

## Note on instructions

When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. It is essential that they have an exact knowledge of the applicable rules and regulations.

The instructions provide a summary of the most important safety measures and must be read by everyone working with the product so that they will be familiar with the correct handling of the product.

The instructions have to be kept for future reference and must be available throughout the expected life of the product.

## Description

The BARTEC EXgate <sup>™</sup> Communication enclosure makes it easy to deploy IIoT and GPS antennas in hazardous areas, zone 1 and zone 2. This enclosure can be used for all types of WiFi, Bluetooth®, 4G/5G/signal repeaters, gateways and GPSs with internal or external antennas that fit in the available sizing options.

The design of EXgate<sup>™</sup> makes the unit easy to install and use and allows for simple solutions within numerous different applications. The enclosures are fully assembled according to clients demands.

The EXgate<sup>™</sup> are designed to meet the harsh environments of the North Sea and are ideal for Petrochemical and Marine applications as well as for all kind of industry where an explosive atmosphere may be present.

EXgate<sup>™</sup> Ex d enclosures allow for utilization of standard electrical components. Subsequent replacement and maintenance of installed components is thus easy.

The EXgate<sup>™</sup> enclosure is designed, built and delivered in full compliance with current specific regulations and standards such as the ATEX Directive 2014/34/EU and relevant IECEx / EN

60079 standards. The client receives a complete system including user manual, part list, wiring diagram and an EU-Declaration of Conformity for ATEX certified solutions. Otherwise the equipment is also according to the following directives: Radio Equipment Directive 2014/53/EU, RoHS Directive

#### Type BARTEC EXgate™

### Explosion protection

#### ATEX

# Ex type of protection

C€ 2460
IP II2G Ex db / db eb IIA/IIB/IIC T6/T5/T4 Gb II2D Ex tb IIIC T70/80/95/100°C Db

EU Type Examination Certificate Presafe 20 ATEX 74578 X

#### **IECEx**

Ex type of protection Ex db / db eb IIA/IIB/IIC T6/T5/T4 Gb Ex tb IIIC T70/80/90/100°C Db

Certificate of Conformity IECEx PRE 20.0102X

IEGEX FRE 20.0102A

#### Ambient temperature range

 $-20^{\circ}C \le Ta \le +40^{\circ}C$  $-20^{\circ}C \le Ta \le +72^{\circ}C$  (optional)

#### Ingress Protection

IP 66

2011/65/EU and 2015/863/EU, EMC Directive 2014/30/EU, REACH Directive 1907/2006/EF and WEEE Directive 2012/19/EU.

#### Other applicable documents

- circuit diagram
- mounting instructions / operating instructions for installed components
- delivery note c/w cable entries listed

The retention of these documents is mandatory.

#### Explosion proof Communication Enclosure, BARTEC EXgate™

Read these installation instructions carefully before mounting, installation, commissioning and maintenance.

#### Example of the Type Label

Here is a typical example of how a Type Label may look like:



### Technical data

#### Supply data

Un:	3 – 24 VDC, POE (37 – 57 V
	DC) / 230 VAC
ln (215) :	≤ 1,5A @ DC, ≤ 0,2A @ VAC
In (360) :	≤ 3A @ DC, ≤ 0,5A @ VAC

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#### Production year

As stated on the marking label of the product

#### Serial number

As stated on the marking label of the product

#### Marking label

Please refer to notes on the marking label

#### Text label

THREADED HOLES – SEE INSTALLATION INSTRUCTIONS WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

#### Notes on the marking label

Each "specific condition of use" of either built in or attached components or equipment, which are important for **the** installation, the use or the maintenance of the assembly, will be unabbreviated adopted into this manual.

Eventually 'loop assessment' information of 'associated **apparatus'** you can find (when applicable) in belonging Certificate(s) of Conformity.

The (threaded) entries for cable entries in Ex d enclosures need to be administrated concerning quantity, size and kind of thread. You can find this information in the respective delivery note with identical reference number. A copy is always part of the documents belonging to the delivery.

