




DNV



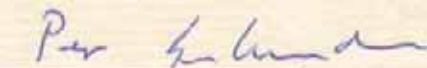
DET NORSKE VERITAS

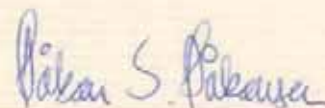
## EC-TYPE EXAMINATION CERTIFICATE

- [2] COMPONENT INTENDED FOR USE IN EQUIPMENT OR PROTECTED SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC
- [3] EC-Type Examination Certificate Number: **DNV-2003-OSL-ATEX-0436U**
- [4] Component: **TNXCD Flameproof enclosure**
- [5] Applicant – Manufacturer or Authorized representative: **Technor ASA**
- [6] Address: **Dusavikveien 39, P.O.Box 658, 4001 Stavanger  
Norway**
- [7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV, notified body number 0575 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential report no. : **2004-3017**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014: 1997 + A1: 1999 + A2: 1999, EN 50018: 2000 + A1: 2002 and EN 50019: 2002**
- [10] The sign 'U' placed after the certificate number 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 EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacturer and supply of this component.
- [12] The marking of the equipment or protective system shall include the following :

 **II 2 G EEx d IIB or EEx de IIB**

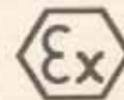
Høvik, 2005-07-20  
for Det Norske Veritas Certification AS

  
Line Gangeskar  
Head of Section

  
Håkon S. Håkonsen  
Senior Engineer

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[13]

## Schedule

[14] TC

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### [15] Description of component

TNXCD is a stainless steel flameproof enclosure with a cylindrical shape For TNXAD 100 also aluminium. The enclosure may be used with glass window, dome or stainless steel top sections.

#### Type Identification

TNXAD 100

TNXCD D - L (diameter and length of Ex d enclosure see table below)

Type	Dimensions to be considered as the maximum size for the diameter of d/de enclosure, smaller dimensions are allowed	Dimensions to be considered as the maximum size for the length of d/de enclosure, smaller dimensions are allowed
TNXAD 100	101 mm	360 mm
TNXCD 100	101 mm	360 mm
TNXCD 130	132 mm	360 mm
TNXCD 195	196 mm	290 mm

Maximum ambient temperatures for the top sections that can be used

Top section	Temperature range
Dome R23	-50°C to +60°C
Dome R43	-20°C to +60°C
Dome R69	-20°C to +60°C
Glass window	-50°C to +60°C
Stainless steel end cover	-50°C to +60°C

#### Degrees of protection (IP Code)

IP 66, IP 67 and IP 68 (0,5bar 2 hours)

[16] Report No.: 2004-3017

Project No.: #2035265

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#### Descriptive Documents

Number	Title	Rev.	Date
XCD-19-4	Certification Drawing for TNXCD / AD Main Enclosure EEx de/ d	E	2005-06-22
XCD-20-4	Certification Drawing for TNXCD / AD Alternative bottom / top sections	E	2002-01-04
XCD-26-4	General arrangement drawing TNXCD./TNXAD..	A	2000-11-10
XCD-33-5	Produksjonstegning for alternativ løsning TNXCD / AD	C	2001-01-25
XCD-37-5	TNXCD / AD connection to EEx e Enclosure	C	2001-01-25
XCD-38-5	TNXCD / AD connection to EEx e Enclosure type 2	C	2001-01-25
XCD-51-4	Detail drawing alternative enclosure TNXCD	A	2001-11-23
XCD-52-4	Alternative type EEx d tube	A	2001-11-23
XCD-53-5	Alternative bottom section TNXCD	A	2001-12-19
XCD-54-4	General arrangement drawing conical dome	A	2001-12-20
XCD-55-4	Ring with threads for conical dome Ref. dwg. XCD-54-4	A	2002-01-04
XCD-81-5	Label for TNXCD ATEX certification	A	2004-05-27
XCD-82-5	Label for TNXCD/AD ATEX certification	A	2004-05-27
XCD-86-4	Certification drawing Lid with spigot joint TNXCD	B	2005-06-02
XCD-87-4	Certification drawing Adapter for spigot joint	B	2005-06-02

#### Routine Test(s)

The overpressure test was performed with 4 times reference pressure and the routine test is not necessary.  
Tested at 45,4 bar.

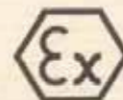
#### [17] Schedule of Limitations

The temperature on the cementing, glass window and dome must not exceed 90°C  
The temperature on the gasket of the EEx e enclosure must not exceed 60°C

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

See part 9 of this certificate

END OF CERTIFICATE



## SUPPLEMENT 1 to EC-TYPE EXAMINATION CERTIFICATE

EC-TYPE EXAMINATION CERTIFICATE No.: DNV-2003-OSL-ATEX-0436U


This EC-Type Examination Certificate is extended to include the following additional information:

The TNXCD flameproof enclosure has been tested as an empty enclosure according to the requirements for gas group IIC. An overpressure test was performed with 4 times reference pressure and the routine test is not necessary. Tested at 45,4 bar.

Report No.: 2004-3017 rev.02

Project No.: 42035265

Høvik, 2005-11-09  
for Det Norske Veritas Certification AS

  
Line Gangeskar  
Head of Section

  
Håkon S. Håkonsen  
Senior Engineer



END OF SUPPLEMENT

Notice: This Supplement to Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Supplement to Certificate invalid.

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