

**Department of Energy**

**§ 431.62**

*Basic Model* means all units of a given type of electric motor (or class thereof) manufactured by a single manufacturer, and which (i) have the same rating, (ii) have electrical design characteristics that are essentially identical, and (iii) do not have any differing physical or functional characteristics that affect energy consumption or efficiency.

*Rating* means one of the 113 combinations of an electric motor's horsepower (or standard kilowatt equivalent), number of poles, and open or enclosed construction, with respect to which § 431.25 of 10 CFR Part 431 prescribes nominal full load efficiency standards.

MODELS ACTUALLY TESTED AND NOT PREVIOUSLY IDENTIFIED

Rating of electric motor			Basic model(s) (model number(s))	Nominal full load efficiency
Motor power output (e.g. 1 hp or .75 kW)	Number of poles	Open or enclosed motor		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Etc.	Etc.	Etc.	Etc.	Etc.

**Subpart C—Commercial Refrigerators, Freezers and Refrigerator-Freezers**

SOURCE: 70 FR 60414, Oct. 18, 2005, unless otherwise noted.

**§ 431.61 Purpose and scope.**

This subpart contains energy conservation requirements for commercial refrigerators, freezers and refrigerator-freezers, pursuant to Part C of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311–6317.

**§ 431.62 Definitions concerning commercial refrigerators, freezers and refrigerator-freezers.**

*Air-curtain angle* means:

(1) For equipment without doors and without a discharge air grille or discharge air honeycomb, the angle between a vertical line extended down from the highest point on the manufacturer's recommended load limit line and the load limit line itself, when the equipment is viewed in cross-section; and

(2) For all other equipment without doors, the angle formed between a vertical line and the straight line drawn by connecting the point at the inside edge of the discharge air opening with the point at the inside edge of the return air opening, when the equipment is viewed in cross-section.

*Basic model* means, with respect to commercial refrigerators, freezers, and refrigerator-freezers, all units of a given type of commercial refrigerator, freezer, or refrigerator-freezer (or class

thereof) manufactured by one manufacturer that have the same primary energy source, which have electrical characteristics that are essentially identical, and which do not have any differing electrical, physical, or functional characteristics that affect energy consumption.

*Commercial refrigerator, freezer, and refrigerator-freezer* means refrigeration equipment that—

- (1) Is not a consumer product (as defined in § 430.2 of part 430);
- (2) Is not designed and marketed exclusively for medical, scientific, or research purposes;
- (3) Operates at a chilled, frozen, combination chilled and frozen, or variable temperature;
- (4) Displays or stores merchandise and other perishable materials horizontally, semi-vertically, or vertically;
- (5) Has transparent or solid doors, sliding or hinged doors, a combination of hinged, sliding, transparent, or solid doors, or no doors;
- (6) Is designed for pull-down temperature applications or holding temperature applications; and
- (7) Is connected to a self-contained condensing unit or to a remote condensing unit.

*Commercial hybrid refrigerator, freezer, and refrigerator-freezer* means a commercial refrigerator, freezer, or refrigerator-freezer that has two or more chilled and/or frozen compartments that are:

- (1) In two or more different equipment families,
- (2) Contained in one cabinet, and
- (3) Sold as a single unit.

## § 431.63

*Door angle* means:

(1) For equipment with flat doors, the angle between a vertical line and the line formed by the plane of the door, when the equipment is viewed in cross-section; and

(2) For equipment with curved doors, the angle formed between a vertical line and the straight line drawn by connecting the top and bottom points where the display area glass joins the cabinet, when the equipment is viewed in cross-section.

*Holding temperature application* means a use of commercial refrigeration equipment other than a pull-down temperature application, except a blast chiller or freezer.

*Horizontal Closed* means equipment with hinged or sliding doors and a door angle greater than or equal to 45°.

*Horizontal Open* means equipment without doors and an air-curtain angle greater than or equal to 80° from the vertical.

*Ice-cream freezer* means a commercial freezer that is designed to operate at or below -5 °F (-21 °C) and that the manufacturer designs, markets, or intends for the storing, displaying, or dispensing of ice cream.

*Integrated average temperature* means the average temperature of all test package measurements taken during the test.

*Pull-down temperature application* means a commercial refrigerator with doors that, when fully loaded with 12 ounce beverage cans at 90 degrees F, can cool those beverages to an average stable temperature of 38 degrees F in 12 hours or less.

*Remote condensing unit* means a factory-made assembly of refrigerating components designed to compress and liquefy a specific refrigerant that is remotely located from the refrigerated equipment and consists of 1 or more refrigerant compressors, refrigerant condensers, condenser fans and motors, and factory supplied accessories.

*Self-contained condensing unit* means a factory-made assembly of refrigerating components designed to compress and liquefy a specific refrigerant that is an integral part of the refrigerated equipment and consists of 1 or more refrigerant compressors, refrigerant con-

## 10 CFR Ch. II (1-1-11 Edition)

densers, condenser fans and motors, and factory supplied accessories.

*Semivertical Open* means equipment without doors and an air-curtain angle greater than or equal to 10° and less than 80° from the vertical.

*Test package* means a packaged material that is used as a standard product temperature-measuring device.

*Vertical Closed* means equipment with hinged or sliding doors and a door angle less than 45°.

*Vertical Open* means equipment without doors and an air-curtain angle greater than or equal to 0° and less than 10° from the vertical.

*Wedge case* means a commercial refrigerator, freezer, or refrigerator-freezer that forms the transition between two regularly shaped display cases.

[70 FR 60414, Oct. 18, 2005, as amended at 71 FR 71369, Dec. 8, 2006; 74 FR 1139, Jan. 9, 2009]

### TEST PROCEDURES

#### § 431.63 Materials incorporated by reference.

(a) *General.* We incorporate by reference the following standards into Subpart C of Part 431. The material listed has been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR 51. Any subsequent amendment to a standard by the standard-setting organization will not affect the DOE regulations unless and until amended by DOE. Material is incorporated 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](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, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, 202-586-2945, or go to: <http://www1.eere.energy.gov/buildings/>