

PART A-1—CERTAIN INDUSTRIAL EQUIPMENT

CODIFICATION

This part was, in the original, designated part C and has been changed to part A-1 for purposes of codification.

§ 6311. Definitions

For purposes of this part—

(1) The term “covered equipment” means one of the following types of industrial equipment:

- (A) Electric motors and pumps.
- (B) Small commercial package air conditioning and heating equipment.
- (C) Large commercial package air conditioning and heating equipment.
- (D) Very large commercial package air conditioning and heating equipment.
- (E) Commercial refrigerators, freezers, and refrigerator-freezers.
- (F) Automatic commercial ice makers.
- (G) Walk-in coolers and walk-in freezers.
- (H) Commercial clothes washers.
- (I) Packaged terminal air-conditioners and packaged terminal heat pumps.
- (J) Warm air furnaces and packaged boilers.
- (K) Storage water heaters, instantaneous water heaters, and unfired hot water storage tanks.
- (L) Any other type of industrial equipment which the Secretary classifies as covered equipment under section 6312(b) of this title.

(2)(A) The term “industrial equipment” means any article of equipment referred to in subparagraph (B) of a type—

- (i) which in operation consumes, or is designed to consume, energy;
- (ii) which, to any significant extent, is distributed in commerce for industrial or commercial use; and
- (iii) which is not a “covered product” as defined in section 6291(a)(2) of this title, other than a component of a covered product with respect to which there is in effect a determination under section 6312(c) of this title;

without regard to whether such article is in fact distributed in commerce for industrial or commercial use.

(B) The types of equipment referred to in this subparagraph (in addition to electric motors and pumps, commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers, packaged terminal air-conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks) are as follows:

- (i) compressors;
- (ii) fans;
- (iii) blowers;
- (iv) refrigeration equipment;
- (v) electric lights;
- (vi) electrolytic equipment;
- (vii) electric arc equipment;

- (viii) steam boilers;
- (ix) ovens;
- (x) kilns;
- (xi) evaporators; and
- (xii) dryers.

(3) The term “energy efficiency” means the ratio of the useful output of services from an article of industrial equipment to the energy use by such article, determined in accordance with test procedures under section 6314 of this title.

(4) The term “energy use” means the quantity of energy directly consumed by an article of industrial equipment at the point of use, determined in accordance with test procedures established under section 6314 of this title.

(5) The term “manufacturer” means any person who manufactures industrial equipment.

(6) The term “label” may include any printed matter determined appropriate by the Secretary.

(7) The terms “energy”, “manufacture”, “import”, “importation”, “consumer product”, “distribute in commerce”, “distribution in commerce”, and “commerce” have the same meaning as is given such terms in section 6291 of this title.

(8)(A) The term “commercial package air conditioning and heating equipment” means air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial application.

(B) The term “small commercial package air conditioning and heating equipment” means commercial package air conditioning and heating equipment that is rated below 135,000 Btu per hour (cooling capacity).

(C) The term “large commercial package air conditioning and heating equipment” means commercial package air conditioning and heating equipment that is rated—

- (i) at or above 135,000 Btu per hour; and
- (ii) below 240,000 Btu per hour (cooling capacity).

(D) The term “very large commercial package air conditioning and heating equipment” means commercial package air conditioning and heating equipment that is rated—

- (i) at or above 240,000 Btu per hour; and
- (ii) below 760,000 Btu per hour (cooling capacity).

(9)(A) The term “commercial refrigerator, freezer, and refrigerator-freezer” means refrigeration equipment that—

- (i) is not a consumer product (as defined in section 6291 of this title);
- (ii) is not designed and marketed exclusively for medical, scientific, or research purposes;

(iii) operates at a chilled, frozen, combination chilled and frozen, or variable temperature;

(iv) displays or stores merchandise and other perishable materials horizontally, semivertically, or vertically;

(v) has transparent or solid doors, sliding or hinged doors, a combination of hinged, sliding, transparent, or solid doors, or no doors;

(vi) is designed for pull-down temperature applications or holding temperature applications; and

(vii) is connected to a self-contained condensing unit or to a remote condensing unit.

(B) The term “holding temperature application” means a use of commercial refrigeration equipment other than a pull-down temperature application, except a blast chiller or freezer.

