



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx PRE 14.0017X

Issue No: 1

Certificate history:

Issue No. 1 (2018-03-07)

Issue No. 0 (2014-12-12)

Status: **Current**

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Date of Issue: **2018-03-07**

Applicant: **Bartec Technor AS**
Vestre Svanholmen 24, 4313 Sandnes
PO box: 418, 4064 Stavanger
Norway

Equipment: **Control system for Habitat**
Optional accessory: Mobile gas detection system for hot work habitat

Type of Protection: **Ex d, e, m.**

Marking: Ex d e mb IIB T4 Gb, T_{amb} -20°C to +45°C

*Approved for issue on behalf of the IECEx
Certification Body:*

Asle Kaastad

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 the [Official IECEx Website](#).

Certificate issued by:

DNV GL Nemko Presafe AS
Veritasveien 3
1363 Høvik
Norway





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Manufacturer: **Bartec Technor**
Vestre Svanholmen 24, 4313 Sandnes
Stavanger
Norway

Additional Manufacturing location(s):

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 apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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/ExTR14.0052/01](#) [NO/PRE/ExTR18.0011/00](#)

Quality Assessment Report:

[NO/NEM/QAR07.0003/07](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

"EXguard" is an assembly of certified equipment/component. The assessment included electric components/ equipment covered by the individual certificates and assembled together. Sensor dummy plug has been type tested as part of equipment (NO/PRE/18.0011/00). "EXguard" system is a control system designed to be used with hot work habitat with mobile gas detection. This is an assessment only for Ex related aspects of the system. The safety function of the system hasn't been part of the assessment. The system involves in purging the clean air and maintains the over pressure inside the habitat. The assessment involves the checking the suitability of control system for EPL: Gb.

The system consists of:

- Hot work habitat system (Not part of assessment)
- Mobile control unit, MCU
- Power control unit PCU
- Pressure monitor unit PMU
- Sensor dummy plug SDP
- Differential pressure transducer DPT
- Pressure switch PS-01
- Uninterruptible power supply UPS
- Air supply unit, ASU (electric driven air-supply fan)
- Air supply unit damper, ASD
- Sensor units for gas detection GD1-4 and GD-5
- Remote alarm station RAS

Formal analyses for non-electrical part of evaluated equipment haven't found any potential ignition source.

Marking includes the Ex marking plate for whole assembly and info marking plates on each of the sub-modules

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Some parts of the assembly must only be placed in areas with low risk of mechanical danger (ref clause 26.4.2 in EN/IEC 60079-0). Hence assembly shall be placed in the area where there is a low risk of mechanical danger.
- The socket shall be checked for conditions & cleanliness before the use.
- The cable glands shall be provided with additional clamping to prevent accidental pulling and twisting.
- The line bushing shall be secured against rotation and self-loosening.
- Equipment shall be earthed according to IEC 60079-14 requirement during normal operation.
- Appropriate Ex safety requirements shall be applied to non-electrical equipment.
- Repairs of flameproof joints must be made in accordance with structural specifications provided by the MSD-CP-117, version 5.0 Page 3 of 38 manufacturer. Repairs must not be made on the basis of the values provided in Table 1 of IEC 60079-1: 2007.
- The property class of the cover screws shall be at least 10.9. on differential pressure switch
- A fuse corresponding to the magnet's rated current (max. 3xI_B in compliance with DIN 41571 or IEC 60127) or a motor protecting switch with short-circuit or thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each magnet of type 6...-A and L. For very low rated magnet currents, the fuse with the lowest current rating according to the above referenced



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IEC standard will suffice. The fuse may be accommodated in the corresponding power supply unit or it shall be separately connected in series. The fuse voltage rating shall be the same or higher than the magnet voltage rating specified. The breaking capacity of the fuse link shall be the same or higher than the maximum short-circuit current expected to occur at the place of installation (normally 1500 A).

- The magnet voltage rating tolerance of $\pm 20\%$ does apply.
- The components used in the assembly have potential risk to electrostatic charge. Appropriate manufacturer's instructions shall be followed • The repair of the flameproof joints must be according to the structural specifications provided by the manufacturer. Repair on the basis of the values in tables 1 and 2 of EN 60079-1 is not accepted.
- The measuring function of the apparatus is not covered by this type examination. It shall comply with the requirements from the relevant standards which provide guidance on the performance of gas detection equipment and safety devices.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

-Manufacturer's address change

-Descriptive documentation&design changes