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CEE Residential Room Heat Pump Specification

Effective January 1, 2027

Scope:

- Room Heat Pump: a room air conditioner as defined per the 10 CFR 430.2[1] and utilizes reverse cycle refrigeration as its prime source for heating the indoor space.
- Refrigerant: GWP ≤ 700.[2]
- Combined Energy Efficiency Ratio (CEER) values shall be measured in accordance with the test procedure at 10 CFR 430, Subpart B, Appendix F or, a DOE-approved test procedure waiver pursuant to 10 CFR Part 430.27 expressed in units of BTU per watt-hour (BTU/Wh).[3]
- Heating Energy Efficiency Ratio (HEER) values shall be measured in accordance with section 7 of the ENERGY STAR Test Method to Determine Room Air Conditioner Heating Mode Performance and expressed in units of BTU per watt-hour (BTU/Wh).[4,5]
- Coefficient of Performance (COP) at 5˚F, COP at 17˚F, and Capacity Ratio values shall be measured per the ENERGY STAR Test Method to Determine Room Air Conditioner Heating Mode Performance.

CEE Market Transformation Tiers℠ ROOM HEAT PUMPS

CEE Room Heat Pump Specification						
CEE Tier	CEER	HEER	COP at 17˚F	COP at 5˚F	Defrost*	Capacity Ratio
CEE Tier 1	≥ 14.4	≥ 7.0	≥ 1.75	N/A	Active	≥ 70% at 17°F/47°F
CEE Advanced Tier	≥ 15.1	≥ 8.5	N/A	≥ 1.75	Active	≥ 70% at 5°F/47°F

* Passive Defrost: The removal of frost and ice on the outdoor coil when outdoor temperature is above 32˚F by cycling the compressor off and continuing to run the outdoor fan.
* Active Defrost: The removal of frost and ice on the outdoor coil by actively heating the outdoor coil (e.g., by operating the unit in cooling mode). Running the outdoor fan without additional outdoor coil heat input is not active defrost.

Reporting Requirements:

For units with active defrost, meltwater disposition reporting will be required with the following fields:

- Disposition Location
- Atomization?
- Sprayed onto Indoor Coil?
- Pump Used?
- Water Storage Tank Used?
- Other Explanation

[1] 10 CFR 430.2 defines a room air conditioner as: "a window-mounted or through-the-wall-mounted encased assembly, other than a "packaged terminal air conditioner," that delivers cooled, conditioned air to an enclosed space, and is powered by single-phase electric current. It includes a source of refrigeration and may include additional means for ventilating and heating."

[2] January 1st, 2025, maximum GWP level as set by U.S. Environmental Protection Agency.

[3] https://www.ecfr.gov/current/title-10/chapter-II/subchapter-D/part-430/subpart-B

[4] https://www.energystar.gov/test-method-determine-room-air-conditioner-heating-mode-performance

[5] For a unit where resistance heat was manually disabled for the tests specified in Section 6.4 or 6.5 of the ENERGY STAR Test Method to Determine Room Air Conditioner Heating Mode Performance, the operation of resistance heaters during unit operation must be accounted for in accordance with the provisions of ENERGY STAR's Resistance Heating Controls Verification Procedure.