Type	Sales Model	Brand
3D Ice and Water	7840#	Kenmore
3D Ice and Water	LFX23961**	LG
All	795.#####.###	Kenmore

APPENDIX B

As requested in this petition, LG should be required to test the products for which a waiver is requested according to the test procedures for electric refrigerator-freezers prescribed by DOE at 10 CFR Part 430, Appendix A1, except that, for the LG products: (A) The following definition is added at the end of Section 1:

1.13 "Variable anti-sweat heater control" means an anti-sweat heater where power supplied to the device is determined by an operating condition variable(s) and/or ambient condition variable(s).

(B) Section 2.2 is revised to read as follows:

2.2 Operational conditions. The electric refrigerator or electric refrigerator-freezer shall be installed and its operating conditions maintained in accordance with HRF–1–1979, section 7.2 through section 7.4.3.3. except that the vertical ambient temperature gradient at locations 10 inches (25.4 cm) out from the centers of the two sides of the unit being tested is to be maintained during the test. Unless shields or baffles obstruct the area, the gradient is to be maintained from 2 inches (5.1 cm) above the floor or supporting platform to a height one foot (30.5 cm) above the unit under test. Defrost controls are to be operative. The anti-sweat heater switch is to be "off" during one test and "on" during the second test. In the case of an electric refrigerator-freezer equipped with variable anti-sweat heater control, the "on" test will be the result of the calculation described in 6.2.3. Other exceptions are noted in 2.3, 2.4, and 5.1 below.

(C) New section 6.2.3 is inserted after section 6.2.2.2.

6.2.3 Variable anti-sweat heater control test. The energy consumption of an electric refrigerator-freezer with a variable anti-sweat heater control in the "on" position (E[on]), expressed in kilowatt-hours per day, shall be calculated equivalent to:

E[ON] = E + (Heater Contribution) [note: called "correction factor" by General Electric]

where E is determined by 6.2.1.1, 6.2.1.2, 6.2.2.1, or 6.2.2.2, whichever is appropriate, with the anti-sweat heater switch in the "off" position.

Heater Contribution n1 = (Anti-sweat Heater Power × System-loss Factor) × (24 hrs/1 day) × (1 kW/1000 W)

Where:

Anti-sweat Heater Power = A1 * (Heater Watts at 5%RH)
+ A2 * (Heater Watts at 15%RH)
+ A3 * (Heater Watts at 25%RH)
+ A4 * (Heater Watts at 35%RH)
+ A5 * (Heater Watts at 45%RH)
+ A6 * (Heater Watts at 55%RH)
+ A7 * (Heater Watts at 65%RH)
+ A8 * (Heater Watts at 75%RH)
+ A9 * (Heater Watts at 85%RH)
v+ A10 * (Heater Watts at 95%RH)

where A1–A10 are from the following table:

A1 = 0.034	A6 = 0.119
A2 = 0.211	A7 = 0.069
A3 = 0.204	A8 = 0.047
A4 = 0.166	A9 = 0.008
A5 = 0.126	A10 = 0.015

Heater Watts at a specific relative humidity = the nominal watts used by all heaters at that specific relative humidity, 72 [degrees] F ambient, and DOE reference temperatures of fresh food average temperature of 45 [degrees] F and freezer average temperature of 5 [degrees] F.

System-loss Factor = 1.3

[FR Doc. 2010–14758 Filed 6–17–10; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

[Case No. CAC–024]

Energy Conservation Program for Consumer Products: Decision and Order Granting a Waiver to Daikin AC (Americas), Inc. (Daikin) From the Department of Energy Residential Central Air Conditioner and Heat Pump Test Procedures

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Decision and order.

SUMMARY: This notice publishes the U.S. Department of Energy's (DOE) decision and order in Case No. CAC–024. DOE grants a waiver to Daikin from the existing DOE test procedure applicable to residential central air conditioners and heat pumps. The waiver request is specific to the Daikin Altherma air-to-water heat pump with integrated domestic water heating. The test method for central air conditioners and heat pumps contained in 10 CFR part 430, subpart B, appendix M does not include any provisions to account for the operational characteristics of an air-to-water heat pump, or any central air-conditioning heat pump with an integrated domestic hot water component. As a condition of this waiver, Daikin must test and rate its Altherma heat pump products according to the alternate test procedure set forth in this notice.

