5015. 'Ex i' entries must be clearly identified.

Installation of 'Ex i' and non-'Ex i' components inside the enclosure.

Ex d IIC certified enclosures complete with accessories can contain only Ex ia IIC associated equipment. In this case, the resulting version becomes Ex d [ia] IIC.

Connection of internal cables

Cables are connected inside the enclosure to the barriers in accordance with EN 60079-11, with one side for connecting 'Ex i' cables and the opposite side for connecting non-'Ex i' cables.
Connection in 'Ex i' circuits must be made using insulated cables only; there must be no connections to non-'Ex i' circuits and no more than one cable can be connected to a single terminal. 'Ex i' cables cannot be grouped together with non-'Ex i' cables. In addition, 'Ex i' cables and non-'Ex i' cables must be kept separate. The minimum distance between the 2 types of cables must be 8 mm. The minimum insulation level for non-'Ex i' cables must be greater than 1.5 kV; the minimum insulation level for 'Ex i' cables must be greater than 0.5 kV.

Internal connections

When routing cables belonging to 'Ex i' circuits, the cables must be identified in one of the following ways:

- cables must have blue insulation (as long as there are no other cables inside the enclosure with this colour).
- 'Ex i' cables must be kept separate from non-'Ex i' cables with blue cable raceways.
- 'Ex i' cables must be grouped together, using a tie, for example, and the area identified with a blue label.

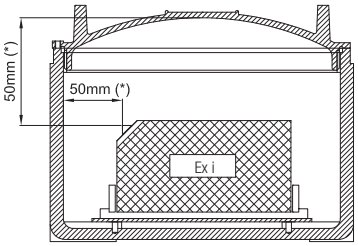
Warning 'Ex i' circuits

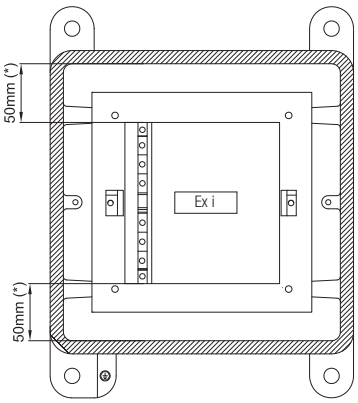
- cables for power circuits must have a cross-sectional area of at least 1.5 mm^2.
- 'Ex i' circuits must be kept at a distance of 50 mm from non-'Ex i' circuits.
- the earth connection must meet European standard EN 60079-14.

The number of items of equipment mounted inside the enclosures and their layout will vary based on the following:

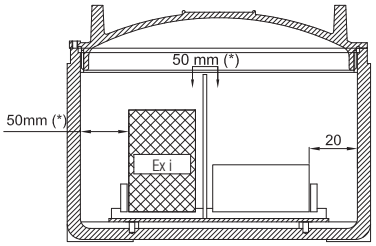
- in accordance with standards EN 60079-1 and IEC 60079-1, the equipment contained inside the enclosure can be arranged in any way provided that at least 20% of the surface area of each section is left free.
- equipment must be set at a suitable distance to accommodate cable wiring.

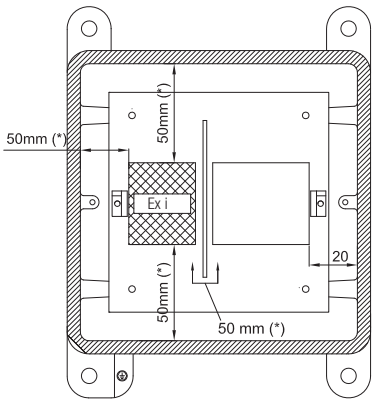
Example of interface unit without separator



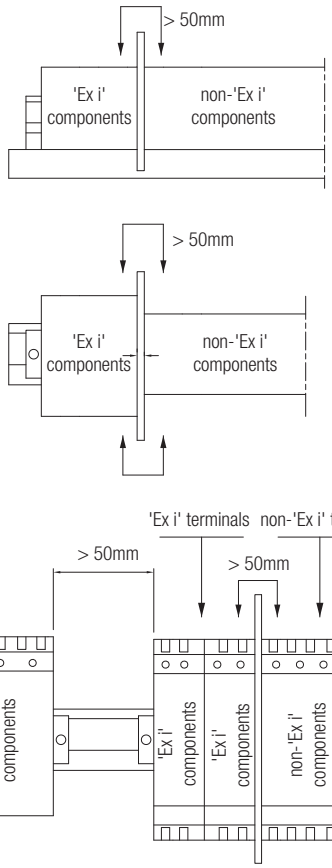


Example of interface unit (with associated equipment) complete with separator





Examples of installation of associated equipment - minimum distances.