In case of loss always by mentioning the SAP/R3 reference number at BARTEC office traceable.

Vestre Svanholmen 24 Tel.: +47 51 844100 sales@bartec.no 4313 SANDNES Fax: +47 51 844101 www.bartec.no NORWAY

# Ex d/Ex de/Ex t SS316L Communication Enclosure



### Safety Instructions

The technical data, which are on the marking label need to be maintained just like all possible warning (caution) texts on the outside of the enclosure.

On the basis of the Category or EPL marking you'll have to check whether the manufactured panel in your application will be installed in the correct zone.

Zone	Category	EPL	Suitability
0	1G only	Ga only	×
1	2G	Gb	√
2	3G or 2G	Gc or Gb	√
20	1D only	Da only	×
21	2D	Db	√
22	3D or 2D	Dc or Db	✓

This table gives only information about main Equipment Protection Level which is applicable for the control panel. The marking label is leading.

The table shows in which zone this panel may be installed under application of the belonging EU-Type Examination Certificate or IECEx Certificate of Conformity. All intrinsically safe circuits generated by 'associated apparatus' conform type of protection Ex ia may enter zone 0 or 20 when corresponding Category 1 or EPL Ga marking is between brackets on the marking label only.

Rebuilds and changes to the enclosures which affect the explosion safety are not permitted.

This installation instruction and possible other lose (spare) parts may not be left in the control panel during operation.

Use explosion protected equipment in good shape only, which means; undamaged, healthy maintenance condition and important: with fully closed enclosures.

Take care of all national applicable safety & work instructions and all safety instructions mentioned in this manual whenever work is necessary to explosion proof panels.

For installation requirements we redirect you to: EN 60079-14: 2014 or IEC 60079-14: 2013.

## Marking

Particularly important points in these instructions are marked with a symbol:

#### A DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

#### 

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

#### 

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

#### NOTICE

NOTICE is used to address practices not related to personal injury.

# (i) Note

Important instructions and information on effective, economical and environmentally compatible handling.

# Conformity to standards

The explosion proof control panels have been examined according following standards (depending on technical execution and application more than one standard may be applicable).

#### Main standards

EN 60079-0:2018 / IEC 60079-0:2017 Ed 7.0 EN 60079-1:2014 / IEC 60079-1:2014-06 Ed 7.0 EN IEC 60079-7:2015/A1:2018 / IEC 60079-7:2017 Ed 5.1

EN 60079-31:2014 / IEC 60079-31:2013 Ed 2

# **Technical data**

Page 1 of these installation instructions describes the exact technical execution. Below follows an overview of possible variants and the general technical data.

Туре	Type of Protection
EXgate™ 215	flameproof enclosure / increased safety enclosure with outer diameter Ø 215, Ex db / db eb IIA/IIB/IIC T* Gb
EXgate™ 360	flameproof enclosure / increased safety enclosure with outer diameter Ø 360, Ex db / db eb IIA/IIB/IIC T* Gb Ex tb IIIC T*°C Db

### Type code

Depending on the variant and the installed components, the product uses a type code as shown in the table below.

#### Marking according EN-IEC 60079-0

Depending on the type of enclosure it can be possible to have an application for either gas only, dust only, or both. The marking on page 1 is leading.

EXgate<sup>™</sup> (see marking for different versions of the product in the tables below):

-version with assembled Ex receptacle 'R': Ex db eb IIA/IIB/IIC T\* Gb, -20°C ≤Ta≤ +\*°C Ex tb IIIC T \*°C Db

-version with assembled Ex e enclosure (junction box):

Ex db eb IIA/IIB/IIC T\* Gb,

-20°C\* ≤Ta≤ +\*°C

Ex tb IIIC T \*°C Db

-version w/o assembled Ex items:

Ex db IIA/IIB/IIC T\* Gb, -20°C ≤Ta≤ +\*°C

Ex tb IIIC T \*°C Db

\* Tamb becomes -20°C when neoprene gasket is used as gasket between Ex e and Ex d enclosure.

