



1. EC-TYPE EXAMINATION CERTIFICATE

2. Equipment or Protective System Intended for use in Potentially explosive atmospheres

Directive 94/9/EC

3. Reference: VTT 08 ATEX 055U Issue 2

4. Component: **Empty enclosures** 

Certified types: ALX and ALCX

5. Applicant Fibox Oy Ab
Keilaranta 19

FI-02150 Espoo

Finland

6. Manufactured by: Fibox GmbH

Rehwinkel 30

32457 Porta Westfalica

Germany

**Fibox Tested Systems Oy** 

**Hovinpelto 2** 

FI-74700 Kiuruvesi

**Finland** 

Fibox Sp.z o.o. ul. Dzieciola 19 04-988 Warsaw

**Poland** 

7. This component and any acceptable variations thereto are specified in the schedule and possible supplements to this Certificate and the documents therein referred to.







- 8. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of 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 reports nos. VTT-S-07102-08 and VTT-S-02887-12.
- 9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 (2012) EN 60079-7 (2007) EN 60079-31 (2009)

- 10. The sign "U" after the certificate number indicates that this Certificate is a component certificate and it may be used as a base for a complete certification of the electrical equipments.
- 11. This EC-Type examination certificate relates only to the design, examination and tests of the specified component in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- 12. The marking of the component shall include the following:

EX

II 2 G

Ex e IIC Gb Ex tb IIIC Db

Espoo, 17.4.2012

**VTT Expert Services Ltd** 

Li rola

Martti Siirola

Senior Expert

Risto Sulonen

**Product Manager** 



# 13. Schedule

## 14. EC-TYPE EXAMINATION CERTIFICATE VTT 08 ATEX 055U Issue 2

# 15. Description of Component

Enclosures, Types ALX... and ALCX..., for fixed installation, made of aluminium.

#### Construction

The construction of the enclosures is specified in the following drawings and documents:

### ALX:

28508	Drawing no.		Signed
1T-28502 ) 1T-28504 ) 1T-28506 ) 1T-28509 ) 1T-28510 ) 1T-28514 ) 1T-28516 ) 29.03.1999 1T-28518 ) 1T-28520 ) 1T-28522A ) 1T-28524 ) 2T-28501A ) 2T-28503A ) 2T-28517 )	28603 A 29801 B YLO-035 B		03.06.2003 26.11.1999 24.05.2003
· · · · · · · · · · · · · · · · · · ·	1T-28500A 1T-28502 1T-28504 1T-28506 1T-28509 1T-28510 1T-28514 1T-28516 1T-28518 1T-28520 1T-28522A 1T-28522A 1T-28524 2T-28501A		
		)	

## **ALCX**

ALC 081306 Base; drawing nro 28561 Ver A1 ALC 081806 Base; drawing nro 28562 Ver A1 ALC 122208 Base; drawing nro 28563 Ver A1 ALC 161609 Base; drawing nro 28564 Ver A1 ALC 162609 Base; drawing nro 28565 Ver A1



# Degree of protection

The degree of protection of IP 66 to EN 60529 is only achieved if Ex-certified cable entries are used that are suitable for the application and correctly installed.

- 16. Reports Nos. VTT-S-07102-08 and VTT-S-02887-12
- 17. Special conditions for safe use

The clearances and creepage distances of the mounted electrical apparatus in type of protection increased safety "e" shall satisfy the requirements stated in Clause 4.4 (Table 1) and Clause 4.5 of EN 60079-7.

Internal connection facilities for earthing or bonding conductors shall satisfy the requirements stated in Clause 15 of EN 60079-0.

Operating temperature range:

-50 °C ... +80 °C (silicone gasket)

-40 °C ... +80 °C (polyurethane gasket)

18. Essential Health and Safety Requirements

Met by the compliance with the standards: EN 60079-0, EN 60079-7 and EN 60079-31.

#### Certificate history

Issue	Date	Report No.	Comment
-	27.8.2008	VTT-S-07102-08	Prime certificate
1	9.6.2011		The introduction of the new
			manufacturing places and thus
			replacing supplements no 1 and 2.
			Markings corrected.
2	17.4.2012	VTT-S-02887-12	Upgrading the certificate to category
			2D with IP66 tests according to latest
			editions of EN 60079-0 and EN
			60079-31.

Espoo, 17.4.2012

**VTT Expert Services Ltd** 

Martti Siirola Senior Expert Risto Sulonen
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