DATES: This decision and order is effective June 18, 2010.

FOR FURTHER INFORMATION CONTACT: Dr. Michael G. Raymond, U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121. Telephone: (202) 586–9611. E-mail: *Michael.Raymond@ee.doe.gov.*

Ms. Jennifer Tiedeman, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC–71, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585–0103. Telephone: (202) 287–6111. E-mail: *mailto:Jennifer.Tiedeman@hq.doe.gov.*

SUPPLEMENTARY INFORMATION: In accordance with 10 CFR 430.27(l), DOE gives notice of the issuance of its decision and order as set forth below. In this decision and order, DOE grants Daikin a waiver from the applicable residential central air conditioner and heat pump test procedures at 10 CFR part 430, subpart B, appendix M. The waiver applies to certain basic models of the Daikin Altherma system, which consists of an air-to-water heat pump that provides hydronic heating and cooling as well as domestic hot water functions. Daikin must test and rate such products using the alternate test procedure described in this notice. Further, today's decision requires that Daikin may not make any representations concerning the energy efficiency of these products unless such product has been tested consistent with the provisions and restrictions in the alternate test procedure set forth in the decision and order below, and such representations fairly disclose the results of such testing. (42 U.S.C. 6314(d)) Distributors, retailers, and private labelers are held to the same

standard when making representations regarding the energy efficiency of these products. (42 U.S.C. 6293(c))

Issued in Washington, DC, on June 11, 2010.

Cathy Zoi,

Assistant Secretary, Energy Efficiency and Renewable Energy.

Decision and Order

In the Matter of: Daikin AC (Americas), Inc. (Daikin) (Case No. CAC–024).

Background

Title III of the Energy Policy and Conservation Act (EPCA) sets forth a variety of provisions concerning energy efficiency, including Part A of Title III, which provides for the "Energy Conservation Program for Consumer Products Other Than Automobiles." (42 U.S.C. 6291–6309) Part A of Title III includes definitions, test procedures, labeling provisions, energy conservation standards for covered products, and the authority to require information and reports from manufacturers. Further, EPCA authorizes the Secretary of Energy to prescribe test procedures that are reasonably designed to produce results that measure energy efficiency, energy use, or estimated annual operating costs, and that are not unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

Today's notice involves residential central air conditioning and heat pump products covered under Part A. The test procedure for residential central air conditioners and heat pumps is contained in 10 CFR part 430, subpart B, appendix M.

DOE's regulations for covered products allow a person to seek a waiver for a particular basic model from the test procedure requirements for covered consumer products, when (1) the petitioner's basic model contains one or more design characteristics that prevent testing according to the prescribed test procedure, or (2) when prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 430.27(a)(1). Petitioners must include in their petition any alternate test procedures known to the petitioner to evaluate the basic model in a manner representative of its energy consumption characteristics. 10 CFR 430.27(b)(1)(iii). The Assistant Secretary for Energy Efficiency and Renewable Energy (the Assistant Secretary) may grant a waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 430.27(l). Waivers remain in effect pursuant to the provisions of 10 CFR 430.27(m).

The waiver process also allows any interested person who has submitted a petition for waiver to file an application for interim waiver of the applicable test procedure requirements. 10 CFR 430.27(a)(2). The Assistant Secretary will grant an interim waiver request if it is determined that the applicant will experience economic hardship if the interim waiver is denied; if it appears likely that the petition for waiver will be granted; and/or the Assistant Secretary determines that it would be desirable for public policy reasons to grant immediate relief pending a determination on the petition for waiver. 10 CFR 430.27(g).

On August 27, 2009, Daikin filed a petition for waiver from the test procedures at 10 CFR part 430, subpart B, appendix M, which are applicable to residential central air conditioners and heat pumps, and an application for interim waiver. The Daikin Altherma system consists of an air-to-water heat pump that provides hydronic space heating and cooling as well as domestic hot water functions. It operates either as a split system with the compressor unit outdoors and the hydronic components in an indoors unit, or as a single package configuration in which all system components are combined in a single outdoor unit. In both the single package and the split system configurations, the system can include a domestic hot water supply tank that is located indoors. On December 15, 2009, DOE granted Daikin an interim waiver and published Daikin's petition for waiver. 74 FR 66319. DOE received one comment on the Daikin petition; discussion of and DOE's response to this comment are set forth below.