EN L THOME A		4.7		
EXgate <sup>®</sup> 215	гкр	12		
	<u>t t t</u>	· <b>† †</b>		
			Z	A letter code that pin points the internal configuration
			1-XX	Means variant of threaded entries
			S	The letter 'S' may also be used, specifying "Special"
			D	Means a Composite Dome Ex d top
			Р	Means a Polycarbonate Dome Ex d top
	11.		т	Means a Tight Ex d top
	11		w	Means a flat Glas Ex d top
			0	Means without an Amphenol Receptacle is mounted
			R	Means an Amphenol Receptacle is mounted
			1	Means an Exd solution
			4	Means an Ex de solution with external Ex e enclosure
			155-360	Means the outer diameter of the enclosure in mm
			EXgato™	Means the product type

# Ex d/Ex de/Ex t SS316L Communication Enclosure



Maximum surface temperature (1-class), ambient temperature (1amb) and Cable temperature				emperature
Model	Model Maximum power Max		T Class / sur-	Temperature on
	(dissipation)	Ambient temperature	face temp.	Cable entry
	3.5W	$-20^{\circ}C \le T_{amb} \le +62^{\circ}C$	T6 / 70°C	<70°C
	9W	$-20^{\circ}C \le T_{amb} \le +58^{\circ}C$	T6 / 70°C	<70°C
	15W	$-20^{\circ}C \le T_{amb} \le +50^{\circ}C$	T6 / 70°C	<70°C
Exgale 11 215 0 D	20W	$-20^{\circ}C \le T_{amb} \le +46^{\circ}C$	T6 / 70°C	<70°C
	26W	$-20^{\circ}C \le T_{amb} \le +41^{\circ}C$	T6 / 70°C	<70°C
	30W	$-20^{\circ}C \le T_{amb} \le +36^{\circ}C$	T6 / 70°C	<70°C
	·			
	20W	$-20^{\circ}C \le T_{amb} \le +55^{\circ}C$	T5 / 95°C	<70°C
EXgate™ 215 * R * * *	26W	$-20^{\circ}C \le T_{amb} \le +40^{\circ}C$	T6 / 70°C	<70°C
	30W	$-20^{\circ}C \le T_{amb} \le +36^{\circ}C$	T6 / 70°C	<70°C
	•	·		
	3.5W	$-20^{\circ}C \le T_{amb} \le +72^{\circ}C$	T6 / 80°C	+75°C
	9W	$-20^{\circ}C \le T_{amb} \le +68^{\circ}C$	T6 / 80°C	+76°C
EXgate™ 215 * 0 P * *	15W	$-20^{\circ}C \le T_{amb} \le +60^{\circ}C$	T6 / 80°C	+73°C
EXgate™ 215 * 0 W * *	20W	$-20^{\circ}C \le T_{amb} \le +56^{\circ}C$	T6 / 80°C	+73°C
, i i i i i i i i i i i i i i i i i i i	26W	$-20^{\circ}C \le T_{amb} \le +51^{\circ}C$	T6 / 80°C	+72°C
	30W	$-20^{\circ}C \le T_{amb} \le +46^{\circ}C$	T6 / 80°C	<70°C
	•		L	L
	3.5W	$-20^{\circ}C \le T_{amb} \le +72^{\circ}C$	T6 / 80°C	+75°C
	9W	$-20^{\circ}C \le T_{amb} \le +68^{\circ}C$	T6 / 80°C	+76°C
	15W	$-20^{\circ}C \le T_{amb} \le +60^{\circ}C$	T6 / 80°C	+73°C
	20W	$-20^{\circ}C \le T_{amb} \le +56^{\circ}C$	T6 / 80°C	+73°C
	26W	$-20^{\circ}C \le T_{amb} \le +51^{\circ}C$	T6 / 80°C	+72°C
	30W	$-20^{\circ}C \le T_{amb} \le +46^{\circ}C$	T6 / 80°C	<70°C
EXgate™ 215 * 0 T * *			L	L
5	20W	$-20^{\circ}C \le T_{amb} \le +71^{\circ}C$	T5 / 95°C	+88°C
	26W	$-20^{\circ}C \le T_{amb} \le +66^{\circ}C$	T5 / 95°C	+87°C
	30W	$-20^{\circ}C \le T_{amb} \le +61^{\circ}C$	T5 / 95°C	+85°C
			L	L
	26W	$-20^{\circ}C \le T_{amb} \le +71^{\circ}C$	T4 / 100°C	+88°C
	30W	$-20^{\circ}C \le T_{amb} \le +66^{\circ}C$	T4 / 100°C	+87°C
	10W	$-20^{\circ}C \le T_{amb} \le +63^{\circ}C$	T6 / 80°C	<70°C
	20W	$-20^{\circ}C \le T_{amb} \le +58^{\circ}C$	T6 / 80°C	<70°C
	30W	$-20^{\circ}C \le T_{amb} \le +53^{\circ}C$	T6 / 80°C	<70°C
EXgate™ 360 * * * * *	35W	$-20^{\circ}C \le T_{amb} \le +48^{\circ}C$	T6 / 80°C	<70°C
	40W	$-20^{\circ}C \le T_{amb} \le +44^{\circ}C$	T6 / 80°C	<70°C
	45W	$-20^{\circ}C \le T_{amb} \le +42^{\circ}C$	T6 / 80°C	<70°C
	50W	$-20^{\circ}C \le T_{amb} \le +39^{\circ}C$	T6 / 80°C	<70°C
	55W	$-20^{\circ}C \le T_{amb} \le +32^{\circ}C$	T6 / 80°C	<70°C
	60W	$-20^{\circ}C \le T_{amb} \le +30^{\circ}C$	T6 / 80°C	<70°C

