



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX KEM 09.0025** issue No.:0 Certificate history:.....

Status: **Current**

Date of Issue: **2009-05-19** Page 1 of 4

Applicant: **ATB Motorentechnik GmbH**  
Helgoländer Damm 75  
26954 Nordenham  
Germany

Electrical Apparatus: **Three-phase explosion proof motors type CD 450-...**  
*Optional accessory:*

Type of Protection: **Flameproof Enclosure "d", Increased Safety "e"**

Marking: **Ex d IIC T3 - T6 resp. Ex de IIC T3 - T6**  
**Tamb -55 °C to +60 °C**

Approved for issue on behalf of the IECEx Certification Body: C.G. van Es

Position: Certification Manager

Signature:  
(for printed version)

  
\_\_\_\_\_  
**2009-05-19**

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**KEMA Quality B.V.**  
Utrechtseweg 310  
6812 AR Arnhem  
The Netherlands





# IECEX Certificate of Conformity

Certificate No.: IECEX KEM 09.0025

Date of Issue: 2009-05-19

Issue No.: 0

Page 2 of 4

Manufacturer: **ATB Motorentchnik GmbH**  
Helgoländer Damm 75  
26954 Nordenham  
Germany

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

|   |  |
|---|--|
| <b>IEC 60079-0 : 2000</b><br>Edition: 3.1 | Electrical apparatus for explosive gas atmospheres - Part 0: General requirements      |
| <b>IEC 60079-1 : 2001</b><br>Edition: 4   | Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd' |
| <b>IEC 60079-7 : 2001</b><br>Edition: 3   | Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'      |

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

NL/KEM/ExTR09.0030/00

Quality Assessment Report:

DE/TUN/QAR06.0001/01



# IECEx Certificate of Conformity

Certificate No.: IECEx KEM 09.0025

Date of Issue: 2009-05-19

Issue No.: 0

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

#### Description of equipment

The three-phase explosion proof motor Type CD 450.-... is a rotary electric machine, which is designed to flameproof enclosure "d" type of protection for use in area with potentially explosive gas, vapour, mist, air mixtures. The enclosure is provided with cooling fins. It may optionally come as a cast or a welded steel unit. The shaft rotates in anti-friction bearings. Together with the inside end shields provided at the drive end and the opposite end, the shaft forms a flameproof shaft joint. Electric energy is supplied by means of separately certified terminal compartments.

#### Electrical data

The motors of type series CD 450.-... are designed for ratings within the following limits:

| Winding               | low-voltage            | high-voltage           |
|-----------------------|------------------------|------------------------|
| Voltage               | 1100 V                 | 11000 V                |
| Current               | 1400 A                 | 170 A                  |
| Power                 | 800 kW                 | 780 kW                 |
| Speed                 | 4200 min <sup>-1</sup> | 4200 min <sup>-1</sup> |
| Frequency (main)      | max. 60 Hz             | max. 60 Hz             |
| Frequency (converter) | 1 - 100 Hz             | 1 - 100 Hz             |

#### Key of type designation

|  |   |
|--|---|
| CD 450 .-....  | e.g. CD 450 L-2                               |
| C  | Group IIC , flameproof enclosure              |
| D  | Three phase current                           |
| 450  | Frame size                                    |
| S/M/L  | length of package                             |
| 2,4,6,8,...  | number of poles                               |
| 4/2, 6/4, 8/4,...  | change-pole motor                             |
| optional the following characters can be added, example: |   |
| H  | High voltage                                  |
| A  | axial fan                                     |
| F  | separately driven fan                         |
| W  | water cooling system                          |
| O  | without an external fan                       |
| R  | with speed monitor                            |
| K  | without Terminal box, with direct cable entry |
| E  | Terminal box "Increased Safety"               |
| D  | Terminal box "Flameproof Enclosure"           |
| 0-9  | Generation of the Construction                |

CONDITIONS OF CERTIFICATION: NO





# IECEx Certificate of Conformity

Certificate No.: IECEx KEM 09.0025

Date of Issue: **2009-05-19**

Issue No.: **0**

Page 4 of 4

## **EQUIPMENT(continued):**

The applicable parameters in relation to the temperature class are given on the name plate of the motor and shall be based on a type test according to the code of practice "Electrical design and test requirements made on motors of type of protection Flameproof Enclosure as part of EC type-examination certification". The motors may be employed only for the type of duty, and under the ambient conditions, for which they were type tested. This includes frequency converter operation.