LGAI
TECHNOLOGICAL CENTER

Bellaterra : **16 de Abril de 2002**

Expedient número : **22008201 ENGLISH VERSION**

Referència del peticionari : **ABB Automation Products-División Motores**
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EXTENSION OF TEST REPORT Nº99005234 DATED 07/06/1999.

Report Nº 99005234:

Extension report insued on 7/6/1999 to motors range denominated "M3AAW 90-250 y MBT 200–250", from ABB Motors, S.A.

Product:

Three phases squirrel cage asynchronous low voltage motors with shaft height between 90 to 250 mm.

Nominal electrical characteristics:

Feeding through a three phase electrical network of frequencies 50 Hz and 60 Hz, maximum 700 V.
Outputs up to 55 kW at 50 Hz or 63 kW at 60 Hz
Speeds lower than or equal to 3600 r/min.
Maximum allowable temperature rise, in class B, must be lower than or equal to 80 K.
The motors can be fed by frequency converters within a maximum ambient temperature of 40 ºC. In case of accident, with an increase of the ambient temperature, the motor should be fed by an industrial sinusoidal network.

Construction characteristics.

Motors with Al frames and cast iron end shields
Degree of protection IP55
Insulation class F
Motor without fan IC418
Bearings greased for life with grease Barrierta L55/2

At the date of this report, LGAI owns the ENAC acreditation to run tests according to EN 12101-3 july 2001.

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This document consists of 3 pages, of which -- from annexes.

LGAI-Laboratori General d'Assaigs i Investigacions NIF Q5855015C

Classification of the resistance against fire

The range of asynchronous three phase squirrel cage low voltage motors with reference **M3AAW 90 – 250** and **MBT 200-250** are classified according to the European standard EN 12101-3 as:

Class F300
Minimum operating temperature: 300 º C
Minimum operation time: 60 minutes

(EN 12101- 3 of July 2001 : "Smoke and heat control systems-part 3 : Specification for powered smoke and heat exhaust ventilators).

The classification will be valid while the next editions of the standard will not substantially modify the test methods established by the edition of July 2001

ADMITED MODIFICATIONS

Mechanical variants:

- Motor mounted with feet, flange or foot and flange.
- Motor mounted as "pad mounting" (fixed on the frame)
- Second shaft extension.
- Motor with fan and fan-protector .
- Protection IP56
- Cable leads with or without terminal board. The electrical connection will be made with electrical cables with a proved resistance against fire at 300 ºC during 1 hour.
- Operation in vertical position.
- Grease nipples.
- Reinforced bearings series 63

Electrical variants:

- Feeding through a frequency converter as it is described above.
- Two speed motors with Dahlander winding or with two separate windings.
- It is only possible to use sensors PTC, Pt100 or bimetallic detectors if they are disconnected in case of accident and the motor works at 300 ºC.
- It is allowed to fit anticondensation heating elements, but they must not be in service during the normal motor operation.

F. Xavier Escriche Segu
Manager Fire and Thermotechnics Centre

Jordi Mirabent i Junyent
Technical Responsible

The results reported in this document relate only to the sample, product or item submitted to the Laboratory and described above, having been tested under the conditions established in this document.

In the event of litigation, the Spanish version will be valid.