



[1] **TYPE EXAMINATION CERTIFICATE**
(Translation)

[2] for electrical equipment of Equipment Group II, Equipment Category 3

[3] Type Examination Certificate Number: **IBExU06ATEXB002**

[4] Equipment: Three-phase Asynchronous Motors with Squirrel Cage Rotor
of type series KPER 63... up to KPER 112...

[5] Manufacturer: VEM motors Thurm GmbH

[6] Address: Äußere Dresdner Straße 35
08066 Zwickau
GERMANY

[7] The design of the equipment mentioned under [4] and any acceptable variations thereto are specified in the schedule to this Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH certifies that the equipment mentioned under [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive 94/9/EC.
The test results are recorded in the test report IB-06-3-077/2 of 02 June 2006.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with IEC-Report 79-15:1987, EN 50021:1999 and EN 60079-15:2003.

[10] If the sign „X“ is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this Type Examination Certificate.

[11] This Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the Three-phase Asynchronous Motors mentioned under [4] shall include the following:

- a) according to IEC 79-15:1987: **II 3G Ex nA II T3 or T4**
T_a -20 °C up to +40 °C ... +55 °C
- b) according to EN 50021:1999
respectively EN 60079-15:2003: **II 3G EEx nA II T3 or T4**
T_a -20 °C up to +40 °C ... +55 °C

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By Order

(Dr. Lösch)

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Freiberg, 02 June 2006

Certificates without signature and stamp are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Schedule

[13] **Schedule**

[14] **to the TYPE EXAMINATION CERTIFICATE IBExU06ATEXB002**

[15] **Description of equipment**

The Three-phase Asynchronous Motors with Squirrel Cage Rotor of type series KPER 63... up to KPER 112... are designed in type of protection „n“.

Technical data

The motors of the type series mentioned above are manufactured up to the following rated data:

Type:	KPER 63...	KPER 71...	KPER 80...	
Nominal power:	0.3	0.66	1.32	kW
Nominal voltage; max.:	500	725	725	V
Nominal speed; max.:	6000	6000	6000	min ⁻¹

Type:	KPER 90...	KPER 100...	KPER 112...	
Nominal power:	2.65	3.6	6.6	kW
Nominal voltage; max.:	725	725	725	V
Nominal speed; max.:	6000	6000	6000	min ⁻¹

Cooling medium temperature: -20 °C up to +40 °C ... +55 °C
Degree of protection: at least IP 54

[16] **Test report**

The proof of explosion protection of the Three-phase Asynchronous Motors with Squirrel Cage Rotor of type series KPER 63... up to KPER 112... is recorded in the test report IB-06-3-077/2 of 02 June 2006. The test documents are part of the test report and listed there.

Summary

The Three-phase Asynchronous Motors with Squirrel Cage Rotor of type series KPER 63... up to KPER 112... fulfil the requirements of explosion protection for equipment of Group II and Category 3G, type of protection „n“ for explosive atmospheres with gases and vapors of the temperature classes T3 or T4.

Safety instructions

- The motors may be operated only in this operating mode and under these ambient conditions, for what they have been tested at the type verification. That includes the operation at the frequency converter.
- Motors for feeding by converter with variable frequency and voltage must be tested for this operation as a unit with the converter fixed in the documents, see also EN 60079-15:2003, paragraph 9.9.2.

[17] **Special conditions for safe use**
none

[18] **Essential Health and Safety Requirements**
Confirmed by compliance with standards (see [9])

By Order



(Dr. Lösch)

Freiberg, 02 June 2006