



## 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 05 ATEX 0016**

- (4) Equipment or protective system: **Three-Phase Squirell – Cage Induction Motor type dSKKs 355-L4z**
- (5) Manufacturer: **Maszyny Elektryczne Celma S.A.**
- (6) Address: **ul. 3. Maja 19, 43-400 Cieszyn, Polska**
- (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°  
**05/0016 dated 17 Februar 2005**

- (9) Compliance with Essential Health and safety requirements has been assured by compliance with:  
**EN 50014:1997+A1+A2                      EN 50018:2000**
- (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 EEx d I**

This EC-Type Examination Certificate is valid till: **28.02.2010**

Responsible person:

  
**Mr. Jaroslav Šindler**  
Head of certification body



Date of issue: 21.02.2005

Number of pages: 1/3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute  
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0016**

(15) Description of Equipment or Protective System:

Three-phase squirrel-cage induction motor type dSKKs 355-4z is intended for driving of mining equipments in mines with explosion risk of methane and coal dust. Motor welded construction with rolling element bearings and water cooling is designed as flameproof type protection „d” and terminal box also welded construction is designed as flameproof type protection „d”. Degree of protection of motor IP 66.

The terminal box contains two cable glands for power connection and cable gland type 54 232-... fy GOTHE & Co. for control circuit. Inside of terminal box are installed three bushings type PD 12/2200 V by fy. Emil A. Peters GmbH.

In addition to a.m. terminal box are installed one 15-pole bushing for control circuits type 07-9102 fy BARTEC or type AD 275-... fy Emil A. Peters GmbH, 14 pcs terminals type 264 fy WAGO GmbH, the control set of earthing continuity type CK1 or CK2 and two protective clamps "PE".

In the winding and the endshields D, ND are inbuilt two free-standing circuits with temperature monitoring of thermistor PTC, resistive temperature switch Pt 100 with characteristics acc. to IEC 751 or bimetalic sensors for thermal machine protection (Trip temperature PTC 160±5 °C or bimetalic: 160±5 °C in the winding and in the endshield D; ND - PTC: 115±5 °C or bimetalic: 115±5 °C.)

Technical data:

Power [kW]	350	
Voltage [V]	1000	1140
Current [A]	231	203
Frequency [Hz]	50	
Power factor	0,91	
Speed [rpm]	1485	
Duty type	S1; S2 without cooling water 60 min	
Insulation class	H	
Degree of protection (of motor and terminal box)	IP 66	
Data of cooling water:		
$T_{max}$ [°C]	30 °C	
$p_{stat}$ [MPa]	3	
$Q_{min}$ [dm <sup>3</sup> /min]	15	
Weight [kg]	1450	
Ambient temperature $T_A$ [°C]	+ 5 ÷ + 35	

Responsible person:

  
**Mr. Jaroslav Šindler**  
Head of certification body



Date of issue: 21.02.2005

Number of pages: 2/3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute

Ostrava-Radvanice

(13)

### Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0016**

(16) Report No. : 05/0016 dated 17.02.2005

(17) Special conditions for safe use:

17.1 The routine overpressure test according EN 50018 section 16 with the static pressure of 10 bars.  
The test must be done on every piece of motor at the manufacturer.

(18) Essential Health and Safety Requirements:

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

18.2 At installation and operation of motor observe requirements of manual No. D4-034.475, edition II dated 14.01.2005.

(19) LIST OF DOCUMENTATION

- Technical description (17 pages) No. D4-034.475, edition II dated 14.01.2005
- Drawings No. D1-020.232 dated 21.01.2005  
D2-020.233 dated 26.01.2005
- Table of gaps No. 46/L/2004 dated 25.05.2004
- EC-Type Examination Certificate PTB No. 98 ATEX 1072U dated 20.01.1999
- EC-Type Examination Certificate PTB No. 98 ATEX 1068U dated 20.01.1999
- EC-Type Examination Certificate IBExU No. 01 ATEX 1013U dated 28.05.2001
- EC-Type Examination Certificate PTB No. 98 ATEX 3129U dated 09.11.1998
- EC-Type Examination Certificate PTB No. 97 ATEX 1047U dated 04.07.1997

Responsible person:

  
Mr. Jaroslav Šindler  
Head of certification body



Date of issue: 21.02.2005

Number of pages: 3/3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute  
This certificate may only be reproduced in its entirety and without any change, schedule included.