# Maximum surface temperature (T-class), ambient temperature (Tamb) and Cable temperature

# Ex d/Ex de/Ex t SS316L Communication Enclosure

#### Type(s) of Protection against ignition

Ex db / db eb IIC Ex tb IIIC

#### Gas group

Depending on final construction; see marking on the panel. This is for gas: IIC / IIB / IIA.

#### Dust group

Depending on final construction; see marking on the panel. This is for dust: IIIC.

# Temperature class or maximum surface temperature

Depending on built-in heat dissipation in the enclosure; see marking on the panel. This is: T6/T5/T4 (for gas) or: T70/80/95/100°C (for dust).

#### **Equipment Protection Level**

This is marked with either Gb after the temperature class (for gas) or Db after the maximum surface temperature (for dust).

# Ingress Protection degree

IP66.

#### Ambient temperature range

-20°C to +40°C (default). -20°C to +72°C (optional).

#### Maximum ambient temperature range

-20°C to +72°C (Engineering to Order). Ambient temperature range as indicated on

page 1 is leading. Depends on components and equipment used in the overall application.

# Entries for cable glands, line bushings and receptacle

The EXgate<sup>TM</sup> 215 Ex d enclosure has 3 ea M25x1,5 6H threaded entries prepared for cable glands, blind plugs, a receptacle or a line bushing. The Ex e enclosure may have up to 3 ea  $\emptyset$ 20 or  $\emptyset$ 25 holes prepared for certified cable glands etc.

The EXgate<sup>™</sup> 360 Ex d enclosure has 6 ea M25x1,5 6H and 1 ea M40x1,5 threaded entries prepared for cable glands, blind plugs, a receptacle or a line bushing. The Ex e enclosure may have various free holes holes prepared for certified cable glands etc,

# (i) Note

For deviating ambient conditions, you are advised to have consultation with BARTEC.

#### **Enclosure material**

- Ex db Stainless Steel AISI 316L
- Ex eb Stainless Steel AISI 316L
- Ex tb Stainless Steel AISI 316L

#### Max. nominal supply voltage

DC 3 – 24 V POE (DC 37 – 57 V) AC 230 V

### Max. nominal supply current

EXgate™360:
3 A @ DC
0,5 A @ AC

#### Max. supply cable cross section

2,5 mm<sup>2</sup> is std, bigger may be fitted.