Assertions and Determinations

Daikin's Petition for Waiver

The test method for central air conditioners and heat pumps contained in 10 CFR subpart B, appendix M does not include any provisions to account for the operational characteristics of an air-to-water heat pump, or a central air-conditioning heat pump with an integrated domestic hot water component. The applicable DOE test method does not account for the Daikin Altherma system's energy performance because the test method does not accurately evaluate the integrated domestic hot water and space conditioning performance, nor does it have any provisions for air-to-water heat pumps. Daikin has proposed using the European standards that are used for testing and rating the Altherma products in Europe. These standards use an energy efficiency ratio (EER) to measure the full load performance of the cooling subsystem; a coefficient of performance (COP) to measure the full load performance of the heating subsystem; and a Seasonal Performance Factor (SPF) to measure the seasonal performance of the combined heating and hot water subsystems. Daikin did not petition to include the performance of the combined cooling and hot water functions in the waiver, nor the stand-alone water heater performance.

The rating parameters EER and COP, although not well-known to the average consumer, are the steady-state efficiency parameters of the DOE test procedure in Appendix M, and are well-known to the domestic HVAC industry. This is not true of the combined performance parameter SPF, defined in European test standard 15316–4–2, "Heating systems in buildings—Method for calculation of system energy requirements and system efficiencies—Part 4–2: Space heating generation systems, heat pump systems," and referenced by Daikin in its petition. SPF is entirely unknown in the U.S., and would be of no value to the U.S. consumer in making purchasing decisions. What would be of value to the consumer is a representation of the Altherma's operating cost. Daikin did not include a discussion of operating cost in its petition for waiver. The European test standard 15316–4–2 does include a methodology for calculating operating cost. However, the methodology includes input parameters, such as meteorological data, design temperatures, and many others that would need to be specified in order to calculate the Altherma's operating cost, and all of these parameters would need to be specified by Daikin and approved by DOE before DOE could allow Daikin to represent the Altherma's operating cost.

There are no domestic test procedures for testing air-to-water heat pumps for space conditioning only, or for integrated space-conditioning and water heater performance. DOE has previously granted waivers to Carrier (55 FR 13607 (April 11, 1990)) and Nordyne (61 FR 11395 (March 20, 1996)) for comparable heat pumps with integrated domestic water heating, but those products were air-to-air, not air-to-water, heat pumps. Daikin did not discuss testing or rating the Altherma products as a water heater only; however, we note that in mild weather, when no space heating or cooling is demanded, the Altherma will function as a heat pump water heater.

One comment on Daikin's petition was received from Carrier Corporation

(Carrier). Carrier asserted that the Altherma should be rated for heating seasonal performance factor (HSPF) and seasonal energy efficiency ratio (SEER), but acknowledged that neither rating could be produced using existing DOE test procedures. Carrier commented that the test procedures should be revised to allow such ratings. However, the purpose of waivers is to address situations in which test procedures do not allow testing and rating until such time as the procedures are revised. Carrier commented that the Altherma should be tested and rated as a water heater with the DOE water heater test procedure. However, Carrier apparently misunderstands the Altherma DHW operation, as it claims the Altherma would function as an electric resistance water heater. Carrier also urged the use of ASHRAE 124–2007, "Methods of Testing for Rating Combination Space-Heating and Water-Heating Appliances," for rating the Altherma as a combined central air-conditioning heat pump and water heater. However, that test procedure does not apply to air-to-water heat pumps and is not incorporated into any DOE test procedure. Carrier commented that the rating tolerances in the relevant European test procedures are different from DOE's tolerances, and that DOE's tolerances should apply. DOE concurs with that comment.

As mentioned above, the Altherma can function as a stand-alone water heater, and will function as such in mild weather when no heating or cooling is demanded. Daikin's petition did not discuss the Altherma's performance as a stand-alone water heater, nor how it would be tested and rated in that mode. If Daikin wants to characterize the Altherma's performance as a stand-alone water heater, Daikin must test and rate it according to the DOE test procedure in 10 CFR part 430, subpart B, appendix E, or petition for a waiver if the Altherma cannot be so tested.

Consultations With Other Agencies

DOE consulted with the Federal Trade Commission (FTC) staff concerning the Daikin Petition for Waiver. The FTC staff did not have any objections to issuing a waiver to Daikin.

