

Appendix A 2016 Through 2018 Commercial Unitary Air Conditioning and Heat Pumps Specification

Unitary Air Conditioner Specification

Effective January 12, 2016 through December 31, 2018 (see Appendix B for 2019 specifications)

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	CEE Advanced Tier*	Test Procedure
	<65,000 Btu/h	All	Split System	15** SEER 12.5 EER	16 SEER 13 EER	18 SEER 13 EER	AHRI 210/240
			Single Package	15 SEER 12 EER	16 SEER 12 EER	17 SEER 12.5 EER	
	≥65,000 Btu/h and	Electric Resistance (or None)	Split System and Single Package	11.7 EER 12.9 IEER	12.2 EER 14 IEER	12.6 EER 18 IEER	
	<135,000 Btu/h	All Other	Split System and Single Package	11.5 EER 12.7 IEER	12 EER 13.8 IEER	12.4 EER 17.8 IEER	
Air Conditioners,	≥135,000 Btu/h and <240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.7 EER 12.4 IEER	12.2 EER 13.2 IEER	12.2 EER 17 IEER	AHRI 340/360
Air Cooled (Cooling		All Other	Split System and Single Package	11.5 EER 12.2 IEER	12 EER 13 IEER	12 EER 16.8 IEER	
Mode)	≥240,000 Btu/h and <760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.5 EER 11.6 IEER	10.8 EER 12.3 IEER	10.8 EER 13.5 IEER	
		All Other	Split System and Single Package	10.3 EER 11.4 IEER	10.6 EER 12.1 IEER	10.6 EER 13.3 IEER	
	≥760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	9.9 EER 11.2 IEER	10.4 EER 11.6 IEER	N/A	
		All Other	Split System and Single Package	9.7 EER 11.2 IEER	10.2 EER 11.4 IEER	N/A	
	<65,000 Btu/h	All	Split System and Single Package	N/A	14 EER	N/A	AHRI 210/240
Air	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	N/A	14 EER 15.3 IEER	N/A	
Conditioners, Water Cooled		All Other	Split System and Single Package	N/A	13.8 EER 15.1 IEER	N/A	
	≥135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	N/A	14 EER 14.8 IEER	N/A	AHRI 340/360
		All Other	Split System and Single Package	N/A	13.8 EER 14.6 IEER	N/A	



High Efficiency Commercial Air Conditioning and Heat Pumps Initiative

Air Conditioners, Evaporatively Cooled	<65,000 Btu/h	All	Split System and Single Package	N/A	14 EER	N/A	AHRI 210/240
	≥65,000 Btu/h and <135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	N/A	14 EER 15.3 IEER	N/A	- AHRI 340/360
		All Other	Split System and Single Package	N/A	13.8 EER 15.1 IEER	N/A	
	≥135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	N/A	13.5 EER 14.3 IEER	N/A	
		All Other	Split System and Single Package	N/A	13.3 EER 14.1 IEER	N/A	

SEER—Seasonal Energy Efficiency Ratio

EER—Energy Efficiency Ratio

IEER—Integrated Energy Efficiency Ratio

^{*}The Advanced Tier should not be considered a level of performance that is currently being met by several manufacturers in all nominal sizes. Instead, the Advanced Tier is an aspirational level that acknowledges and provides recognition for manufacturers who have developed the most efficient systems available in the market today. The tier is intended to identify a top performing product line(s) or a major category within a given product line, and to encourage additional availability in the future. Such products may not yet be broadly available in the market or cost-effective in portions of the country or in some applications.

^{**}With the exception of the advanced tier for single package air conditioners, levels for equipment <65,000 Btu/h align with corresponding tiers in the CEE High Efficiency Residential Central Air Conditioners and Air Source Heat Pumps Specification.



Unitary Heat Pump Specification

Effective January 12, 2016 through December 31, 2018 (see Appendix B for 2019 specifications)

