

Department of Energy

§ 431.445

two-digit frame number series in accordance with NEMA Standards Publication MG1-1987, including IEC metric equivalent motors.

TEST PROCEDURES

§ 431.443 Materials incorporated by reference.

(a) *General.* The Department incorporates by reference the following standards into subpart X of part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE test procedures unless and until the DOE amends its test procedures. DOE incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Also, this material is available for inspection at U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945, or go to http://www1.eere.energy.gov/buildings/appliance_standards/. Standards can be obtained from the sources below.

(b) *CAN/CSA.* Canadian Standards Association, Sales Department, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6, Canada, 1-800-463-6727, or go to <http://www.shopcsa.ca/onlinestore/welcome.asp>.

(1) *CAN/CSA-C747-94* ("CAN/CSA-C747") (Reaffirmed 2005), *Energy Efficiency Test Methods for Single- and Three-Phase Small Motors*, IBR approved for § 431.444.

(2) [Reserved]

(c) *IEEE.* Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ

08855-1331, 1-800-678-IEEE (4333), or go to <http://www.ieee.org/web/publications/home/index.html>.

(1) *IEEE Std 112™-2004* (Revision of *IEEE Std 112-1996*) ("IEEE Std 112"), *IEEE Standard Test Procedure for Polyphase Induction Motors and Generators*, approved February 9, 2004, IBR approved for § 431.444.

(2) *IEEE Std 114-2001™* (Revision of *IEEE Std 114-1982*) ("IEEE Std 114"), *IEEE Standard Test Procedure for Single-Phase Induction Motors*, approved December 6, 2001, IBR approved for § 431.444.

§ 431.444 Test procedures for the measurement of energy efficiency.

(a) *Scope.* Pursuant to section 346(b)(1) of EPCA, this section provides the test procedures for measuring, pursuant to EPCA, the efficiency of small electric motors pursuant to EPCA. (42 U.S.C. 6317(b)(1)) For purposes of this part 431 and EPCA, the test procedures for measuring the efficiency of small electric motors shall be the test procedures specified in § 431.444(b).

(b) *Testing and Calculations.* Determine the energy efficiency and losses by using one of the following test methods:

(1) Single-phase small electric motors: either *IEEE Std 114*, (incorporated by reference, see § 431.443), or *CAN/CSA C747*, (incorporated by reference, see § 431.443);

(2) Polyphase small electric motors less than or equal to 1 horsepower (0.746 kW): *IEEE Std 112* (incorporated by reference, see § 431.443), Test Method A; or

(3) Polyphase small electric motors greater than 1 horsepower (0.746 kW): *IEEE Std 112* (incorporated by reference, see § 431.443), Test Method B.

§ 431.445 Determination of small electric motor efficiency.

(a) *Scope.* When a party determines the energy efficiency of a small electric motor to comply with an obligation imposed on it by or pursuant to Part A-1 of Title III of EPCA, 42 U.S.C. 6311-6317, this section applies.

(b) *Provisions applicable to all small electric motors—(1) General requirements.* The average full-load efficiency of each basic model of small electric motor must be determined either by testing