### Transport, Storage

NOTICE

Damage to the control panel through incorrect transport or incorrect storage.

Transport and storage are permissible in original packaging only.

## Assembly / Disassembly

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#### Risk of injury due to incorrect proceedings.

- Remark heavy weight cover on stainless steel Ex db enclosures; act accordingly.
- When installing and operating Ex equipment, take care of the applicable safety standards and generally known electrical safety standards.
- ➤ To open an EXgate<sup>™</sup> enclosure, use a 2 mm Allen key for the M4 locking screw in the front flange of the enclosure and loosen it.
- Use a pin wrench (4mm pins) or a dedicated tool from BARTEC to unscrew the enclosure top.
- ➤ To close an EXgate<sup>™</sup> enclosure, make sure that the threads of the male and female parts are fully cleaned and checked, before it is regreased using Gleitmo 165. Also check the O-ring, clean it and regrease it, using acid free vaseline. Replace it if it is damaged.
- Screw the enclosure top back in place, hand tight. Use a pin wrench (4mm pins) or a dedicated tool from BARTEC and wrench the top to shoulder.
- Securely tighten the M4 locking screw in the front flange of the enclosure to 3 Nm using a 2 mm Allen key.

#### 

# Risk of injury and property damage because of disregarding minimum distances.

The physical distance between the flanges of a flame proof enclosure and possible other flameproof enclosures or massive obstacles must be minimum either 30 mm for gas group IIB, or 40 mm for gas group IIB+H<sub>2</sub> or IIC.

### Installation

#### 

# Death or serious injury through improper use.

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Switch the control panel to zero-potential. This is possible by either an installation isolator switch in the power line or by disconnecting the feeding group of the concerning (main) power distribution board.

# (i) Note

In case of lost bolts: ask for genuine bolts from BARTEC.

#### Cabling and wiring

The electrical cable entries must be realized according the actual installation standard EN-IEC 60079-14.

 You'll have to choose the cross sections of the cables in a manner that no overload and thereafter possibly inadmissible temperature rising could occur.

#### NOTICE

Special attention for selection of direct cable entries in flameproof enclosure Ex db (see clause 10.6.2. of EN 60079-14:2014 (IEC 2013).

Internal and external earth connection according to below drawing (the metric size may be M5 or M6):



Remark the fact that many cable entries offer no guarantee for strain relief (recognizable with EU/EC-Type Examination Certificate or Certificate of Conformity number ending on 'X').

The size of the PE conductor shall be according to IEC 60079-0:2018 clause 15 Table 12. This implies for internal earthing (S: conductor):

- when  $S \le 16 \text{ mm}^2$  then S PE = S

With regards to wiring we refer to the drawings <u>EXA-25-3</u> POE with Ex e connection box, to <u>EXA-27-3</u> where the Amphe-Ex receptacle is used and <u>EXA-28-3</u> for direct entry.

Reference, for EXgate <sup>™</sup> 360, is also made to drawing EXA-47-3. Excerpts from this drawing is enclosed at the end of this Installation Instruction.

#### NOTICE

There's a mandatory need for cable clamping within a limited (0.3 m) distance to the enclosure to be sure no strain on the cable entry may occur.

Vestre Svanholmen 24 Tel.: +47 51 844100 sales@bartec.no 4313 SANDNES Fax: +47 51 844101 www.bartec.no NORWAY



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Unused cable entries must be closed with a certified stopping plug according the applicable protection method Ex db or Ex eb. Attention for 'protection by enclosure' Ex tb enclosures, the stopping plug needs to have a marking with 'tb' as well.

Ex db cable glands are allowed in combination with maximum 1 Ex db adapter/reducer in the threaded entry of the Ex db enclosure, where Ex db stopping plugs are not allowed in combination with Ex db adapters/reducers.