Conclusion

After careful consideration of all the materials submitted by Daikin, the comment submitted by Carrier, and consultation with the FTC staff, it is ordered that:

(1) Daikin shall not be required to test or rate its Altherma heat pump products on the basis of the currently applicable test procedure under 10 CFR part 430 subpart B, appendix M.

(2) Daikin shall be required to test and rate its Altherma heat pump products according to the alternate test procedure as set forth in paragraph (3) below:

Type	Description	U.S. model name	E.U. equivalent model name
Split Altherma	OD Unit (Split, 3-Ton or 11kW)	ERLQ036BAVJU	ERLQ011BAV3
	OD Unit (Split, 4-Ton or 14kW)	ERLQ048BAVJU	ERLQ014BAV3
	OD Unit (Split, 4.5-Ton or 16kW)	ERLQ054BAVJU	ERLQ016BAV3
Monobloc Altherma	OD Unit (Heat Only, 3-Ton or 11kW)	EDLQ036BA6VJU	EDLQ011BA6V3
	OD Unit (Heat Only, 4-Ton or 14kW)	EDLQ048BA6VJU	EDLQ014BA6V3
	OD Unit (Heat Only, 4.5-Ton or 16kW)	EDLQ054BA6VJU	EDLQ016BA6V3
	OD Unit (Heat Pump, 3-Ton or 11kW)	EBLQ036BA6VJU	EBLQ011BA6V3
	OD Unit (Heat Pump, 4-Ton or 14kW)	EBLQ048BA6VJU	EBLQ014BA6V3
	OD Unit (Heat Pump, 4.5-Ton or 16kW)	EBLQ054BA6VJU	EBLQ016BA6V3
Hydrobox	HB (Heating Only, BUH 3kW)	EKHBH054BA3VJU	EKHBH016BA3V3
	HB (Heating Only, BUH 6kW)	EKHBH054BA6VJU	EKHBH016BA6V3
	HB (Heat Pump, BUH 3kW)	EKHBX054BA3VJU	EKHBX016BA3V3
	HB (Heat Pump, BUH 6kW)	EKHBX054BA6VJU	EKHBX016BA6V3
DHW	Hot Water Tank (50 Gallon or 200L)	EKHWS050BA3VJU	EKHWS200B3V3
	Hot Water Tank (80 Gallon or 300L)	EKHWS080BA3VJU	EKHWS300B3V3
Options	Digital I/O PCB	EKRP1HBAAU	EKRP1HBAA
	Solar Pump Kit	EKSOLHWBAVJU	EKSOLHAV1
	Wired Room Thermostat	EKRTWA	EKRTWA
	Condensate Kit	EKHBDP	EKHBDP

(3) *Alternate Test Procedure*

Daikin shall be required to test the basic models of Altherma products that are explicitly listed above according to:

a. Full Load Performance and Efficiency—The Daikin Altherma shall be tested and rated according to European Standard EN 14511, "Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling," except that the test operating and test condition tolerances in Tables 7, 13 and 15 of the DOE test procedure in 10 CFR part 430, subpart B, Appendix M shall apply. Daikin shall rate the Altherma full load heating and cooling performance (not including the DHW contribution) using coefficient of performance (COP) and energy efficiency ratio (EER).

b. The European Standard EN 14511 applies only to testing for COP and EER and does not supersede any DOE requirements in 10 CFR 430.24.

(4) Representations. Daikin may make representations about the energy use of its Altherma heat pump products for compliance, marketing, or other purposes only to the extent that such products have been tested in accordance with the provisions outlined above, and such representations fairly disclose the results of such testing. Daikin may not make representations of annual operating cost, or any parameters other than COP and EER for the Altherma's space heating and space cooling functions, respectively.

(5) This waiver shall remain in effect from the date this order is issued, consistent with the provisions of 10 CFR 430.27(m).

(6) This waiver is issued on the condition that the statements, representations, and documentary materials provided by the petitioner are valid. DOE may revoke or modify this waiver at any time if it determines the factual basis underlying the petition for waiver is incorrect, or the results from the alternate test procedure are unrepresentative of the basic model's true energy consumption characteristics.

Issued in Washington, DC, on June 11, 2010.

Cathy Zoi,

Assistant Secretary, Energy Efficiency and Renewable Energy.

[FR Doc. 2010–14756 Filed 6–17–10; 8:45 am]

BILLING CODE 6450–01–P