

(Effective until July 1, 2020)

WAC 51-11C-403231 Table C403.2.3(1)—Minimum efficiency requirements—Electrically operated unitary air conditioners and condensing units.

Table C403.2.3(1)A
Minimum Efficiency Requirements—Electrically Operated Unitary Air Conditioners and Condensing Units

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^A
Air conditioners, air cooled	< 65,000 Btu/h ^b	All	Split System	13.0 SEER	AHRI 210/240
			Single Package	14.0 SEER	
Through-the-wall (air cooled)	≤ 30,000 Btu/h ^b	All	Split system	12.0 SEER	
			Single Package	12.0 SEER	
Small duct high velocity, air cooled	< 65,000 Btu/h ^b	All	Split system	11.0 SEER	
Air conditioners, air cooled	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.2 EER 12.9 IEER	AHRI 210/240
		All other	Split System and Single Package	11.0 EER 12.7 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.0 EER 12.4 IEER	
		All other	Split System and Single Package	10.8 EER 12.2 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.0 EER 11.6 IEER	
		All other	Split System and Single Package	9.8 EER 11.4 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	9.7 EER 11.2 IEER	
		All other	Split System and Single Package	9.5 EER 11.6 IEER	
Air conditioners, water cooled	< 65,000 Btu/h ^b	All	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 210/240
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.1 EER 13.9 IEER	AHRI 210/240
		All other	Split System and Single Package	11.9 EER 13.7 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.5 EER 13.9 IEER	
		All other	Split System and Single Package	12.3 EER 13.7 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.4 EER 13.6 IEER	
		All other	Split System and Single Package	12.2 EER 13.4 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.2 EER 13.5 IEER	
		All other	Split System and Single Package	12.0 EER 13.3 IEER	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^A
Air conditioners, evaporatively cooled	< 65,000 Btu/h ^b	All	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 210/240
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 340/360
		All other	Split System and Single Package	11.9 EER 12.1 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.0 EER 12.2 IEER	
		All other	Split System and Single Package	11.8 EER 12.0 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.9 EER 12.1 IEER	
		All other	Split System and Single Package	11.7 EER 11.9 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.7 EER 11.9 IEER	
All other		Split System and Single Package	11.5 EER 11.7 IEER		
Condensing units, air cooled	≥ 135,000 Btu/h			10.5 EER 11.8 IEER	AHRI 365
Condensing units, water cooled	≥ 135,000 Btu/h			13.5 EER 14.0 IEER	
Condensing units, evaporatively cooled	≥ 135,000 Btu/h			13.5 EER 14.0 IEER	

For SI: 1 British thermal unit per hour = 0.2931 W.

^a Chapter 6 of the referenced standard contains a complete specification of the referenced test procedure, including the reference year version of the test procedure.

^b Single-phase, air-cooled air conditioners less than 65,000 Btu/h are regulated by NAECA. SEER values are those set by NAECA.

Table C403.2.3(1)B

Minimum Efficiency Requirements—Electrically Operated Variable Refrigerant Flow Air Conditioners

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Air Conditioners, Air Cooled	< 65,000 Btu/h	All	VRF Multi-Split System	13.0 SEER	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.2 EER 13.1 IEER (before 1/1/2017) 15.5 IEER (as of 1/1/2017)	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.0 EER 12.9 IEER (before 1/1/2017) 14.9 IEER (as of 1/1/2017)	
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	10.0 EER 11.6 IEER (before 1/1/2017) 13.9 IEER (as of 1/1/2017)	

