

IEEE Std 841-1994

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(Revision of
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IEEE Standard for Petroleum and Chemical Industry—Severe Duty Totally Enclosed Fan-Cooled (TEFC) Squirrel Cage Induction Motors—Up to and Including 500 hp

IEEE Industrial Applications Society

Sponsored by the
Petroleum and Chemical Industry Committee

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Sponsor

**Petroleum and Chemical Industry Committee
of the
IEEE Industry Applications Society**

Approved March 17, 1994

IEEE Standards Board

Abstract: This standard applies to high-efficiency TEFC, horizontal and vertical, single-speed, squirrel cage polyphase induction motors, up to and including 500 hp, in NEMA frame sizes 143T and larger, for petroleum, chemical, and other severe duty applications (commonly referred to as severe duty motors). Excluded from the scope of this standard are motors with sleeve bearings and additional specific features required for explosion-proof motors.

Keywords: NEMA frame motors, polyphase induction motors, severe duty motors, squirrel cage motors, totally enclosed fan-cooled (TEFC) motors

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Introduction

(This introduction is not a part of IEEE Std 841-1994, IEEE Standard for Petroleum and Chemical Industry—Severe Duty Totally Enclosed Fan-Cooled (TEFC) Squirrel Cage Induction Motors—Up to and Including 500 hp.)

This standard has been prepared in an effort to improve the reliability, efficiency, and performance of severe duty TEFC integral horsepower squirrel cage induction motors, 500 hp and below; and to promote uniform specification of such motors in petroleum and chemical industry applications. This standard reflects the thinking of representatives of the petroleum and chemical industry and their supplying motor manufacturers. It was prepared by the Petroleum and Chemical Industry Motors Working Group. At the time this standard was approved, the working group had the following membership:

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