



General Specification for Consultants,
Industrial and Municipal:
NEMA Premium[®]
Efficiency Electric Motors
(600 Volts or Less)

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Published by:

National Electrical Manufacturers Association

1300 North 17th Street, Suite 1752

Rosslyn, Virginia 22209

www.nema.org

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Foreword

In the preparation of this Publication, input of users and other interested parties has been sought and evaluated. Inquiries, comments, and proposed or recommended revisions should be submitted to the concerned NEMA product Subdivision by contacting the following:

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This Publication was developed by the Motors and Generators Section. Section approval of the document does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the Section was composed of the following members:

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1 GENERAL

The intent of this specification is to outline the minimum requirements for three-phase AC induction motors applied to municipal and industrial applications for operation on voltages 600 volts or less, rated 500HP or less, operating more than 2000 hours per year at >75% of full-load.

2 DESIGN STANDARDS

In addition to this specification, equipment shall comply with the current applicable standards promulgated by the following organizations:

AFBMA	Anti-Friction Bearing Manufacturers Association
ANSI	American National Standards Institute
ASTM	American Society of Testing Materials
AWWA	American Water Works Association
IEEE	Institute of Electrical and Electronics Engineers (Testing)
HI	Hydraulic Institute
NEMA	National Electrical Manufacturers Association (NEMA Standards Publication MG 1)

3 SERVICE CONDITIONS

3.1 Usual Service Conditions

- a. Ambient temperature not greater than 40°C and not less than -15°C
- b. Voltage variation within +/- 10%
- c. Frequency variation within +/- 5%
- d. Combination of b) and c) above, not to exceed 10%.
- e. Exposure to an altitude that does not exceed 3300 feet (1000 meters).
- f. Installation on a rigid mounting surface.
- g. Installation in areas or supplementary enclosures, which do not seriously interfere with the ventilation of the motor.