(C) The term “integrated average temperature” means the average temperature of all test package measurements taken during the test.

(D) The term “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.

(E) The term “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 one or more refrigerant compressors, refrigerant condensers, condenser fans and motors, and factory supplied accessories.

(F) The term “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 one or more refrigerant compressors, refrigerant condensers, condenser fans and motors, and factory supplied accessories.

(10)(A) The term “packaged terminal air conditioner” means a wall sleeve and a separate unencased combination of heating and cooling assemblies specified by the builder and intended for mounting through the wall. It includes a prime source of refrigeration, separable outdoor louvers, forced ventilation, and heating availability by builder’s choice of hot water, steam, or electricity.

(B) The term “packaged terminal heat pump” means a packaged terminal air conditioner that utilizes reverse cycle refrigeration as its prime heat source and should have supplementary heat source available to builders with the choice of hot water, steam, or electric resistant heat.

(11)(A) The term “warm air furnace” means a self-contained oil- or gas-fired furnace designed to supply heated air through ducts to spaces that require it and includes combination warm air furnace/electric air conditioning units but does not include unit heaters and duct furnaces.

(B) The term “packaged boiler” means a boiler that is shipped complete with heating equipment, mechanical draft equipment, and automatic controls; usually shipped in one or more sections.

(12)(A) The term “storage water heater” means a water heater that heats and stores water within the appliance at a thermostatically controlled temperature for delivery on demand. Such term does not include units with an input rating of 4000 Btu per hour or more per gallon of stored water.

(B) The term “instantaneous water heater” means a water heater that has an input rating of at least 4000 Btu per hour per gallon of stored water.

(C) The term “unfired hot water storage tank” means a tank used to store water that is heated externally.

(13) ELECTRIC MOTOR.—

(A) GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE I).—The term “general purpose electric motor (subtype I)” means any motor that meets the definition of “General Purpose” as established in the final rule issued by the Department of Energy entitled “Energy Efficiency Program for Certain Commercial and Industrial Equipment: Test Procedures, Labeling, and Certification Requirements for Electric Motors” (10 CFR 431), as in effect on December 19, 2007.

(B) GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE II).—The term “general purpose electric motor (subtype II)” means motors incorporating the design elements of a general purpose electric motor (subtype I) that are configured as 1 of the following:

(i) A U-Frame Motor.

(ii) A Design C Motor.

(iii) A close-coupled pump motor.

(iv) A Footless motor.

(v) A vertical solid shaft normal thrust motor (as tested in a horizontal configuration).

(vi) An 8-pole motor (900 rpm).

(vii) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts.¹

(C) The term “definite purpose motor” means any motor designed in standard ratings with standard operating characteristics or standard mechanical construction for use under service conditions other than usual or for use on a particular type of application and which cannot be used in most general purpose applications.

(D) The term “special purpose motor” means any motor, other than a general purpose motor or definite purpose motor, which has special operating characteristics or special mechanical construction, or both, designed for a particular application.

(E) The term “open motor” means a motor having ventilating openings which permit passage of external cooling air over and around the windings of the machine.

(F) The term “enclosed motor” means a motor so enclosed as to prevent the free exchange of air between the inside and outside of the case but not sufficiently enclosed to be termed airtight.

(G) The term “small electric motor” means a NEMA general purpose alternating current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1-1987.

(H) The term “efficiency” when used with respect to an electric motor means the ratio of an electric motor’s useful power output to its total power input, expressed in percentage.

¹So in original. A closing parenthesis probably should follow “volts”.

(I) The term “nominal full load efficiency” means the average efficiency of a population of motors of duplicate design as determined in accordance with NEMA Standards Publication MG1-1987.

(14) The term “ASHRAE” means the American Society of Heating, Refrigerating, and Air Conditioning Engineers.

(15) The term “IES” means the Illuminating Engineering Society of North America.

(16) The term “NEMA” means the National Electrical Manufacturers Association.

(17) The term “IEEE” means the Institute of Electrical and Electronics Engineers.

(18) The term “energy conservation standard” means—

(A) a performance standard that prescribes a minimum level of energy efficiency or a maximum quantity of energy use for a product; or

(B) a design requirement for a product.

