

EU-Type Examination Certificate

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: Presafe 14 ATEX 5228X Issue 05
- [4] Product: TNHV*
- [5] Manufacturer: Bartec Technor
[6] Address: Dusavikveien 39
4007 Stavanger
Norway
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Nemko Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0:2012/A11:2013 EN 60079-1:2007 & EN60079-7:2007.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:



II 2 G

Ex d e IIC T3 Gb, -50°C ≤ Ta ≤ +60°C

Ex e IIC T4 Gb, -50°C ≤ Ta ≤ +60°C (without heater)

Arne Hortman
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com



Date of issue: 2016-11-07

This certificate may only be reproduced in its entirety and without any change, schedule included.

EU-Type Examination Certificate

[13]

Schedule

[14] EU-TYPE EXAMINATION CERTIFICATE No.:

Presafe 14 ATEX 5228X

Issue 05

[15] Description of Product

TNHV high voltage enclosure is intended to be used as a connection box for high voltage cable and may also be equipped with a separate compartment containing fiber cables. This provision is intended to be used with Ex certified "op is" source, or as "op pr" according to the manufacturers instructions.

Type designation

TNHV *

*=size in cm.

Maximum size of high voltage part: 100x200x60.

Electrical Data

Minimum enclosure size for High voltage (cm)	Max voltage Un:	Max current In:	Cable Dimensions (mm ²)	Minimum cable working temperature
57x95x30	8.000V	250A	95/120	110°C*
80x110x60	11.000V	1000A	185	100°C*

* Alternatively a full scale test may be performed to determine minimum cable working temperature for lower currents than specified in table above.

Degrees of protection (IP Code)

Option 1:

Tamb: -40°C +60°C

Enclosures can be delivered with screws, hinges and screws, hinges and quick locks, IP66 / IP67. With silicone gasket IP68 (0.2 bar for 30 minutes) .

Drain device with silicone O-ring according to Sira 09 ATEX 3321U.

Option 2:

Tamb: -50°C +60°C, Extended Tamb to -50°C. Enclosures can be delivered with screws, hinges and screws, silicone gasket. For enclosure with silicone gasket, cover screws, cover screws and hinges, and extended Tamb: IP66. For enclosure with silicone gasket SIL 16, cover screws, cover screws and hinges and extended Tamb: IP66/67, IP68 (0,2 bar for 30 min). Drain device with silicone, fluorosilicone, EPDM O-ring according to Sira 09 ATEX 3321U.

Ambient temperature:

-50°C to +60°C

Routine tests

Dielectric strength test according to clause 6.1, EN 60079-7:2007 shall be performed.

[16] Report No.: D0001513

[17] Specific Conditions of Use

- The cable through the cable glands shall be effectively clamped to prevent pulling from cable gland.
- The high voltage cable connections are made with copper bus bar lug terminals, with screws, nuts and washers suitable for the actual sizes of lugs and cables.
- 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.

[18] Essential Health and Safety Requirements

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9.

[19] Drawings and documents

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Type label for TNHV Ex e	HVX-01-5	E	2016-06-16
Ex e Enclosure TNHV 8011030	HVX-02-5	E	2016-06-16
Bill of Material/Part list Ex e Enclosure TNHV 8011030	HVX-03-5	E	2016-06-16
HV Junction Box TNCN 579530	HVX-04-5	B	2016-04-18
HV Junction Box TNCN 579530-Partlist	HVX-05-5	B	2016-04-18

[20] Certificate History

Issue	Description	Report no.	Issue date
0	Original issue	D0001513	2014-09-18
1	Extended ambient temperature and new temperature classification.	D0001513	2014-09-19
2	Update to 11kV	D0001513	2014-10-28
3	Extended to include alternative enclosure size.	D0001513	2015-05-26
4	Extended temperature range	D0001513	2015-06-26
5	Assessment for new current rating	D0001513	2016-11-07

END OF CERTIFICATE