
CERTIFICATE

1.

2. Certificate reference: **VTT No. Ex-06.008X Issue 2**

3. This Certificate is issued for the following electrical apparatus, intended for use in potentially explosive atmospheres:

Range of cage induction motors

4. Certified types: **AMI 560...**
AMI 630...

5. Applicant: **ABB Oy Motors and Generators**
Strömbergintie 1
FI-00380 Helsinki
Finland

6. Manufactured by **ABB Oy Motors and Generators**
Hiomotie 13
FI-00380 Helsinki
Finland

or

ABB Electrical Machines Ltd
No. 380, Tian Xing Road
Minhang District, Shanghai
People's Republic of China

7. These electrical apparatus and any acceptable variations thereto are specified in the Annex and possible supplement(s) to this Certificate and in the descriptive documents therein referred to.

8. VTT Expert Services Ltd/Electrical Ex-Apparatus, Inspection Body No. I018 accredited by the Finnish Accreditation Service (FINAS),

- certifies that these electrical apparatus has been found to comply with the following IEC-standard:

IEC 60079-0 (2011)
IEC 60079-15 (2010)

and has successfully met the type verification and test requirements of this standard.

- confirms that confidential Test Report FI/VTT/ExTR11.0008/00 has been completed on these verifications and tests.

9. The code for the electrical apparatus is:

Ex nA IIA/IIB/IIC T1-T4 Gc

10. By marking the supplied electrical apparatus, the manufacturer attests on his own responsibility that this electrical apparatus complies with the descriptive documents referred to in the Annex to this Certificate.
11. If there appears sign X after the certification number, there are special conditions for safe use, which are specified in the Annex of this Certificate.

Espoo, 19.12.2011

VTT Expert Services Ltd



Martti Siirola
Senior Expert



Risto Sulonen
Team Manager

Range of cage induction motors, types AMI 560... - 630...

Description of apparatus

Three phase squirrel cage induction motors of a closed type with welded steel frame and fitted out with Ex-certified main terminal boxes and Ex-certified auxiliary terminal boxes. The temperature class of the motor depends on the ratings of the motor and temperature class of the accessories.

Technical data

The Certificate is valid for the range of motors having the technical values within the limits in the following table:

Shaft height	U _{MAX} / kV	Number of poles	f / Hz	P _{MAX} / kW
560	13,8*	2 – 20	50/60	9000
630	13,8*	2 – 20	50/60	9000

*U_{MAX} = 13,2 kV for equipment group IIC

In the 50/60 Hz supply the duty type of the motors shall be S1 or S2.

Special conditions for safe use

The motors may be indicated to be used in ambient temperature other than specified in the standard (- 20 °C... + 40 °C).

Temperature class may vary between T1 - T4 depending of the design and the motor is marked accordingly.

Equipment group may be IIA, IIB or IIC depending of equipment groups of the used auxiliaries and the motor is marked accordingly.

The Certificate covers also the following frequency converter drives with the converter types ACS 600- , ACS 800- , ACS 1000-, ACS 2000- and ACS 5000-series manufactured by ABB Group Ltd:

1. Squared torque drive, and
2. Drives featuring constant torque up to the field weakening point, or/and constant power in speed range above the field weakening point, presuming that the main

Certificate without signatures shall not be valid.

This certificate, including the annex may only be reproduced in its entirety and without any change.

motor is equipped with a separate (Ex-certified) fan motor or the stator windings are equipped with detectors for temperature control.

All the manufacturer's instructions concerning the speed range and the torque restrictions shall be followed.

Validity

The Certificate is valid five years from the date of issue.

Certificate history

Issue	Date	Report No.	Comment
-	22.9.2006	FI/VTT/ExTR06.0001/00	Prime certificate
1	5.3.2010	FI/VTT/ExTR06.0001/01	A new manufacturing site added and the certificate was updated to cover new standards
2	19.12.2011	FI/VTT/ExTR11.0008/00	Change of the applicant's name. Certification documents are updated with new tests results and construction changes especially with main terminal boxes. Use with the converter type ACS 2000 added. The certificate is extended to cover the new standards IEC 60079-0 (2011) and IEC 60079-15 (2010)

Espoo, 19.12.2011

VTT Expert Services Ltd



Martti Siirola
Senior Expert



Risto Sulonen
Team Manager