Table C403.2.3(1)C

Minimum Efficiency Requirements—Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Air Cooled (cooling mode)	< 65,000 Btu/h	All	VRF Multi-Split System	13.0 SEER	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.0 EER 12.9 IEER (before 1/1/2017) 14.6 IEER (as of 1/1/2017)	
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	10.8 EER 12.7 IEER (before 1/1/2017) 14.4 IEER (as of 1/1/2017)	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	10.6 EER 12.3 IEER (before 1/1/2017) 13.9 IEER (as of 1/1/2017)	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	10.4 EER 12.1 IEER (before 1/1/2017) 13.7 IEER (as of 1/1/2017)	
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	9.5 EER 11.0 IEER (before 1/1/2017) 12.7 IEER (as of 1/1/2017)	
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	9.3 EER 10.8 IEER (before 1/1/2017) 12.5 IEER (as of 1/1/2017)	
VRF Water Source (cooling mode)	< 65,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	12.0 EER	AHRI 1230
	< 65,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	11.8 EER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	12.0 EER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	11.8 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	10.0 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	9.8 EER	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Groundwater Source (cooling mode)	< 135,000 Btu/h	All	VRF Multi-Split System <i>59°F entering water</i>	16.2 EER	AHRI 1230
	< 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>59°F entering water</i>	16.0 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System <i>59°F entering water</i>	13.8 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>59°F entering water</i>	13.6 EER	
VRF Ground Source (cooling mode)	< 135,000 Btu/h	All	VRF Multi-Split System <i>77°F entering water</i>	13.4 EER	AHRI 1230
	< 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>77°F entering water</i>	13.2 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System <i>77°F entering water</i>	11.0 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>77°F entering water</i>	10.8 EER	
VRF Air Cooled (heating mode)	< 65,000 Btu/h (cooling capacity)	—	VRF Multi-Split System	7.7 HSPF	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>47°F db/43°F wb outdoor air</i> <i>17°F db/15°F wb outdoor air</i>	3.3 COP 2.25 COP	
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>47°F db/43°F wb outdoor air</i> <i>17°F db/15°F wb outdoor air</i>	3.2 COP 2.05 COP	
VRF Water Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>68°F entering water</i>	4.2 COP	AHRI 1230
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>68°F entering water</i>	3.9 COP	
VRF Groundwater Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>50°F entering water</i>	3.6 COP	AHRI 1230
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>50°F entering water</i>	3.3 COP	
VRF Ground Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>32°F entering water</i>	3.1 COP	AHRI 1230

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System 32°F entering water	2.8 COP	

[Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-403231, filed 5/2/17, effective 6/2/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-403231, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-403231, filed 2/1/13, effective 7/1/13.]

(Effective July 1, 2020)

WAC 51-11C-403231 Table C403.3.2(1)—Minimum efficiency requirements—Electrically operated unitary air conditioners and condensing units.

**Table C403.3.2(1)A
Minimum Efficiency Requirements—Electrically Operated Unitary Air Conditioners and Condensing Units**

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^A
Air conditioners, air cooled	< 65,000 Btu/h ^b	All	Split System	13.0 SEER	AHRI 210/240
			Single Package	14.0 SEER	
Through-the-wall (air cooled)	≤ 30,000 Btu/h ^b	All	Split system	12.0 SEER	
			Single Package	12.0 SEER	
Small duct high velocity, air cooled	< 65,000 Btu/h ^b	All	Split system	11.0 SEER	
Air conditioners, air cooled	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.2 EER 12.9 IEER	
		All other	Split System and Single Package	11.0 EER 12.7 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.0 EER 12.4 IEER	
		All other	Split System and Single Package	10.8 EER 12.2 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.0 EER 11.6 IEER	
		All other	Split System and Single Package	9.8 EER 11.4 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	9.7 EER 11.2 IEER	
		All other	Split System and Single Package	9.5 EER 11.6 IEER	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure ^A
Air conditioners, water cooled	< 65,000 Btu/h ^b	All	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 210/240
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.1 EER 13.9 IEER	AHRI 210/240
		All other	Split System and Single Package	11.9 EER 13.7 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.5 EER 13.9 IEER	
		All other	Split System and Single Package	12.3 EER 13.7 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.4 EER 13.6 IEER	
		All other	Split System and Single Package	12.2 EER 13.4 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.2 EER 13.5 IEER	
All other		Split System and Single Package	12.0 EER 13.3 IEER		
Air conditioners, evaporatively cooled	< 65,000 Btu/h ^b	All	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 210/240
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.1 EER 12.3 IEER	AHRI 340/360
		All other	Split System and Single Package	11.9 EER 12.1 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	12.0 EER 12.2 IEER	
		All other	Split System and Single Package	11.8 EER 12.0 IEER	
	≥ 240,000 Btu/h and < 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.9 EER 12.1 IEER	
		All other	Split System and Single Package	11.7 EER 11.9 IEER	
	≥ 760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.7 EER 11.9 IEER	
All other		Split System and Single Package	11.5 EER 11.7 IEER		
Condensing units, air cooled	≥ 135,000 Btu/h			10.5 EER 11.8 IEER	AHRI 365
Condensing units, water cooled	≥ 135,000 Btu/h			13.5 EER 14.0 IEER	
Condensing units, evaporatively cooled	≥ 135,000 Btu/h			13.5 EER 14.0 IEER	

For SI: 1 British thermal unit per hour = 0.2931 W.

