



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 04 ATEX 0341

- (4) Equipment or protective system: **Three-Phase Squirell – Cage Induction Motor type dSKK 200 L4 A**
(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°
04/0341 dated 20 December 2004

- (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: **31.12.2009**

Responsible person:

Mr. Jaroslav Šindler
Head of certification body



Date of issue: 20.12.2004

Number of pages: 1/3

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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 04 ATEX 0341**

(15) Description of Equipment or Protective System:

Three-phase squirrel-cage induction motor type dSKK 200 L4 A 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” for the voltage 500V, 1000V or 1140V. Degree of protection of motor IP 66.

The terminal box contains cable glands for power connection and cable gland type 54 232-... fy GOTHE & Co GmbH in Ex- protection type Ex I M2 EEx d I (IBExU 01 ATEX 1013U) for control circuit. Inside of terminal box are installed three bushings type PLD .../550 or PLD .../1100 (500V or 1000V) in Ex-protection type Ex I M2 EEx de I (PTB 98 ATEX 1069U) by fy. PETERS GmbH or one 3-pole bushing type AD 3300-... (1140V) in Ex-protection type Ex I M2 EEx d I (PTB 98 ATEX 1072U) fy. PETERS GmbH.

In addition to a.m. terminal box are installed one multi-pole bushing for control circuits type 07-91... in Ex-protection Ex I M2 EEx d I (PTB 98 ATEX 1047U) fy. PETERS GmbH or AD 275-... fy. PETERS GmbH in Ex- protection Ex I M2 EEx d I (PTB 98 ATEX 1072U), clamp type 07-9702-0.2/... in Ex-protection type Ex I M2 EEx e I (PTB 99 ATEX 3117U) fy. BARTEC 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 or bimetalic sensors for thermal machine protection (Trip temperature PTC: 145 ± 5 °C or bimetalic: 150 ± 5 °C in the winding and in the endshield D; ND - PTC: 140 ± 5 °C or bimetalic: 135 ± 5 °C.)

Technical data:

Power [kW]	100
Voltage [V]	500 1000 1140
Current [A]	143 72 63
Frequency [Hz]	50
Power factor	0,88
Speed [rpm]	1452
Duty type	S1; S2 without cooling water 60 min, S4 40% c/h
Insulation class	F
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 ³ /min]	15
Ambient temperature T_A [°C]	+ 5 + + 40

Responsible person:

Mr. Jaroslav Šindler
Head of certification body



Date of issue: 20.12.2004

Number of pages: 2/3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 04 ATEX 0341**

(16) Report No. : 04/0341

dated 20.12.2004

(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. D4-034.479
dated 17.09.2004.

(19) LIST OF DOCUMENTATION

- | | | |
|---|---------------------------------------------------------|------------------|
| ➤ | Technical description (16 pages) No. D4-034.479 | dated 17.09.2004 |
| ➤ | Drawings No. D1-020.235 | dated 16.07.2004 |
| | D3-020.538 | dated 02.08.2004 |
| | R3-437.717 | dated 21.09.2004 |
| | R4-437.340 | dated 24.02.2004 |
| | R4-739.080-089 | dated 07.04.2004 |
| | D4-020.529 | dated 18.08.2004 |
| | D2-020.524 | dated 18.06.2004 |
| ➤ | Table of gaps No. 67/L/2004 | dated 10.09.2004 |
| ➤ | EC-Type Examination Certificate IBExU No. 01 ATEX 1013X | dated 28.02.2001 |
| ➤ | EC-Type Examination Certificate PTB No. 98 ATEX 1072U | dated 20.01.1999 |
| ➤ | EC-Type Examination Certificate PTB No. 98 ATEX 1069U | dated 20.01.1999 |
| ➤ | EC-Type Examination Certificate PTB No. 99 ATEX 3117U | dated 30.07.1999 |
| ➤ | 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: 20.12.2004

Number of pages: 3/3

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(1) **Supplement No. 1 to
EC-Type Examination Certificate**

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0341

(4) Equipment or protective system: **Three-Phase Squirell – Cage Induction Motor type dSKK 200 L4 A**

(5) Manufacturer: **Maszyny Elektryczne Celma S.A.**

(6) Address: **ul. 3. Maja 19, 43-400 Cieszyn, Polska**

(7) This supplement of certificate is valid for: - new model (variant) – extension of series

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

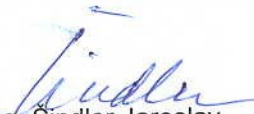
EN 50014:1997+A1+A2; EN 50018:2000

(11) Marking of equipment shall contain symbols:

 **I M2 EEx d I**

(12) This type examination certificate is valid till: **31. 12. 2009**

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 30.03.2007

Number of pages: 2

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PHYSICAL TECHNICAL TESTING INSTITUTE
Ostrava-Radvanice

(13) **Schedule**

(14) **Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0341**

(15) Description of Equipment or Protective System:

Alternative application bushings type dM10, dM12, dM12a in Ex-protection type Ex I M2 EEx de I
or Ex II 2G EEX de II (FTZU 03 ATEX 0396U) event. type 2dM10, 2dM12, 2dM12a in
Ex-protection type Ex I M2 EEx d I (FTZU 03 ATEX 0396U).

(16) Report No. : 04/0341-1 dated 28.03.2007

(17) Special conditions for safe use: --

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this supplement.

(19) LIST OF DOCUMENTATION

- Drawing No. D1-020.235 Rev. 2 dated 25.04.2006
- EC-Type Examination Certificate FTZÚ No. 03 ATEX 0396U dated 21.02.2005

Responsible person:

Dipl. ing. Šindler Jaroslav
Head of certification body



Date of issue: 30.03.2007

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