

CERTIFICATE OF CONFORMITY



2. DEMKO No. 96D.119342

3. This certificate is issued for **Squirrel-cage motors**
type **M2AA 250 SM . . .**

4a. Manufactured by **ABB Motors AB, S-721 70 Västerås, Sweden.**

4b. and submitted by **The manufacturer**

5. This electrical apparatus and any acceptable variation thereto is specified in the Appendix to this certificate and the documents therein referred to.

6. DEMKO being an Approval Certification Body in accordance with Article 14 of the Council Directive of the European Communities of 18th December 1975, document 76/117/EEC, confirms that the apparatus has been found to comply with the harmonized European Standards:

EN 50014 incl. amd. 1 - 5
EN 50019 incl. amd. 1 - 5

7. The apparatus marking shall include the code:

EEx e II T3

8. The supplier of the electrical apparatus referred to in this certificate has the responsibility to ensure that the apparatus conforms to the specification laid down in the Appendix to this certificate and has satisfied routine verifications and tests specified therein.

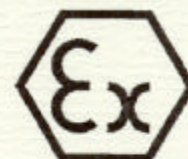
9. The apparatus may be marked with the Distinctive Community Mark specified in Annex II to the Council Directive of 16 January 1984, document 84/47/EEC. A facsimile of this mark is printed at the top of this certificate. The marking of the equipment shall be visible, legible and durable.

For and on behalf of DEMKO

J. Nittegaard



Herlev, 1996-07-10



APPENDIX
to Certificate of Conformity No. 96D.119342

THIS APPROVAL APPLIES TO

Squirrel-cage motors,
three-phased

For mounting on a base or a flange

Protection by enclosure: IP 55

Ambient temperature area: $\div 20\text{ }^{\circ}\text{C} < T_{\text{amb}} < +50\text{ }^{\circ}\text{C}$

max. $3 \times 690\text{ V} \sim 50/60\text{ Hz}$

marked: "ABB Motors AB"

01) type: M2AA 250SMA-2

02) type: M2AA 250SMB-2

03) type: M2AA 250SMA-4

04) type: M2AA 250SMB-4

05) type: M2AA 250SMA-6

06) type: M2AA 250SMB-6

07) type: M2AA 250SMA-8

08) type: M2AA 250SMB-8

protected for use in potentially explosive atmosphere (increased safety)

EEx e II T3

Manufactured by:
ABB Motors AB
S-721 70 Västerås
Sweden

Submitted by:
ABB Motors AB
S-721 70 Västerås
Sweden

The product type has been tested in accordance with the European Standard EN 50014 incl. amd. 1 - 5 and EN 50019 incl. amd. 1 - 5.

The approval applies to products, strictly identical with the submitted and approved product type. If you make any alteration of the product, including the marking, you are obliged to inform DEMKO about this by letter.

FURTHER CONDITIONS RELATING TO THE APPROVAL

The approval does not include cable entry devices. Any cable or conduit entries certified to EN 50014 and EN 50019 can be used. To keep the IP-classification the cable entry device must be at least of the classification IP 55.

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The motors are as standard mounted with built-in PTC-thermistors for use in connection with a protection device according to the manufacturers instruction.

The below tables state the power consumption [kW], number of rotations per minute [r/min], rated current (I_N) [A], starting current conditions (I_A/I_N) and the time (t_E) [s]. The windings of the motors will be designed for any actual voltage up to 690 V. This will only have influence on the rated current I_N .

RATING FOR MOTORS AT 400V, 50 Hz.

EEx e II T3 - Ambient temperature of max. 40°C.

Motor type	kW	r/min	I_N [A]	I_A/I_N	t_E [s]
M2AA 250SMA-2	48	2970	82	7.3	9.0
M2AA 250SMB-2	52	2980	87	9.3	6.5
M2AA 250SMA-4	46	1480	82	7.0	6.5
M2AA 250SMB-4	53	1480	93	7.6	6.5
M2AA 250SMA-6	37	990	70	6.9	9.0
M2AA 250SMB-6	45	985	83	7.0	8.5
M2AA 250SMA-8	30	740	61	7.1	15
M2AA 250SMB-8	37	735	73	7.4	15

EEx e II T3 - Ambient temperature of max. 50°C.

Motor type	kW	r/min	I_N [A]	I_A/I_N	t_E [s]
M2AA 250SMA-2	46	2970	79	7.6	8.5
M2AA 250SMB-2	50	2980	85	9.7	6.0
M2AA 250SMA-4	44	1480	79	7.3	6.0
M2AA 250SMB-4	50	1480	88	8.0	6.0
M2AA 250SMA-6	37	990	70	6.9	7.0

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RATING FOR MOTORS AT 460 V, 60 Hz.

EEx e II T3 - Ambient temperature of max. 40°C.

Motor type	kW	r/min	I_N [A]	I_A/I_N	t_E [s]
M2AA 250SMA-2	52	3570	78	7.6	8.0
M2AA 250SMB-2	58	3575	85	9.5	5.0
M2AA 250SMA-4	48	1780	75	7.6	6.0
M2AA 250SMB-4	55	1785	84	8.3	6.5
M2AA 250SMA-6	41	1185	66	7.3	7.0
M2AA 250SMB-6	51	1185	81	7.1	7.5
M2AA 250SMA-8	34	885	59	7.1	16
M2AA 250SMB-8	42	885	71	7.3	16

EEx e II T3 - Ambient temperature of max. 50°C.

Motor type	kW	r/min	I_N [A]	I_A/I_N	t_E [s]
M2AA 250SMA-2	50	3570	75	7.9	7.5
M2AA 250SMB-2	56	3575	82	9.9	5.0
M2AA 250SMA-4	46	1780	72	7.9	5.5
M2AA 250SMB-4	52	1785	80	8.7	6.0
M2AA 250SMA-6	40	1190	65	7.5	6.0
M2AA 250SMB-6	49	1185	79	7.4	7.0
M2AA 250SMA-8	34	885	59	7.1	15
M2AA 250SMB-8	42	885	71	7.3	15

DRAWINGS

Description

Number


Year Week

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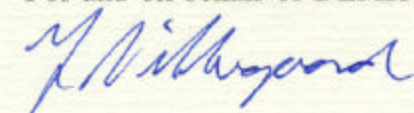
DRAWINGS (cont.)

Description	Number	Year, Week
Terminal Cover	3GZV 274 001, Rev. 1	94 07
Terminal Board	3GZP 284 001-F	94 08
N-Bearing Application	3GZV 241 001-A, Rev. 2	94 45
D-Bearing Application	3GZV 241 001-M, Rev. 2	94 45
N-Endshield	3GZV 203 001, Rev. 2	94 35
D-Endshield	3GZV 213 004, Rev. 2	94 35
Fan Cover	3GZV 314 001-A, Rev. 1	94 51
Protective Cover	3GZV 312 001-A	94 16
Fan - 2-pole	3GZV 304 001-1	94 04
Fan - 4-8 pole	3GZV 304 001-2	94 04
Rating Plate. EXE	3GZV 194 001-4, Rev. 2	95 35

The approval entitles the licensee to provide the product with the registered approval mark  and the Epsilon-x mark.

For and on behalf of DEMKO

Herlev, 1996-07-10


J. Nittegaard