The insulation class of electrical wires needs to be chosen according the temperature class or max. surface temperature: most regular is:

		,	
Temp.	T4	T5	T6
class			
Max. sur-	T130°C	T95°C	T80°C
face temp.			
Max. inter-	110°C	75°C	60°C
nal temp.			
Wire insu-	H07G	H07V2	H05V/
lation	(EVA	(PVC/	H07V
quality	110°C)	XLPE	(PVC
	,	90°C)	70°C)

Reference is also given to the temperature table above in this document that states the demand of the minimum temperature rating of supply cables in and out of the equipment.

The external grounding facility of the explosion proof control panel must be connected to the protective earth system. Each non energized blank metal part must be grounded (PE).

In particular the terminal connections (junctions) in a panel based on type of protection increased safety (Ex eb) need to be carefully maintained. Eventually applied terminal bridges need to maintain the type of protection as well (apply genuine manufactures only and apply insulation walls on the beginning and end of each terminal bridge).

# (i) Note

The insulation of the wires must reach up to the terminal. Multi stranded conductor ends have to be protected against splaying by the use of cable lugs, ferrules, or by the design of the terminal block (e.g. cage clamp) applied.

Be aware of a correct application of the corresponding size of the cross section. The insulation of the wires may not be damaged.

#### NOTICE

Be during installation aware of the minimum required bending radius of the applicable wires. All screw terminals, - also the unused -, must be tightened.

# Specific conditions of use

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"X" - The Instructions provide guidance for the user to minimize the risk from electrostatic discharge.

"X" - Flameproof threaded joint at EXgate<sup>™</sup> 215 - M208x2 6g/6H minimum 9,5 (nine and a half) threads must be engaged.

This is necessary because of cooling down effect by releasing hot gases from an internal explosion through the flameproof joint.

Check when assembling:

Choose the mounting location of the panel with care; where pilot lights or windows are applied on panels, those are to be installed in such a way that the risk on mechanical impact is low.

Mount the enclosure without torsion, on a flat underground only.

# (i) Note

The mounting sizes of stand-alone enclosures are free available in (online) catalogues. Due to the fact that many control panels are assembled based on more enclosures built together, the mounting sizes of an 'assembly' can be asked for at BARTEC with serial number as a reference

Take in to account the minimum required clearance and creepage distances.

The manufacturer takes care of the necessary creepage and clearance distances when positioning the terminals. This is required for terminals of intrinsically safe circuits as well; the minimum distance between the reachable connections of intrinsically safe and non-intrinsically safe circuits must be at least 50 mm. Wherever a clearance of 50 mm is not feasible the application of a separation wall is allowed.

#### NOTICE

When moving the terminals, take care of the necessary creepage and clearance distances according EN-60079-7:2018 (IEC 2017 Ed 5.1).

#### **Tightening Torques**

For bolt based (metric size) terminals:		
Screw size	Torque	
M3:	0.8 Nm	
MA	2 0 Nm	

M4:	2.0 Nm
M5:	3.5 Nm

For screw terminals (source: WEIDMÜLLER):

l erminal size	lorque
2,5 mm²:	0.4-0.7 Nm
4 mm²:	0.5-1.0 Nm
6 mm²:	0.8-1.6 Nm

## Commissioning

Before commissioning, check that:

- The device has been installed in compliance with the manufacturer instructions.
- The enclosure is not damaged.
- The enclosure is fully closed. •
- All connections have been established • properly.
- The cables have been installed correctly.
- All screws have been tightened securely.
- The device functions perfectly.

# Maintenance and Fault Clearance

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#### Risk of injury due to incorrect proceedings.

- The national valid regulatory for mainte-۶ nance, inspection, and repair is applicable for electrical equipment for the use in hazardous areas.
- ≻ Damaged flameproof components (e.g. windows, pilot lights, switches and cable entries) must be directly replaced by genuine BARTEC spare parts.

#### Maintenance cycles

There should be maintenance within regular intervals. Recommended is to formulate a maintenance plan according EN 60079-17: 2014 (IEC 2013).

