

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx PRE 20.0102X	Page 1 of 4	Certificate history

Status: Current Issue No: 0

Date of Issue: 2020-12-04

Applicant: Bartec Technor AS

Vestre Svanholmen 24

4313 Sandnes **Norway** 

Equipment: EXgate® Radio Dot System Enclosure

Optional accessory:

Type of Protection: Ex d, e, t

Marking: -version with assembled Ex d receptacle socket:

Ex db eb IIC T6/T5 Gb, -20°C  $\leq$ Tamb $\leq$  +36°C / +40°C / +46°C

Ex tb IIIC T 95°C / 80°C Db

-version with assembled Ex e enclosure (junction box): Ex db eb IIC T6 Gb, -20°C  $\leq$ Tamb $\leq$  +36°C / +41°C / +46°C

Ex tb IIIC T 70°C Db

-version w/o assembled Ex items:

Ex db IIC T6 Gb,  $-20^{\circ}$ C  $\leq$ T<sub>amb</sub> $\leq$   $+36^{\circ}$ C /  $+41^{\circ}$ C /  $+46^{\circ}$ C

Ex tb IIIC T 70°C Db

Details for T class, surface temperature and T<sub>amb</sub> see in table below

Maximum power dissipation	Ambient temperature	T class	Highest surface temperature
20W	-20°C ≤ Tamb ≤ +46°C	T6	+70°C
26W	-20°C ≤ Tamb ≤ +41°C	Т6	+70°C
30W	-20°C ≤ Tamb ≤ +36°C	Т6	+70°C
Version with assembled Ex d receptacle	-20°C ≤ Tamb ≤ +36°C / +40°C	Т6	+80°C
Version with assembled Ex d receptacle	-20°C ≤ Tamb ≤ +46°C	T5	+95°C

Approved for issue on behalf of the IECEx Ståle Sandstad

Certification Body:

Position: Certification Manager

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DNV GL Presafe AS Veritasveien 3 1363 Høvik Norway





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 on with assembled Ex e aclosure with silicone gasket	-20°C ≤ T <sub>amb</sub> ≤ +36°C/ +41°C/+46°C	Т6	+70°C
on with assembled Ex e closure with neoprene gasket	-20°C ≤ T <sub>amb</sub> ≤ +36°C/ +41°C/+46°C	Т6	+70°C



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Manufacturer: Bartec Technor AS

Vestre Svanholmen 24 4313 Sandnes

Norway

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

NO/PRE/ExTR20.0109/00

Quality Assessment Report:

NO/NEM/QAR07.0003/12



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

EXgate® Radio Dot System enclosure is a wireless router protected with type of protection "flameproof enclosure" which can include externally assembled Ex certified socket (receptacle) or "increased safety" enclosure as junction box. It is intended for fixed installation. "Dust protection" (w/o dust layers) is assured with appropriate O-ring between the enclosure body and top and with a gasket between enclosure body and junction box. Enclosure is made of stainless steel. Enclosure's bottom and top are fixed together by flameproof threaded joint. Enclosure top includes non-metallic dome cemented on the metallic top of the enclosure.

Electronic components are located inside the flameproof enclosure including connection terminals for field wiring. Flameproof enclosure is provided with three threaded holes (direct entries) in flameproof enclosure intended for Ex certified receptacle, line bushing and cable glands. Version with external enclosure is intended for indirect entry (via line bushing) and includes connection terminals for field connection located inside the junction box made of thin stainless steel sheet with a thickness of 1,5mm. The junction box is provided with up to three entries (plane holes) intended for cable glands.

All free entries are supplied with the appropriate Ex certified blanking elements.

Type design: EXgate®

Applicable models: EXgate® 215

Electrical data and principal characteristics:

Rated voltage: 24 VDC, POE (37 - 57 V DC) / 230 VAC

Rated current:  $\leq 1,5A$  (DC),  $\leq 0,2A$  (AC)

Ingress protection IP: IP66

Routine tests:

- Routine overpressure test at 39.6 bar for duration of at least 10 seconds acc. Cl. 16 of IEC 60079-1:2014 for flameproof enclosure.
- Dielectric strength test according to Clause 7.1 of IEC 60079-7:2017 (500V/1500V R.M.S. for Un 24V/230V) (0-5%) at 48-62 Hz maintained 60s or 1.2 x test voltage maintained at least 100 ms for increased safety enclosure.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- "X"- The Instructions provide guidance for the user to minimize the risk from electrostatic discharge
- "X"- Flameproof threaded joint M208x2 6g/6H. Minimum 9.5 (nine and half) threads must be engaged.
- "X"- Flameproof threaded joints M20/25x1.5 6q/6H. Minimum 7 (seven) 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 energised, as per IEC 60079-0, 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.