(19) The term “automatic commercial ice maker” means a factory-made assembly (not necessarily shipped in one package) that—

(A) consists of a condensing unit and ice-making section operating as an integrated unit, with means for making and harvesting ice; and

(B) may include means for storing ice, dispensing ice, or storing and dispensing ice.

(20) WALK-IN COOLER; WALK-IN FREEZER.—

(A) IN GENERAL.—The terms “walk-in cooler” and “walk-in freezer” mean an enclosed storage space refrigerated to temperatures, respectively, above, and at or below 32 degrees Fahrenheit that can be walked into, and has a total chilled storage area of less than 3,000 square feet.

(B) EXCLUSION.—The terms “walk-in cooler” and “walk-in freezer” do not include products designed and marketed exclusively for medical, scientific, or research purposes.

(21) The term “commercial clothes washer” means a soft-mount front-loading or soft-mount top-loading clothes washer that—

(A) has a clothes container compartment that—

(i) for horizontal-axis clothes washers, is not more than 3.5 cubic feet; and

(ii) for vertical-axis clothes washers, is not more than 4.0 cubic feet; and

(B) is designed for use in—

(i) applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries; or

(ii) other commercial applications.

(22)² The term “harvest rate” means the amount of ice (at 32 degrees F) in pounds produced per 24 hours.

(22)² SINGLE PACKAGE VERTICAL AIR CONDITIONER.—The term “single package vertical air conditioner” means air-cooled commercial package air conditioning and heating equipment that—

(A) is factory-assembled as a single package that—

(i) has major components that are arranged vertically;

(ii) is an encased combination of cooling and optional heating components; and

(iii) is intended for exterior mounting on, adjacent interior to, or through an outside wall;

(B) is powered by a single- or 3-phase current;

(C) may contain 1 or more separate indoor grilles, outdoor louvers, various ventilation options, indoor free air discharges, ductwork, well plenum, or sleeves; and

(D) has heating components that may include electrical resistance, steam, hot water, or gas, but may not include reverse cycle refrigeration as a heating means.

(23) SINGLE PACKAGE VERTICAL HEAT PUMP.—The term “single package vertical heat pump” means a single package vertical air conditioner that—

(A) uses reverse cycle refrigeration as its primary heat source; and

(B) may include secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.

(Pub. L. 94-163, title III, §340, as added Pub. L. 95-619, title IV, §441(a), Nov. 9, 1978, 92 Stat. 3267; amended Pub. L. 102-486, title I, §122(a), (f)(1), Oct. 24, 1992, 106 Stat. 2806, 2817; Pub. L. 109-58, title I, §136(a), Aug. 8, 2005, 119 Stat. 634; Pub. L. 110-140, title III, §§312(a), 313(a), 314(a), Dec. 19, 2007, 121 Stat. 1564, 1568, 1569.)

AMENDMENTS

2007—Par. (1)(G) to (L). Pub. L. 110-140, §312(a)(1), added subpar. (G) and redesignated former subpars. (G) to (K) as (H) to (L), respectively.

Par. (13). Pub. L. 110-140, §313(a), inserted par. heading, added subpars. (A) and (B), redesignated former subpars. (B) to (H) as (C) to (I), respectively, and struck out former subpar. (A) which read as follows: “The term ‘electric motor’ means any motor which is a general purpose T-frame, single-speed, foot-mounting, polyphase squirrel-cage induction motor of the National Electrical Manufacturers Association, Design A and B, continuous rated, operating on 230/460 volts and constant 60 Hertz line power as defined in NEMA Standards Publication MG1-1987.”

Pars. (20), (21). Pub. L. 110-140, §312(a)(2), (3), added par. (20) and redesignated former par. (20) as (21). Former par. (21) redesignated (22) relating to harvest rate.

Par. (22). Pub. L. 110-140, §314(a), added par. (22) relating to single package vertical air conditioner.

Pub. L. 110-140, §312(a)(2), redesignated par. (21) as (22) relating to harvest rate.

Par. (23). Pub. L. 110-140, §314(a), added par. (23).

2005—Par. (1)(D) to (K). Pub. L. 109-58, §136(a)(1), added subpars. (D) to (G) and redesignated former subpars. (D) to (G) as (H) to (K), respectively.

