



EC-Type Examination Certificate

(1)

(2)

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

(3) EC-Type Examination Certificate Number:

FTZÚ 06 ATEX 0217

(4) Equipment or protective system: **Explosion Proof Induction Motor of the type A . M 160 ...**

(5) Manufacturer: **EM Brno s.r.o.**

(6) Address: **Jílková 124, 615 32 Brno, Czech Republic**

(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, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 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 N°

06/0217 dated 23 July 2007

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

EN 60079-0:2004 EN 60079-1:2004 EN 60079-7:2003

(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 EC-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:

 **I M2 Ex d I or Ex de I**

 **II 2G Ex d IIB+H₂ T4, T5 or Ex de IIB+H₂ T4, T5**

This EC-Type Examination Certificate is valid till: **31.08.2012**

Responsible person:


Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 14.08.2007

Number of pages: 3

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PHYSICAL TECHNICAL TESTING INSTITUTE

Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 06 ATEX 0216**

(15) Description of Equipment or Protective System:

Three phase explosion proof induction motors of the type A . M 160 .. . are made with a flame proof enclosure for motors and terminal parts. Also the terminal part can be made at protection increased safety "e". The motors part with a surface cooling and the terminal compartment are made from cast iron. The motor is closed by means of the front and rear ball bearing shields. Both shields are made from cast iron too. Behind the front shield there is a fan fastened to the shaft (aluminium alloy for Ex d IIC, cast iron for Ex d I) and protected by a perforated cover made from steel metal plate.

Ambient temperature: Standard - 20°C < T_{amb} < + 40°C
Special - 20°C < T_{amb} < + 60°C
 - 40°C < T_{amb} < + 40°C (event. + 60°C)
 - 50°C < T_{amb} < + 40°C (event. + 60°C)

The range of ambient temperature and accordant power of motor is mentioned on the label of the electromotor type:

Technical data :

Power: ... 2,2 kW to 23,0 kW
Main voltage: ... 230 V to 690 V
Main current: ... 5,2 A to 53,0 A
Frequency ... 50 Hz / 60 Hz
Engine speed: ... 725 min⁻¹ to 3520 min⁻¹
Frequency with frequency charger from ... 25 Hz to 70 Hz
The speed for frequency charger: ... 370 – 3980 rpn/min.
Thermistors PTC : ... 100 °C for T5
 ... 140 °C for frequency charger or T_{amb} = + 60 °C
Anti-condensing heater: ... RSV 1,06 m/ 50 W


(16) Report No. : 06/0217 ... dated 23.07.2007

(17) Special conditions for safe use: --

(18) Essential Health and Safety Requirements:

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

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



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Number of pages: 3
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PHYSICAL TECHNICAL TESTING INSTITUTE

Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 06 ATEX 0217**

(19)

LIST OF DOCUMENTATION

- Technical description No. Z58-06 ... dated 12.05.2007 (6 pages)
- Drawings No.: 2 951 1064 ... dated 08.12.2007
- 2 600 1324 ... dated 06.12.2006
- 2 600 1325 ... dated 22.02.2007
- 2 600 1326 ... dated 20.02.2007
- 2 600 1327 ... dated 28.02.2007
- 2 600 1328 ... dated 22.02.2007
- 2 810 1858 ... dated 18.12.2006
- 2 331 1944 ... dated 01.03.2007
- 2 331 1945 ... dated 14.11.2006
- 2 331 1946 ... dated 19.03.2007



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