



#### 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 053U Issue 1

4. Component: **Empty enclosures** 

Certified types: **FEX PC-7** 

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.

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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 report no. VTT-S-07097-08.

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

EN 60079-0 (2006) EN 60079-7 (2007)

- 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 II

Espoo, 9.6.2011

**VTT Expert Services Ltd** 

Martti Siirola

Research scientist

Risto Sulonen



13. Schedule

#### 14. EC-TYPE EXAMINATION CERTIFICATE VTT 08 ATEX 053U Issue 1

15. Description of Component

Enclosures, Type FEX PC-7..., for fixed installation, made of polycarbonate.

## Construction

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

Drawing no.			Signed
	4T 11028-1	)	
	253MB10256 J	)	
	253MB10563 C	)	
	1T 11028-2 D	)	
	0MB 10320 H	)	
	1MB 10810 B	)	
	1MB 10811 B	)	
	1MB 10812 C	)	
	1MB 10813 B	)	
	1MB 10814 G	)	
	1MB 10816 E	)	
	1MB 10817 E	)	18.09.1998
	1MB 10143 U	)	
	1MB 10144 L	)	
	1MB 10145 M	)	
	1MB 10146 R	)	
	1MB 10147 R	)	
	1MB 10555 H	)	
	1MB 10556 H	)	
	1MB 10557 D	)	
	1MB 10558 H	)	
	1MB 10559 H	)	
	1MB 10096 N	)	
	4T 10822 F		03.06.2003
	3D 10581 B		17.09.1998
	YLO-035 A		24.5.2003



# Degree of protection

The degree of protection of IP 54 to EN 60529 is only achieved if Ex-certified cable entries are used that are suitable for the application and correctly installed.

- 16. Report No. VTT-S-07097-08
- 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.

The use of the enclosures is limited to locations where there is a low risk of mechanical danger.

Operating temperature range: -10 °C ... +80 °C

18. Essential Health and Safety Requirements

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

#### Certificate history

Issue	Date	Report No.	Comment
-	27.8.2008	VTT-S-07097-08	Prime certificate
1	9.6.2011		The introduction of the new
			manufacturing places and the marking
			correction.

Espoo, 9.6.2011

**VTT Expert Services Ltd** 

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Martti Siirola

Research scientist

Risto Sulonen





1. TYPE EXAMINATION CERTIFICATE

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

Directive 94/9/EC

3. Reference: VTT 08 ATEX 054U Issue 1

4. Component: **Empty enclosures** 

Certified types: **FEX PC-7** 

5. Applicant Fibox Oy Ab

Keilaranta 19 FI-02150 Espoo

**Finland** 

6. Manufactured by: **Fibox GmbH** 

Rehwinkel 30

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**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 is specified in the schedule and possible supplements to this Certificate and the documents therein referred to.

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Fax + 358 20 722 7042







8. VTT Expert Services Ltd/Electrical Ex-apparatus, Inspection Body No. I018 accredited by the Finnish Accreditation Service (FINAS), certifies that these equipment have been found to comply with the Essential Health and Safety Requirements in Annex II to European Union Directive 94/9/EC of March 1994 relating to the design and construction of Category 3D equipment intended for use in potentially explosive atmospheres.

The examination and test results are recorded in confidential report no. VTT-S-07097-08.

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

EN 61241-0 (2006) EN 61241-1 (2004)

- 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 equipment.
- This Type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the directive 94/9/EC.

Further requirements of the Directive may apply to the manufacturing process and supply of these equipment. These are not covered by this certificate.

12. The marking of the component shall include the following:



II 3 D Ex tD A22

Espoo, 9.6.2011

**VTT Expert Services Ltd** 

Martti Siirola

Research Scientist

Risto Sulonen



13. Schedule

#### 14. TYPE EXAMINATION CERTIFICATE VTT 08 ATEX 054U Issue 1

15. Description of Component

Enclosures FEX PC-7, for fixed installation, made of thermoplastic material, for mounting of electrical apparatus.

## Construction

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

Drawing no.	Signed	
4T 11028-1	)	
253MB10256 J	)	
253MB10563 C	)	
1T 11028-2 D	)	
0MB 10320 H	)	
1MB 10810 B	)	
1MB 10811 B	)	
1MB 10812 C	)	
1MB 10813 B	)	
1MB 10814 G	)	
1MB 10816 E	)	
1MB 10817 E	) 18.09.1998	
1MB 10143 U	)	
1MB 10144 L	)	
1MB 10145 M	)	
1MB 10146 R	)	
1MB 10147 R	)	
1MB 10555 H	)	
1MB 10556 H	)	
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1MB 10558 H	)	
1MB 10559 H	)	
1MB 10096 N	)	
4T 10822 F	03.06.2003	
3D 10581 B	17.09.1998	
YLO-035 A	24.5.2003	



### Degree of protection

The degree of protection of at least IP 54 to EN 60 529 is only achieved if Excertified cable entries are used that are suitable for the application and correctly installed.

- 16. Report No. VTT-S-07097-08
- 17. Special conditions for safe use

The use of the enclosures is limited to locations where there is a low risk of mechanical danger.

Operating temperature range -10 °C ... +80 °C.

18. Essential Health and Safety Requirements

Met by the compliance with the standards EN 61241-0 and EN 61241-1.

## Certificate history

Issue	Date	Report No.	Comment
-	27.8.2008	VTT-S-07097-08	Prime certificate
1	9.6.2011		The introduction of the new manufacturing places and the marking correction.

Espoo, 9.6.2011

**VTT Expert Services Ltd** 

Martti Siirola

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Risto Sulonen