



Proposed Recognition Criteria Non-Ducted Split Air Conditioners and Heat Pumps

Scope

Included products: Residential single-split, multiple-split, and multi-head mini-split air conditioners and heat pumps with non-ducted indoor units, as defined below, are eligible for ENERGY STAR® Most Efficient recognition in 2023. The unit may be of a modular design that allows for combining multiple outdoor coils and compressors to create one overall system. Non-ducted systems eligible for ENERGY STAR Most Efficient are all split systems.

Central air conditioner (CAC) or central air conditioning heat pump (HP)¹: A product, other than a packaged terminal air conditioner or packaged terminal heat pump, which is powered by single phase electric current, air cooled, rated below 65,000 Btu per hour, not contained within the same cabinet as a furnace, the rated capacity of which is above 225,000 Btu per hour, and is a heat pump or a cooling unit only.

A central air conditioner or central air conditioning heat pump may consist of: A single-package unit; an outdoor unit and one or more indoor units; an indoor unit only; or an outdoor unit with no match. In the case of an indoor unit only or an outdoor unit with no match, the unit must be tested and rated as a system (combination of both an indoor and an outdoor unit).

Non-ducted indoor unit¹: An indoor unit that is designed to be permanently installed, mounted on room walls and/or ceilings, and that directly heats or cools air within the conditioned space.

Split System: Any air conditioner or heat pump that has at least two separate assemblies that are connected with refrigerant piping when installed. One of these assemblies includes an indoor coil that exchanges heat with the indoor air to provide heating or cooling, while one of the others includes an outdoor coil that exchanges heat with the outdoor air. Split systems may be either blower coil systems or coil-only systems.

Single-split system¹: A split system that has one outdoor unit and one indoor unit connected with a single refrigeration circuit.

Multiple-split (or multi-split) system¹: A split system that has one outdoor unit and two or more coil-only indoor units and/or blower coil indoor units connected with a single refrigerant circuit. The indoor units operate independently and can condition multiple zones in response to at least two indoor thermostats or temperature sensors. The outdoor unit operates in response to independent operation of the indoor units based on control input of multiple indoor thermostats or temperature sensors, and/or based on refrigeration circuit sensor input (e.g., suction pressure).

Multi-head mini-split system¹: A split system that has one outdoor unit and that has two or more indoor units connected with a single refrigeration circuit. The indoor units operate in unison in response to a single indoor thermostat.

¹ 10 CFR Part 430, Subpart B, Appendix M - Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps.

Excluded products: The following products are not eligible for ENERGY STAR Most Efficient recognition in 2023 under this specification:

- Units that run on three-phase power.
- Units rated for more than 65,000 Btu/h of cooling.
- Ducted and packaged units are eligible for ENERGY STAR Most Efficient 2022 recognition with different requirements under the Central Air Conditioners, Heat Pumps, and Geothermal Heat Pumps recognition criteria.

Recognition Criteria

1) Product must be ENERGY STAR certified consistent with applicable ENERGY STAR Partner Commitments and the requirements set forth in the ENERGY STAR Program Requirements Product Specification for Residential Air Source Heat Pump and Central Air Conditioner, Version 6.1.

2) Products must meet the following cooling and heating performance levels:

Product type	SEER2	EER2	HSPF2
Ductless CAC	18.7	12.0	
Ductless HP	18.7	12.0	8.5
Ductless Cold Climate HP	16.9	11.0	8.5

- A. To be recognized as ENERGY STAR Most Efficient Cold Climate, heat pumps must be certified as cold climate heat pumps under Version 6.1 of the Central Air Conditioners and Heat pumps specification.

3) Products must be able to provide cooling (and heating if applicable) at two or more capacity levels.

4) Products must be recognized as having installation benefits per the ENERGY STAR Program Requirements Product Specifications for Residential Heat Pumps and Air Conditioners, Version 6.1, Section 3.C.

Recognition Period

The U.S. Environmental Protection Agency (EPA) will add eligible models to the ENERGY STAR Most Efficient 2023 product list for non-ducted air conditioners and heat pumps from January 1, 2023, through December 31, 2023. The ENERGY STAR Most Efficient 2023 designation may be used in association with models recognized during this period for as long as the model remains on the market.