IECEx Certificate of Conformity

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 15.0054X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2020-11-06		
Applicant:	**BARTEC TECHNOR AS** Vestre Svanholmen 24 4313 Sandnes PO box: 418, 4064 Stavanger Norway **Norway**		
Equipment:	**TNHV2- High Voltage Junction Box**		
Optional accessory:	Refer description		
Type of Protection:	**Ex nA, eb, db , op pr**		
Marking:	High voltage part: Ex nA IIC T3 Gc High voltage part with heater/thermostat/switch module:Ex db eb nA IIC T3 Gc High voltage part with Ex nA connection box for fiber: Ex nA op pr IIC T3 Gc High voltage part with Ex nA connection box for fiber, heater and thermostat: Ex db eb nA op pr IIC T3 Gc The op pr protection may be replaced by op is signals, and the Ex-code will then be modified, and op pr replaced by [op is].		

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

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

IECEx Certificate of Conformity

Certificate No.: **IECEx PRE 15.0054X**

Date of issue: 2020-11-06 Issue No: 0

Manufacturer: **BARTEC TECHNOR AS**
Vestre Svanholmen 24
4313 Sandnes
PO box: 418, 4064 Stavanger
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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
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/ExTR19.0051/00

Quality Assessment Report:

NO/NEM/QAR07.0003/11

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The TNHV2 Junction box comprises a component certified Ex e enclosure with up to four(3 phase+N) high voltage connection facilities supported by ceramic insulators. Optionally, additional junction box is attached to the main enclosure for the connection of fiber optic cables. The method of connecting the enclosures together is described in the component certificate IECEx DNV 09.0005U

Optical fibre cable is not part of the assessment. Relevant requirements IEC 60079-28 shall be considered when choosing the optical fibre. The assessment to op pr covers only the provision made for fibre optic termination within enclosure. The optical source is not part of the assessment. This provision is intended to be used with Ex certified “op is” source, or as “op pr” when terminating according to the manufacturer’s instructions.

The junction box may be equipped with optional components such as anti-condensation heater (Ex d), thermostat (Ex d), fuse (Ex d), low voltage terminals (Ex e) or switch (Ex d).

A cover made of Lexan 9030 is provided to cover the high voltage terminals to avoid direct contact uninsulated parts for the operator as the door is opened.
The size of the junction box may be in the range of (W/H/D) 90 cm x 125 cm x 40 cm up to 100cm x 200cm x 60 cm, with the layout of the internal connections as described in the manufacturer’s documentation.
The TNHV2 has two configurations for internal mounting of components. The difference is the placement of HV terminals and cable clamps.
650A:
-50 ºC ≤Ta≤ 60ºC
-50 ºC ≤Ta≤ 40ºC,When Ex d switch module is used
-25 ºC ≤Ta≤ 40ºC,When Ex d control module is used
1000A:
-50 ºC ≤Ta≤ 40ºC
-25 ºC ≤Ta≤ 40ºC,When Ex d control module is used

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The cable & cable gland selected that shall be able to withstand a service temperature range of at least 100°C. Cable gland shall have at least IP66 to comply IP66 for the complete assembly.
- The cable through the cable glands shall be effectively clamped to prevent pulling from cable gland.
- Optical fiber shall comply with relevant industrial standards when used.
- The enclosure can be delivered with an additional Ex e enclosure as an option for splicing of optical fibre, according to the manufacturer’s instructions. The marking must reflect this by adding “[op is]” or “op pr” in the Ex-code.