

§431.191

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air furnace, instantaneous water heater, storage water heater, or unfired hot water storage tank.

*Flue loss* means the sum of the sensible heat and latent heat above room temperature of the flue gases leaving the appliance.

*Industrial equipment* means an article of equipment, regardless of whether it is in fact distributed in commerce for industrial or commercial use, of a type which:

- (1) In operation consumes, or is designed to consume energy;
- (2) To any significant extent, is distributed in commerce for industrial or commercial use; and
- (3) Is not a "covered product" as defined in Section 321(2) of EPCA, 42 U.S.C. 6291(2), other than a component of a covered product with respect to which there is in effect a determination under Section 341(c) of EPCA, 42 U.S.C. 6312(c).

*Private labeler* means, with respect to a commercial HVAC & WH product, an owner of a brand or trade mark on the label of a product which bears a private label. A commercial HVAC & WH product bears a private label if :

- (1) Such product (or its container) is labeled with the brand or trademark of a person other than a manufacturer of such product;
- (2) The person with whose brand or trademark such product (or container) is labeled has authorized or caused such product to be so labeled; and
- (3) The brand or trademark of a manufacturer of such product does not appear on such label.

**Subpart K—Distribution Transformers**

SOURCE: 70 FR 60416, Oct. 18, 2005, unless otherwise noted.

**§431.191 Purpose and scope.**

This subpart contains energy conservation requirements for distribution transformers, pursuant to Part B of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6291-6309.

**§431.192 Definitions concerning distribution transformers.**

*Distribution transformer* means a transformer that—

- (1) Has an input voltage of 34.5 kilovolts or less;
- (2) Has an output voltage of 600 volts or less; and
- (3) Is rated for operation at a frequency of 60 Hertz; however, the term "distribution transformer" does not include—
  - (i) A transformer with multiple voltage taps, the highest of which equals at least 20 percent more than the lowest;
  - (ii) A transformer that is designed to be used in a special purpose application and is unlikely to be used in general purpose applications, such as a drive transformer, rectifier transformer, auto-transformer, Uninterruptible Power System transformer, impedance transformer, regulating transformer, sealed and non-ventilating transformer, machine tool transformer, welding transformer, grounding transformer, or testing transformer; or
  - (iii) Any transformer not listed in paragraph (3)(ii) of this definition that is excluded by the Secretary by rule because—
    - (A) The transformer is designed for a special application;
    - (B) The transformer is unlikely to be used in general purpose applications; and
    - (C) The application of standards to the transformer would not result in significant energy savings.

*Low-voltage dry-type distribution transformer* means a distribution transformer that—

- (1) Has an input voltage of 600 volts or less;
- (2) Is air-cooled; and
- (3) Does not use oil as a coolant.

*Transformer* means a device consisting of 2 or more coils of insulated wire that transfers alternating current by electromagnetic induction from 1 coil to another to change the original voltage or current value.

**Department of Energy**

**§ 431.226**

TEST PROCEDURES [RESERVED]

TEST PROCEDURES [RESERVED]

ENERGY CONSERVATION STANDARDS

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**§ 431.196 Energy conservation standards and their effective dates.**

**§ 431.206 Energy conservation standards and their effective dates.**

(a) *Low Voltage Dry-Type Distribution Transformers.* The efficiency of a low voltage dry-type distribution transformer manufactured on or after January 1, 2007, shall be no less than the following:

An illuminated exit sign manufactured on or after January 1, 2006, shall have an input power demand of 5 watts or less per face.

Single phase efficiency		Three phase efficiency	
kVA	Low voltage	kVA	Low voltage
15 .....	97.7	15	97.0
25 .....	98.0	30	97.5
37.5 .....	98.2	45	97.7
50 .....	98.3	75	98.0
75 .....	98.5	112.5	98.2
100 .....	98.6	150	98.3
167 .....	98.7	225	98.5
250 .....	98.8	300	98.6
333 .....	98.9	500	98.7
		750	98.8
		1000	98.9

**Subpart M—Traffic Signal Modules and Pedestrian Modules**

SOURCE: 70 FR 60417, Oct. 18, 2005, unless otherwise noted.

(Source: Table 4-2 of National Electrical Manufacturers Association (NEMA) Standard TP-1-2002, "Guide for Determining Energy Efficiency for Distribution Transformers.")

**§ 431.221 Purpose and scope.**

(b) *Liquid-Immersed Distribution Transformers.* [Reserved]

This subpart contains energy conservation requirements for traffic signal modules and pedestrian modules, pursuant to Part B of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6291-6309.

(c) *Medium Voltage Dry-Type Distribution Transformers.* [Reserved]

**§ 431.222 Definitions concerning traffic signal modules and pedestrian modules.**

**Subpart L—Illuminated Exit Signs**

*Pedestrian module* means a light signal used to convey movement information to pedestrians.

SOURCE: 70 FR 60417, Oct. 18, 2005, unless otherwise noted.

*Traffic signal module* means a standard 8-inch (200 mm) or 12-inch (300 mm) traffic signal indication that—

**§ 431.201 Purpose and scope.**

(1) Consists of a light source, a lens, and all other parts necessary for operation; and

This subpart contains energy conservation requirements for illuminated exit signs, pursuant to Part B of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6291-6309.

(2) Communicates movement messages to drivers through red, amber, and green colors.

**§ 431.202 Definitions concerning illuminated exit signs.**

TEST PROCEDURES [RESERVED]

*Illuminated exit sign* means a sign that—

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(1) Is designed to be permanently fixed in place to identify an exit; and

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(2) Consists of an electrically powered integral light source that—

Any traffic signal module or pedestrian module manufactured on or after January 1, 2006, shall meet both of the following requirements:

- (i) Illuminates the legend "EXIT" and any directional indicators; and
- (ii) Provides contrast between the legend, any directional indicators, and the background.

(a) Have a nominal wattage no greater than:

	Maximum wattage (at 74 °C)	Nominal wattage (at 25 °C)
Traffic Signal Module Type:		
12" Red Ball .....	17	11
8" Red Ball .....	13	8
12" Red Arrow .....	12	9