

**CERTIFICATE OF CONFORMITY**



2. DEMKO No. 96D.119341

3. This certificate is issued for Squirrel-cage motors  
type M2AA 225 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

Herlev, 1996-07-04

  
J. Nittegaard





**APPENDIX**  
to Certificate of Conformity No. 96D.119341

**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:  $+20\text{ }^{\circ}\text{C} < T_{\text{amb}} < +50\text{ }^{\circ}\text{C}$

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

marked: "ABB Motors AB"

01) type: M2AA 225SMB-2

02) type: M2AA 225SMB-4

03) type: M2AA 225SMC-4

04) type: M2AA 225SMB-6

05) type: M2AA 225SMA-8

06) type: M2AA 225SMB-8

protected for use in potentially explosive atmosphere  
(increased safety)

**EEx e II T3**

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

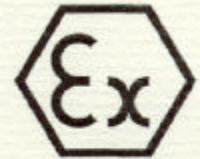
Submitted by:  
ABB Motors AB  
S-721 70 Västerås  
Sweden

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**

APPENDIX  
to Certificate of Conformity No. 96D.119341



When the motor is installed with a vertical shaft it must be secured by an extra shield that foreign matters cannot fall vertically down into the fan opening. This extra shield will be delivered by the manufacturer.

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 225SMB-2	43	2955	74	6.3	6.5
M2AA 225SMB-4	35	1480	63	7.5	9.0
M2AA 225SMC-4	39	1480	69	7.7	7.0
M2AA 225SMB-6	30	985	58	7.4	6.5
M2AA 225SMA-8	18.5	735	40	6.5	17
M2AA 225SMB-8	22	735	47	6.1	19

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 225SMB-2	40	2960	69	6.8	6.5
M2AA 225SMB-4	35	1480	63	7.5	7.5
M2AA 225SMC-4	37	1480	66	8.1	6.5
M2AA 225SMB-6	28	985	55	7.8	7.0
M2AA 225SMA-8	18.5	735	40	6.5	15



APPENDIX  
to Certificate of Conformity No. 96D.119341

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 225SMB-2	44	3565	66	7.0	5.5
M2AA 225SMB-4	37	1785	58	8.0	8.5
M2AA 225SMC-4	41	1785	63	8.1	6.5
M2AA 225SMB-6	32	1185	53	8.1	6.5
M2AA 225SMA-8	21	885	39	6.7	18
M2AA 225SMB-8	25	885	45	6.4	19

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 225SMB-2	40	3565	60	7.6	5.5
M2AA 225SMB-4	37	1785	58	8.0	7.5
M2AA 225SMC-4	38	1785	60	8.7	6.0
M2AA 225SMB-6	30	1185	50	8.6	6.5
M2AA 225SMA-8	21	885	39	6.7	16
M2AA 225SMB-8	25	885	45	6.4	16

DRAWINGS


Description	Number	Year, Week
Assembly Drawing, M2AA 200	3GZV 101 004-1	95 40
Earthing Device	3GZV 382 001-A, Rev. 2	95 13
Terminal Fittings	3GZV 281 002-2, Rev. 1	95 15
Terminal Cover	3GZV 274 001, Rev. 1	94 07
Terminal Board	3GZP 284 001-F	94 08

APPENDIX  
to Certificate of Conformity No. 96D.119341




DRAWINGS (cont.)

Description	Number	Year,Week
D-Endshield	3GZV 213 005, Rev. 2	94 35
Fan Cover	3GZV 314 001-C, Rev. 2	94 51
Protective Cover	3GZV 312 001-C	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, 1996-07-04

  
J. Nittegaard