#### Inspection

Follow the national law and regulatory for inspection of explosion proof equipment. This should be done by skilled and gualified personnel only. During inspection following parts of the panels need special attention:

### Ex db enclosures

Inspection of flange- or screw cover (flame path) and belonging gasket/ O-ring

# NOTICE

The flame proof joint may not be damaged with scratches or grooves. When- ever the joint is damaged, the joint width (gap) could be bigger than acceptable: the enclosure needs to be returned to the factory for overhaul.

#### NOTICE

The flameproof joint may not be painted.

• To protect flameproof joints against corrosion they have to be greased by an acidfree non-curing grease with service temperature in the application range.

### Ex eb or Ex tb enclosure

- Check all gaskets and O-rings.
- Replace gaskets and O-rings when aged or damaged with new identical ones.
- Check if all terminals (junctions) and cable entries and/or line bushings are completely tightened. Polyester (glass fibre reinforced) enclosures may not show any cracks.

### Repair

- Disconnect from power supply before starting any repair to equipment.
- Replace faulty vital Ex relevant compo-• nents with original genuine BARTEC components only.

### NOTICE

Be aware not every repair is allowed to be performed on your own. In case of doubt; ask for the technical service from BARTEC.

Installation Instruction

# Ex d/Ex de/Ex t SS316L Communication Enclosure

BARTEC

"X" - Flameproof threaded joints at EXgate™ 215 - M20/25x1.5 6g/6H minimum 7 (seven) threads must be engaged.

"X" - Flameproof threaded joints at EXgate™ 360 - M352x3 6g/6H minimum 6 (six) threads must be engaged.

"X" - When a Connector half fitted with contact pins is not connected to an associated Plug or Receptacle, it shall not be energized as per EN IEC 60079-0:2018, clause 20.2.

"X" - Plugs and receptacles shall only be used with blanking caps or mating Connector halves certified under certificate number IECEx SIR 08.0029X.

"X" - Pilot light type EFL\*PC\* underwent only a shock corresponding to an energy of a low risk at 2J

"X" - The flameproof joints (inside pilot light type EFL \*PC\*) have a different value from those specified in the tables of the IEC 60079-1 standard, for any repair to contact the manufacturer.

# (i) Note

Protect the installation with a corresponding fuse or automatic circuit breaker. The power supply must have a sufficient short circuit current capacity to be sure that in case of a short circuit the fuse will trip guaranteed.

# Operation

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Death or serious injury through improper use.

➤ The EXgate<sup>™</sup> Communication Enclosure may be operated only within the technical limits that apply to it (see page 1).

## Disposal

The components in the control panel contain metal and plastic parts. Therefore, the statutory requirements for disposing of electronic scrap (WEEE) must be observed (e.g. disposal by an approved disposal company).



#### **Service Addresses**

#### BARTEC AS

Vestre Svanholmen 24, N 4313 Sandnes Norway

#### BARTEC NEDERLAND B.V.

Boelewerf 25, NL 2987 VD Ridderkerk Netherlands

# BARTEC Explosion Proof Appliances (Shanghai) Co., Ltd.

New Building 7, No. 188 Xinjun Ring Road Caohejing Pujiang Hi-tech Park CN 201114 Shanghai **China** 

#### BARTEC Pte. Ltd.

63 Hillview Avenue, #07-20/23 Lam Soon Building, SG 669569 Singapore Singapore

#### BARTEC GmbH

Max-Eyth-Str. 16, D 97980 Bad Mergentheim Germany

#### BARTEC Middle East FZE

RA-08, HB-01, Jebel Ali Free Zone, Dubai United Arab Emirates

#### BARTEC US Corp.

650 Century Plaza Drive, Suite D120 Houston, TX 77073 USA WIRING DIAGRAMS, TYPICAL, FOR EXgate 360 (cut from drawing EXA-47-3):



Vestre Svanholmen 24 Tel.: +47 51 844100 sales@bartec.no 4313 SANDNES Fax: +47 51 844101 www.bartec.no NORWAY Installation Instruction

# Ex d/Ex de/Ex t SS316L Communication Enclosure





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