



## Type Examination Certificate

(1)  
(2)

Equipment Intended for use  
in Potentially Explosive Atmospheres  
Directive 94/9/EC

(3) Type Examination Certificate Number:

**FTZÚ 07 ATEX 0098X**

(4) Equipment: **Centrifugal on line fan type TERNO-S K, KB 400 - Ex**

(5) Manufacturer: **ALTEKO, spol. s r.o.**

(6) Address: **Pod Cihelnou 454, 267 24, Hostomice pod Brdy, CZ**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of Category 2 equipment, which is intended for use in potentially explosive atmospheres given in Annex II to the Council Directive 94/9/EC.

The examination and test results are recorded in confidential Report N°

**07/0098 dated April 2007**


(9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:

**EN 13463-1:2001; EN 13463-5:2003**

(10) If the sign „X“ is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

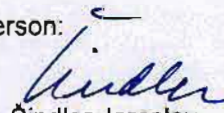
(11) This TYPE EXAMINATION CERTIFICATE relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include following:

 II 2G c

This Type Examination Certificate is valid till: **30.04.2012**

Responsible person:

  
Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 30.04.2007

Number of pages: 3

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# PHYSICAL TECHNICAL TESTING INSTITUTE

Ostrava-Radvanice

(13)

## Schedule

(14)

## Type Examination Certificate N° FTZÚ 07 ATEX 0098X

(15) Description of Equipment:

Explosion-proof on line fan type TERNO-S K, KB 400 - Ex is low pressure, radial fan with zinc plated impeller, which has forward bent vanes. This fan can be use indoor or outdoor and can convey air without solid, fibre, glue or aggressive mixture. Parts of enclosure are made from zinc plated steel or stainless steel plate connected by spot welding or by bolts. A brass air intake is bolt up to fan body. The fan is on line driven by explosion-proof electrical flanged motor. All bolt connection with fanwise washer ensure equipotential bonding between of all separate parts. Fan is equipped by earthing terminal. Impeller counterweights are secured by soldering. Also all bolts used on fan are secured either by thread deformation or by tab washer. Clearance between impeller and air intake is minimum 1 % of impeller diameter.

The counterweights are riveted or soldered to the impeller.

Technical parameters:

$$Q_{vmax} = 2,38 \text{ m}^3 \cdot \text{s}^{-1}$$

$$n_{max} = 1435 \text{ min}^{-1}$$

$$\Delta p_{max} = 1220 \text{ Pa}$$

$$\rho = 1,2 \text{ kg} \cdot \text{m}^{-3}$$

(16) Report No. : 07/0098

13+3 pages

(17) Special conditions for safe use:

Direct fan drive shall be provided by relevant certified explosion – proof electric motor with appropriate power and maximum rotation speed 1435 r/min which is selected according to potentially explosive atmospheres (zones in accordance with EN 60 079-10) present inside and outside of fan.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate.

Responsible person:

Dipl. Ing. Šimůnek Jaroslav

Head of certification body



Date of issue: 30.04.2007

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PHYSICAL TECHNICAL TESTING INSTITUTE  
Ostrava-Radvanice

(13)

**Schedule**

(14)

**Type Examination Certificate N° FTZÚ 07 ATEX 0098X**

(19)

**LIST OF DOCUMENTATION**

- Drawings No. 19042 z 14.07.2003  
7931 z 12.05.2003  
7933 z 12.05.2003  
2628 z 18.01.1999  
7930 z 19.01.1999  
2629 z 17.04.2007
- Instruction for use No. NP 16/07 Ex – relating to the explosion protection on 03.04.2007

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 30.04.2007

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