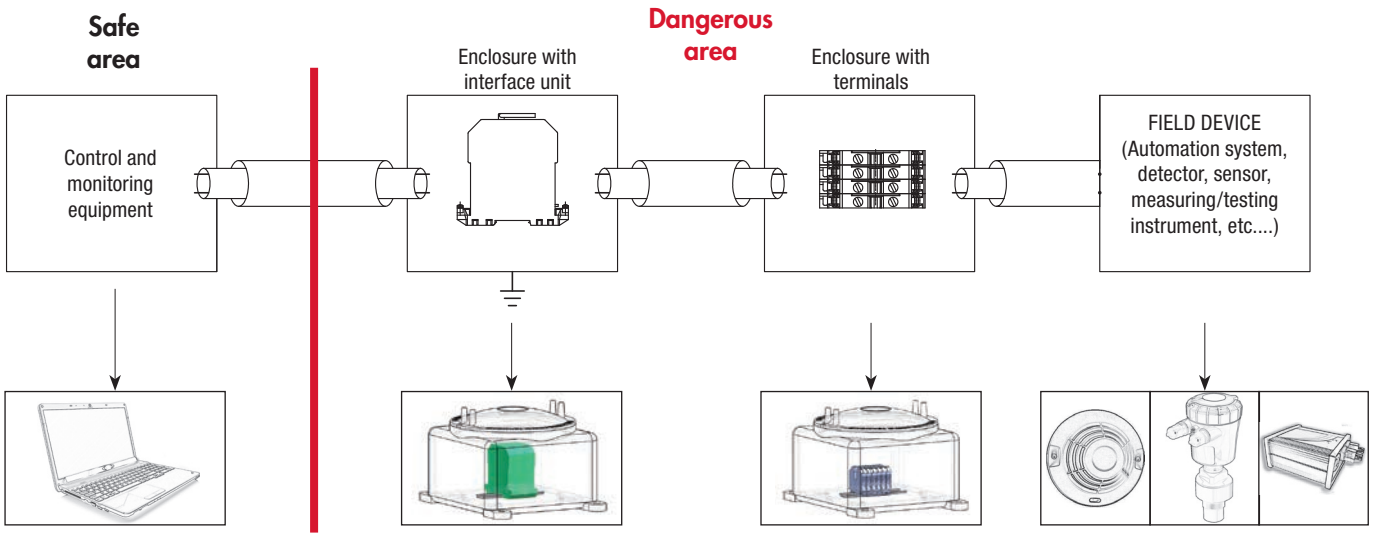


NOTES

(*) 50 mm is the minimum safe distance between 'Ex i' components and non-'Ex i' components (and/or conducting parts).

- The active and passive barriers that can be installed in the enclosures must have their own ATEX certificate.
- The maximum voltage entering barriers on non-'Ex i' circuits must be less than 250 V.

