

(Effective July 1, 2023)

WAC 51-11C-403324 Table C403.3.2(4)—Minimum efficiency requirements—Electrically operated PTAC, PTHP, SPVAC, SPVHP, room air conditioners.

Table C403.3.2(4)

Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single-Package Vertical Heat Pumps, Room Air Conditioners and Room Air-Conditioner Heat Pumps—Minimum Efficiency Requirements^e

Equipment Type	Size Category (Input)	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^a
PTAC (cooling mode) Standard size	< 7,000 Btu/h	95°F db/75°F wb outdoor air ^c	11.9 EER	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		14.0 - (0.300 × Cap/1000) EER ^d	
	> 15,000 Btu/h		9.5 EER	
PTAC (cooling mode) Nonstandard size ^a	< 7,000 Btu/h	95°F db/75°F wb outdoor air ^c	9.4 EER	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		10.9 - (0.213 × Cap/1000) EER ^d	
	> 15,000 Btu/h		7.7 EER	
PTHP (cooling mode) Standard size	< 7,000 Btu/h	95°F db/75°F wb outdoor air ^c	11.9 EER	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		14.0 - (0.300 × Cap/1000) EER ^d	
	> 15,000 Btu/h		9.5 EER	
PTHP (cooling mode) Nonstandard size ^b	< 7,000 Btu/h	95°F db/75°F wb outdoor air ^c	9.3 EER	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		10.8 - (0.213 × Cap/1000) EER ^d	
	> 15,000 Btu/h		7.6 EER	
PTHP (heating mode) Standard size	< 7,000 Btu/h	47°F db/43°F wb outdoor air	3.3 COP _H	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		3.7 - (0.052 × Cap/1000) COP _H ^d	
	> 15,000 Btu/h		2.90 COP _H	
PTHP (heating mode) Nonstandard size ^b	< 7,000 Btu/h	47°F db/43°F wb outdoor air	2.7 COP _H	AHRI 310/380
	≥ 7,000 Btu/h and ≤ 15,000 Btu/h		2.9 - (0.026 × Cap/1000) COP _H ^d	
	> 15,000 Btu/h		2.5 COP _H	
SPVAC (cooling mode)	< 65,000 Btu/h	95°F db/75°F wb outdoor air ^c	11.0 EER	AHRI 390
	≥ 65,000 Btu/h and < 135,000 Btu/h		10.0 EER	
	≥ 135,000 Btu/h and < 240,000 Btu/h		10.0 EER	
SPVHP (cooling mode)	< 65,000 Btu/h	95°F db/75°F wb outdoor air ^c	11.0 EER	AHRI 390
	≥ 65,000 Btu/h and < 135,000 Btu/h		10.0 EER	
	≥ 135,000 Btu/h and < 240,000 Btu/h		10.0 EER	

Equipment Type	Size Category (Input)	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^a
SPVHP (heating mode)	<65,000 Btu/h	47°F db/43°F wb outdoor air	3.3 COP	AHRI 390
	≥ 65,000 Btu/h and < 135,000 Btu/h		3.0 COP	
	≥ 135,000 Btu/h and < 240,000 Btu/h		3.0 COP	
Room air conditioners without reverse cycle with louvered sides for applications outside U.S.	< 6,000 Btu/h	-	11.0 CEER	ANSI/AHAMRAC-1
	≥ 6,000 Btu/h and < 8,000 Btu/h	-	11.0 CEER	
	≥ 8,000 Btu/h and < 14,000 Btu/h	-	10.9 CEER	
	≥ 14,000 Btu/h and < 20,000 Btu/h	-	10.7 CEER	
	≥ 20,000 Btu/h and < 28,000 Btu/h	-	9.4 CEER	
	≥ 28,000 Btu/h	-	9.0 CEER	
Room air conditioners without louvered sides	< 6,000 Btu/h	-	10.0 CEER	ANSI/AHAMRAC-1
	≥ 6,000 Btu/h and < 8,000 Btu/h	-	10.0 CEER	
	≥ 8,000 Btu/h and < 11,000 Btu/h	-	9.6 CEER	
	≥ 11,000 Btu/h and < 14,000 Btu/h	-	9.5 CEER	
	≥ 14,000 Btu/h and < 20,000 Btu/h	-	9.3 CEER	
	≥ 20,000 Btu/h	-	9.4 CEER	
Room air conditioners with reverse cycle, with louvered sides for applications outside U.S.	< 20,000 Btu/h	-	9.8 CEER	ANSI/AHAMRAC-1
	≥ 20,000 Btu/h	-	9.3 CEER	
Room air conditioners with reverse cycle without louvered sides for applications outside U.S.	< 14,000 Btu/h	-	9.3 CEER	ANSI/AHAMRAC-1
	≥ 14,000 Btu/h	-	8.7 CEER	
Room air conditioners, casement only for applications outside U.S.	All capacities	-	9.5 CEER	ANSI/AHAMRAC-1
Room air conditioners, casement-slider for application outside U.S.	All capacities	-	10.4 CEER	ANSI/AHAMRAC-1

For SI: 1 British thermal unit per hour = 0.2931 W, °C = [(°F) - 32]/1.8.

"Cap" = The rated cooling capacity of the product in Btu/h. If the unit's capacity is less than 7,000 Btu/h, use 7,000 Btu/h in the calculation. If the unit's capacity is greater than 15,000 Btu/h, use 15,000 Btu/h in the calculations.

^a Chapter 6 contains a complete specification of the referenced standards, which include test procedures, including the referenced year version of the test procedure.

^b Nonstandard size units must be factory labeled as follows: "MANUFACTURED FOR NONSTANDARD SIZE APPLICATIONS ONLY: NOT TO BE INSTALLED IN NEW STANDARD PROJECTS." Nonstandard size efficiencies apply only to units being installed in existing sleeves having an external wall opening of less than 16 inches (406 mm) high or less than 42 inches (1067 mm) wide and having a cross-sectional area less than 670 square inches (0.43 m²).

- c The cooling-mode wet bulb temperature requirement only applies for units that reject condensate to the condenser coil.
- d "Cap" in EER and COPH equations for PTACs and PTHPs means cooling capacity in Btu/h at 95°F outdoor dry-bulb temperature.
- e This table is a replica of ASHRAE 90.1 Table 6.8.1-4 Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single-Package Vertical Heat Pumps, Room Air Conditioners, and Room Air-Conditioner Heat Pumps—Minimum Efficiency Requirements.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapters 19.27A and 19.27 RCW. WSR 22-14-091, § 51-11C-403324, filed 7/1/22, effective 7/1/23.]