

## [1] TYPE EXAMINATION CERTIFICATE

[2] Component Intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] **Type Examination Certificate Number:** Nemko 03 ATEX 263 U Issue 6

[4] **Product:** Empty Flameproof Enclosures

[5] **Manufacturer:** BARTEC TECHNOR AS

[6] **Address:** Vestre Svanholmen 24  
4313 Sandnes

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Nemko AS 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no.

D0000867

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013 and EN 60079-1:2014

[10] The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system

[11] This 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 db IIC Gb

Oslo, 2019-02-18



**Geir Hørthe**  
Certification Manager

## [13] Schedule

[14] **TYPE EXAMINATION CERTIFICATE No**                      Nemko 03 ATEX 263U                      Issue 5

[15] **Description of Product**

The TNCD is empty flameproof enclosure certified as EX component.

The Certificate covers TNCD Empty Enclosures of Stainless Steel which may be equipped with:

- Internal hinges.
- Glass window in lid, walls and bottom of enclosure (optional).

**Type Designations**

TN	CD	XX	XX	XX	
					Dimension of box, depth in cm, max. 38cm
					Dimension of box, height in cm, 19 to 57cm
					Dimension of box, width in cm, 19 to 57cm
					Material: CD = Stainless Steel V4A
					Manufacturer

The empty flameproof enclosure has been certified as Ex component according to IECEx NEM 10.0001U (Issue 02). Cementing material of the window has been changed in order to extend the ambient temperature range.

This certificate is made based on the previous issue and report DE/TUN/ExTR12.0013/00 and intended to:

- cover extended ambient temperature range for enclosure models both with- and w/o glass window and cemented joint
- substitute the routine testing requirement for enclosure models with glass window and cemented joint up to size of 38x38x27.

Only explosive gas atmospheres have been evaluated and tested (IIC).

To maintain the level of Ex protection:

- The requirements in clause D4 of IEC/EN 60079-1:2017 shall be observed
- Only appropriate certified (Ex d) cable glands, blanking elements or other entry devices shall be used.

**IP Code:**

IP66

**Routine tests:**

Each enclosure has to be submitted to routine overpressure test (15.8 bar acc. Cl. 16 of IEC/EN 60079-1:2014) to if any of the following conditions is fulfilled:

- welding is used on enclosure,
- enclosure has bigger size than TNCD38x38x27.
- models TNCD282815-TNCD282827 with the cemented polycarbonate dome.

[16] Report No. D0000867

**Descriptive Documents**

Number	Title	Rev	Date
CDX-77-5	Type Label for TNCD Exd Gas component	J	09.22.2017
CDX-20-4	Alternative depth for TNCD Ex d Enclosure	C	04.07.2013
CDX-22-4	Window arrangement for Ex d Enclosure	H	09.23.2013
CDX-70-3	Verification of threaded Ex d flame path	D	04.07.2013
CDX-74-4	Machined TNCD Enclosure	C	04.07.2013
CDX-75-4	External window for Ex d Enclosure	D	04.07.2013
CDX-76-4	Arrangement for switch Ex d	D	04.07.2013
CDX-101-4	Mounting details for TNCD	B	04.07.2013
CDX-102-4	Ex d Enclosure Entries TNCD 19918	B	03.07.2013
CDX-103-4	Ex d Enclosure Entries TNCD 282815	B	03.07.2013
CDX-104-4	Ex d Enclosure Entries TNCD 282827	B	03.07.2013
CDX-105-4	Ex d Enclosure Entries TNCD 383827	B	03.07.2013
CDX-106-4	Ex d Enclosure Entries TNCD 383838	B	03.07.2013
CDX-107-4	Ex d Enclosure Entries TNCD 575727	B	03.07.2013
CDX-108-4	Ex d Enclosure Entries TNCD 575738	B	03.07.2013
CDX-181-4	Lid with Dome M237x2	A	14.01.2019

**Certificate History and Associated Nemko Reports**

Issue	Date	Report	Description
0	2003-08-29	10074	Prime Certificate released
1	2010-07-02	117144	Update to CENELEC EN 60079-0:2006 and CENELEC EN 60079-1:2007
2	2011-06-22	171158	Update to new Applicant / Manufacturer name BARTEC TECHNOR and dust
3	2013-06-28	240246	Update to CENELEC EN 60079-0: 2012
4	2017-09-22	D0000867	Update to CENELEC 60079-0: 2012/A11:2013 and 60079-60079-1:2014, ambient temperature range extended
5	2017-10-05	D0000867	Changed cementing compound, ambient temperature range extended, routine testing substituted for some models
6	2019-02-18	D0000867	models TNCD282815-TNCD282827 - option with cemented polycarbonate dome in cover included



**[17] Schedule of Limitations for Utilization of the Component**

- the maximum number of apertures are 92, the maximum size is M42. The detailed specifications for each enclosure size are in drawing with the reference numbers as follows: CDX-102-4, CDX-103-4, CDX-104-4, CDX-105-4, CDX-106-4, CDX-107-4 and CDX-108-4, rev. B as listed below in Technical documentation.
- ambient temperature range:
  - enclosures without glass window and cemented joint: -52°C to +60°C
  - enclosures with glass window (cemented joint): -50°C to +60°C
- oil-filled circuit-breakers, contactors and rotating machines shall not be used,
- the content of the Ex component enclosure equipment may be placed in any arrangement provided that an area of at least 40 % of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12,5 mm.
- When windows are used the temperature on the cementing/window shall not exceed +80°C, the temperature on the polycarbonate dome shall not exceed +100°C.

**[18] Essential Health and Safety Requirements**

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