Par. (2)(B). Pub. L. 109-58, §136(a)(2), substituted “commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers” for “small and large commercial package air conditioning and heating equipment” in introductory provisions.

Pars. (8), (9). Pub. L. 109-58, §136(a)(3), added pars. (8) and (9) and struck out former pars. (8) and (9) which read as follows:

“(8) The term ‘small commercial package air conditioning and heating equipment’ means air-cooled, water-cooled, evaporatively-cooled, or water source

² So in original. Two pars. (22) have been enacted.

(not including ground water source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial application which are rated below 135,000 Btu per hour (cooling capacity).

“(9) The term ‘large commercial package air conditioning and heating equipment’ means air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial application which are rated at or above 135,000 Btu per hour and below 240,000 Btu per hour (cooling capacity).”

Pars. (19) to (21). Pub. L. 109-58, § 136(a)(4), added pars. (19) to (21).

1992—Par. (1)(B) to (G). Pub. L. 102-486, § 122(a)(1), added subpars. (B) to (F) and redesignated former subpar. (B) as (G).

Par. (2)(B). Pub. L. 102-486, § 122(a)(2), in introductory provisions, substituted “pumps, small and large commercial package air conditioning and heating equipment, packaged terminal air-conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks” for “pumps”, redesignated cls. (vi) to (x) and (xii) to (xiv) as cls. (v) to (ix) and (x) to (xi), respectively, and struck out former cls. (v) and (xi) which read “air conditioning equipment;” and “furnaces;”, respectively.

Par. (3). Pub. L. 102-486, § 122(f)(1), substituted “(3) The” for “(3) the”.

Pars. (8) to (18). Pub. L. 102-486, § 122(a)(3), added pars. (8) to (18).

EFFECTIVE DATE OF 2007 AMENDMENT

Amendment by Pub. L. 110-140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110-140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

§ 6312. Purposes and coverage

(a) Congressional statement of purpose

It is the purpose of this part to improve the efficiency of electric motors and pumps and certain other industrial equipment in order to conserve the energy resources of the Nation.

(b) Inclusion of industrial equipment as covered equipment

The Secretary may, by rule, include a type of industrial equipment as covered equipment if he determines that to do so is necessary to carry out the purposes of this part.

(c) Inclusion of component parts of consumer products as industrial equipment

The Secretary may, by rule, include as industrial equipment articles which are component parts of consumer products, if he determines that—

- (1) such articles are, to a significant extent, distributed in commerce other than as component parts for consumer products; and
- (2) such articles meet the requirements of section 6311(2)(A) of this title (other than clauses (ii) and (iii)).

(Pub. L. 94-163, title III, § 341, as added Pub. L. 95-619, title IV, § 441(a), Nov. 9, 1978, 92 Stat. 3268.)

§ 6313. Standards

(a) Small, large, and very large commercial package air conditioning and heating equipment, packaged terminal air conditioners and heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks

(1) Each small commercial package air conditioning and heating equipment (including single package vertical air conditioners and single package vertical heat pumps) manufactured on or after January 1, 1994, shall meet the following standard levels:

(A) The minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 10.0.

(B) The minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 9.7.

(C) The minimum energy efficiency ratio of air-cooled central air conditioners and central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 8.9 (at a standard rating of 95 degrees F db).

(D) The minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 6.8.

(E) The minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 6.6.

(F) The minimum coefficient of performance in the heating mode of air-cooled central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 3.0 (at a high temperature rating of 47 degrees F db).

(G) The minimum energy efficiency ratio of water-cooled, evaporatively-cooled and water-source central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity) shall be 9.3 (at a standard rating of 95 degrees F db, outdoor temperature for evaporatively cooled equipment, and 85 degrees Fahrenheit entering water temperature for water-source and water-cooled equipment).

(H) The minimum energy efficiency ratio of water-cooled, evaporatively-cooled and water-source central air conditioners and central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 10.5 (at a standard rating of 95 degrees F db, outdoor temperature for evaporatively cooled equipment, and 85 degrees Fahrenheit entering water temperature for water source and water-cooled equipment).

(I) The minimum coefficient of performance in the heating mode of water-source heat pumps less than 135,000 Btu per hour (cooling