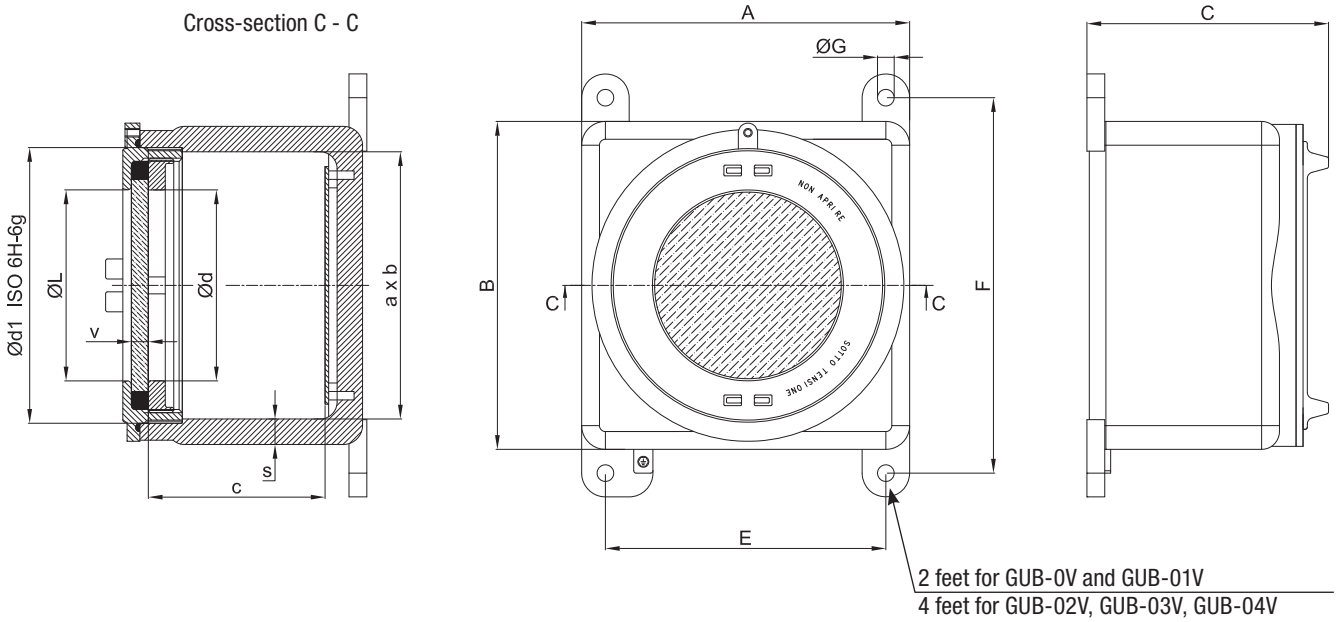
APPLICATION MODEL



GUB-...V series Junction boxes with round viewing windows

GUB series junction boxes are used as enclosures for electrical equipment that requires a visual interface with the outside. Voltmeters, ammeters and other analogue and digital measuring instruments are typical examples of installations that require a window for taking direct readings. These enclosures are also used to house monitoring instruments such as infra-red photoelectric cells and twilight sensors that provide pulses for control and signalling equipment (opening/closing, alarms, etc....). Our technical department will decide what size enclosures to use based on your requirements and determine the internal layout so that all the dimensional and electrical parameters prescribed by the certificate are met. We can install equipment to your specifications within the technical limits allowed by the certificate and based on our standard control and signalling devices.

DIMENSIONAL DRAWING OF ENCLOSURES WITH ROUND VIEWING WINDOWS



ENCLOSURE SELECTION CHART

Code	Outside dimensions mm				Inside dimensions mm							Mounting mm			Weight
	A	B	C	ØL	a	b	c	Ød	Ød1	s	v	E	F	ØG	kg
GUB-0V	150	150	125	90	126	126	75	90	130x2	12	10	126	174	10	
GUB-01V	174	174	160	90	146	146	105	92	150x2	12	10	154	195	10	
GUB-02V	230	230	154	140	204	204	95	140	200x3	12	12	196	265	14	
GUB-03V	276	276	200	180	250	250	140	180	250x3	12	15	236	316	14	
GUB-04V	430	430	275	310	398	398	190	310	390x3	16	20	390	480	14	

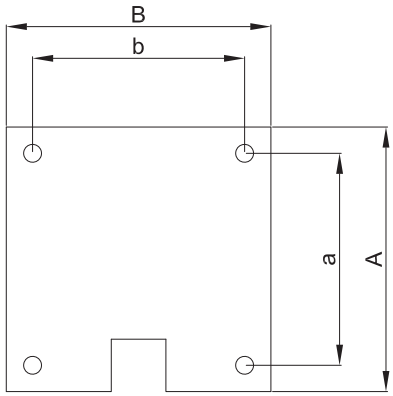
DON'T FORGET TO ORDER THE ACCESSORIES

Example: Enclosure type GUB-02 + Internal mounting plate TF-02 + Cable glands, unions + other...see key

GUB..., GUB-...V series Accessories available on request and spare parts

ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	KEY
	Internal mounting plates	GUB	Thickness 2.5mm Aluminium (TF-...) Galvanized steel (TF-...AC)	TF	
		GUB-S		TF-S	
		GUB-0, GUB-0V		TF-0	
		GUB-01, GUB-01V		TF-01	
		GUB-02, GUB-02V		TF-02	
		GUB-03, GUB-03V		TF-03	
		GUB-04, GUB-04V		TF-04	
		GUB-05		TF-05	
	Breather and drain valve	Thread diameter ISO 7-R 3/8"	Material: stainless steel	ECD-210S	
	Cable glands and unions		For models and codes, visit www.cortemgroup.com		
	Viewing window	GUB-0V	Shock and high temperature resistant borosilicate glass sealed in aluminium ring	K-0253	
		GUB-01V		K-0145	
		GUB-02V		K-0254	
		GUB-03V		K-0255	
		GUB-04V		K-0195	

Enclosures	Internal mounting plates				
	A	B	a	b	Code
GUB	80	80	60	48	TF
GUB-S	80	80	60	50	TF-S
GUB-0	100	100	80	60	TF-0
GUB-01	113	113	90	90	TF-01
GUB-02	150	150	130	130	TF-02
GUB-03	200	200	158	158	TF-03
GUB-04	315	315	230	230	TF-04
GUB-05	380	380	280	280	TF-05



Example of control panel with floor-mounting system