



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

Certificate No.: IECEx PTB 06.0009 Issue No.: 1
Status: **Current** Certificate history:
Issue No. 1 (2008-6-12)
Issue No. 0 (2006-2-20)

Date of Issue: **2008-06-12** Page 1 of 4

Applicant: **ATB Motorentchnik GmbH**
Helgoländer Damm 75
26945 Nordenham
Germany

Electrical Apparatus: **Three-phase motor type CD 80, CD 90, CD 100, CD112**
Optional accessory: **CD 132, CD 160, CD 225, CD 250, CD 280, CD 315**

Type of Protection: **Flameproof Enclosure "d"**

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:

Dr. Ing. Uwe Klausmeyer

Position:

Head of Section "Flameproof Enclosures"

Signature:
(for printed version)

Date:

19. 06. 2008

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.

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany



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Manufacturer: **ATB Motorentchnik GmbH**
Helgoländer Damm 75
26945 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:

IEC 60079-0 : 2000 Edition: 3.1	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
IEC 60079-7 : 2001 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:

DE/PTB/ExTR06.0044/00
DE/PTB/ExTR08.0027/00

Quality Assessment Report:

DE/TUN/QAR06.0001/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

see annex

CONDITIONS OF CERTIFICATION: NO



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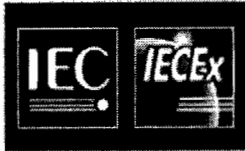
DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The motor type series CCD 160-... will be added to the certificate. Details are shown in the annex.

Electrical data

The motors of type series CCD 160-... are designed for ratings within the following limits:

Voltage:	1100	V
Current:	63	A
Power:	26	kW
Speed (main):	3600	min ⁻¹
Speed (converter):	9000	min ⁻¹
Frequency (main):	max. 60	Hz
Frequency (converter):	1 - 150	Hz



Applicant: ATB Motorentchnik GmbH, 26954 Nordenham, Germany

Electrical Apparatus: Three-phase motors of type series CCD 160.-..

Description of equipment

The equipment is a rotating electric machine. The housing is a casting provided with cooling ribs. The shaft rotates in rolling bearings. Together with the end shield on the drive end and the motor housing on the non-drive end, the shaft forms a flameproof shaft joint.

For "G" atmospheres (atmospheres with potentially explosive gas, steam, mist, air mixtures), the machine is designed to Flameproof Enclosure "d" type of protection. Electric power is supplied either by a separately certified flameproof cable entry, or with terminal compartments designed to Flameproof Enclosure "d" or Increased Safety "e" type of protection.

For "D" atmospheres (atmospheres with flammable dust), the machine with its terminal compartments is designed to degree of protection IP 6X. For "D" atmospheres, the shaft is provided with sealing rings which make sure that IP protection is maintained.

Maximum admissible ambient temperatures: -55 °C to 60 °C. The admissible ambient temperature range may be restricted by the terminal boxes, components or enclosures selected or the data sheet for the electrical design.

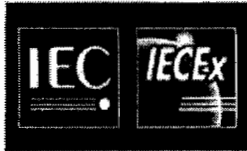
When using the machines for "D" atmospheres, this may be done at ambient temperatures ≥ -40 °C only. When using the casting compound to delimit motor compartment and terminal compartment, the ambient temperatures have to be ≥ -20 °C.

The electrical motor data, including specifications for compliance with the temperature class, are defined in a data sheet attached to the EC type-examination certificate.

Electrical data

The motors of type series CCD 160.-.., produced by ATB Motorenttechnik GmbH, 26954-Nordenham, are designed for the following maximum ratings:

Voltage:	1100	V
Current:	63	A
Power:	26	kW
Speed (mains):	3600	rpm
Speed (converter):	9000	rpm
Frequency (mains):	max. 60	Hz
Frequency (converter):	150	Hz



For each motor design, compliance with the governing regulations shall be verified in the form of a type test. Due regard shall In this connection be given to the code of practice "Merkblatt für die elektrische Auslegung und Prüfung von Motoren in der Zündschutzart Druckfeste Kapselung im Rahmen der EG-Baumusterprüfbescheinigung".

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.

Special conditions for safe use

None;

Additional notes for safe operation:

Any components attached or installed (e.g. terminal compartments, bushings, cable entries, connectors) shall be of a technical standard that complies with the specifications on the cover sheet as a minimum and for which a separate examination certificate has been issued. Any special conditions specified for the components shall be complied with, and the components may have to be included into the type test.

Monitoring devices have to meet the requirements set forth in Directive 94/9/EC and EN 1127-1.

If the three-phase asynchronous motor is cooled by an external fan, due care shall be taken that motor operation is only possible with the external fan in operation.



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Certificate No.: **IECEx PTB 06.0009** Issue No.: **0**

Status: **Current**

Date of Issue: **2006-02-20** Page 1 of 3

Applicant: **ATB Motorentchnik GmbH**
Helgoländer Damm 75
26945 Nordenham
Germany

Electrical Apparatus: **Three-phase motor type CD 80, CD 90, CD 100, CD112**
 Optional accessory: **CD 132, CD 160, CD 225, CD 250, CD 280, CD 315**

Type of Protection: **Flameproof Enclosure "d"**

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:

Dr. Ing. Uwe Klausmeyer

Position:

Head of Section "Flameproof Enclosures"

Signature:
 (for printed version)

Date: **21.06.06**

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Bundesallee 100
 38116 Braunschweig
 Germany



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Certificate No.: **IECEX PTB 06.0009**

Date of Issue: **2006-02-20**

Issue No.: **0**

Page **2** of **3**

Manufacturer: **ATB Motorentechnik GmbH**
Helgoländer Damm 75
26945 Nordenham
Germany

Manufacturing location(s):

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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:

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IEC 60079-1 : 2001 Edition: 4	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures 'd'
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*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:

DE/PTB/ExTR06.0044/00

Quality Assessment Report:

DE/TUN/QAR06.0001/00



IECEx Certificate of Conformity

Certificate No.: IECEx PTB 06.0009

Date of Issue: 2006-02-20

Issue No.: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The three-phase explosion proof motor Types CD ...-... are a rotary electric machines, which are 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 ... are designed for ratings within the following limits:

	80	90	100	112	132	160	225	250	280	315		
Voltage	1150										V	
Current	25				63		100	250		400		A
Power	4	7	8	10	15	26	64	87	121	310	kW	
Speed	19000	15000	12000	12000	10000	9000	5300	3600	3600	3600	min-1	
Frequency (main):	60										Hz	
Frequency (converter):	316	250	200	200	167	150	120	120	120	120	Hz	

Key of type designation

CD ...-... e.g. CD 80 L-2	
C	Group IIC, flameproof enclosure
D	Three phase current
80	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:	
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"
I	Integrated Frequency Inverter
Y	high efficiency
0-9	Generation of the Construction

CONDITIONS OF CERTIFICATION: NO