^a Chapter 12 of the referenced standard contains a complete specification of the referenced test procedure, including the reference year version of the test procedure.

^b Single-phase, air-cooled air conditioners less than 65,000 Btu/h are regulated by NAECA. SEER values are those set by NAECA.

Table C403.3.2(1)B
Minimum Efficiency Requirements—Electrically Operated Variable Refrigerant Flow Air Conditioners

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Air Conditioners, Air Cooled	< 65,000 Btu/h	All	VRF Multi-Split System	13.0 SEER	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.2 EER 15.5 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.0 EER 14.9 IEER	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-split System	10.0 EER 13.9 IEER	

Table C403.3.2(1)C
Minimum Efficiency Requirements—Electrically Operated Variable Refrigerant Flow Air-to-Air and Applied Heat Pumps

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Air Cooled (cooling mode)	< 65,000 Btu/h	All	VRF Multi-Split System	13.0 SEER	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	11.0 EER 14.6 IEER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	10.8 EER 14.4 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	10.6 EER 13.9 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	10.4 EER 13.7 IEER	
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System	9.5 EER 12.7 IEER	
	≥ 240,000 Btu/h	Electric Resistance (or none)	VRF Multi-Split System with Heat Recovery	9.3 EER 12.5 IEER	
VRF Water Source (cooling mode)	< 65,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	12.0 EER 16.0 IEER	AHRI 1230
	< 65,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	11.8 EER 15.8 IEER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	12.0 EER 16.0 IEER	
	≥ 65,000 Btu/h and < 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	11.8 EER 15.8 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	10.0 EER 14.0 IEER	
	≥ 135,000 Btu/h and < 240,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	9.8 EER 13.8 IEER	
	≥ 240,000 Btu/h	All	VRF Multi-Split System <i>86°F entering water</i>	12.0 IEER	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
	≥ 240,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>86°F entering water</i>	11.8 IEER	
VRF Groundwater Source (cooling mode)	< 135,000 Btu/h	All	VRF Multi-Split System <i>59°F entering water</i>	16.2 EER	AHRI 1230
	< 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>59°F entering water</i>	16.0 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System <i>59°F entering water</i>	13.8 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>59°F entering water</i>	13.6 EER	
VRF Ground Source (cooling mode)	< 135,000 Btu/h	All	VRF Multi-Split System <i>77°F entering water</i>	13.4 EER	AHRI 1230
	< 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>77°F entering water</i>	13.2 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System <i>77°F entering water</i>	11.0 EER	
	≥ 135,000 Btu/h	All	VRF Multi-Split System with Heat Recovery <i>77°F entering water</i>	10.8 EER	
VRF Air Cooled (heating mode)	< 65,000 Btu/h (cooling capacity)	—	VRF Multi-Split System	7.7 HSPF	AHRI 1230
	≥ 65,000 Btu/h and < 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>47°F db/43°F wb outdoor air</i> <i>17°F db/15°F wb outdoor air</i>	3.3 COP 2.25 COP	
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>47°F db/43°F wb outdoor air</i> <i>17°F db/15°F wb outdoor air</i>	3.2 COP 2.05 COP	
VRF Water Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>68°F entering water</i>	4.3 COP	AHRI 1230
	≥ 135,000 Btu/h and < 240,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>68°F entering water</i>	4.0 COP	
	≥ 240,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>68°F entering water</i>	3.9 COP	

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF Groundwater Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>50°F entering water</i>	3.6 COP	AHRI 1230
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>50°F entering water</i>	3.3 COP	
VRF Ground Source (heating mode)	< 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>32°F entering water</i>	3.1 COP	AHRI 1230
	≥ 135,000 Btu/h (cooling capacity)	—	VRF Multi-Split System <i>32°F entering water</i>	2.8 COP	

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-403231, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 17-10-062, § 51-11C-403231, filed 5/2/17, effective 6/2/17. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-403231, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-403231, filed 2/1/13, effective 7/1/13.]