		Heating				Test	
Equipment Type	Size Category	Section Type	Subcategory	CEE Tier 1	CEE Tier 2	Procedure	
	<65,000 Btu/h	All	Split System	15 SEER 12.5 EER	16 SEER 13 EER	AHRI 210/240	
			Single Package	15 SEER 12 EER	16 SEER 12 EER		
	≥65,000 and <135,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	11.3 EER 12.2 IEER	11.8 EER 13.6 IEER	- AHRI 340/360	
		All Other	Split System and Single Package	11.1 EER 12 IEER	11.6 EER 13.4 IEER		
Air Cooled (Cooling Mode)	≥135,000 and <240,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.9 EER 11.6 IEER	N/A		
		All Other	Split System and Single Package	10.7 EER 11.4 IEER	N/A		
	≥240,000 and <760,000 Btu/h	Electric Resistance (or None)	Split System and Single Package	10.3 EER 10.6 IEER	N/A		
		All Other	Split System and Single Package	10.1 EER 10.4 IEER	N/A		
	<65,000 Btu/h ≥65,000 and <135,000 Btu/h	_	Split System	8.5 HSPF	9 HSPF	A LIDI 210 /240	
		_	Single Package	8.2 HSPF	8.2 HSPF	AHRI 210/240	
		-	47°F db/43°F wb Outdoor Air	3.4 COP	N/A		
Air Cooled (Heating Mode)		_	17°F db/15°F wb Outdoor Air	2.4 COP	N/A	A LIDI 240 /260	
	≥135,000 Btu/h	-	47°F db/43°F wb Outdoor Air	3.2 COP	N/A	AHRI 340/360	
		-	17°F db/15°F wb Outdoor Air	2.1 COP	N/A		
Water Source (Cooling Mode)	<135,000 Btu/h	All	86° Entering Water	14 EER	N/A	ISO-13256-1	
Water Source (Heating Mode)	<135,000 Btu/h	_	68° Entering Water	4.6 COP	N/A	ISO-13256-1	

SEER—Seasonal Energy Efficiency Ratio

EER—Energy Efficiency Ratio

HSPF— Heating Seasonal Performance Factor wb—Wet Bulb

IEER—Integrated Energy Efficiency Ratio

COP—Coefficient of Performance

db—Dry Bulb



Variable Refrigerant Flow Multisplit Air Conditioner Specification Effective January 12, 2016

Equipment Type	Size Category Heating Section Type		Subcategory	CEE Tier 1	CEE Tier 2	Test Procedure	
	<65,000 Btu/h	All	Multisplit System	15 SEER 12.5 EER	16 SEER 13 EER	AHRI 1230	
VRF Air Cooled	≥65,000 and <135,000 Btu/h	Electric Resistance (or None)	Multisplit System	11.7 EER 14.9 IEER	N/A		
(Cooling Mode)	≥135,000 and <240,000 Btu/h	Electric Resistance (or None)	Multisplit System	11.7 EER 14.4 IEER	N/A		
	≥240,000 Btu/h	Electric Resistance (or None)	Multisplit System	10.5 EER 13 IEER	N/A		

SEER—Seasonal Energy Efficiency Ratio

IEER—Integrated Energy Efficiency Ratio COP—Coefficient of Performance

EER—Energy Efficiency Ratio

HSPF— Heating Seasonal Performance Factor



Variable Refrigerant Flow Multisplit Heat Pump Specification

Effective January 12, 2016

Equipment	Size	Heating				Test	
Type	Category	Section Type	Subcategory	CEE Tier 1	CEE Tier 2	Procedure	
	<65,000 Btu/h	All	Multisplit System	15 SEER 12.5 EER	16 SEER 13 EER		
	≥65,000 and <135,000 Btu/h	Electric Resistance (or None)	Multisplit System	11.3 EER 14.2 IEER	N/A		
			Multisplit System with Heat Recovery	11.1 EER 14 IEER	N/A		
VRF Air Cooled (Cooling Mode)	≥135,000 and <240,000 Btu/h	Electric Resistance (or None)	Multisplit System	10.9 EER 13.7 IEER	N/A		
Ü			Multisplit System with Heat Recovery	10.7 EER 13.5 IEER	N/A		
	≥240,000 Btu/h	Electric Resistance (or None)	Multisplit System	10.3 EER 12.5 IEER	N/A		
			Multisplit System with Heat Recovery	10.1 EER 12.3 IEER	N/A	AHRI 1230	
	<65,000 Btu/h	-	Multisplit System	8.5 HSPF	9.0 HSPF	711111111111111111111111111111111111111	
	≥65,000 and		47°F db/43°F wb Outdoor Air	3.4 COP	N/A		
VRF Air Cooled, (Heating Mode)	<135,000 Btu/h	-	17°F db/15°F wb Outdoor Air	2.4 COP	N/A		
, 0 ,	≥135,000 Btu/h	_	47°F db/43°F wb Outdoor Air	3.2 COP	N/A		
		-	17°F db/15°F wb Outdoor Air	2.1 COP	N/A]	
VRF Water Source (Cooling Mode)			Multisplit System 86° Entering Water	14 EER	N/A		
	<135,000 Btu/h	All	Multisplit System with Heat Recovery 86° Entering Water	13.8 EER	N/A		
VRF Water Source (Heating Mode)	<135,000 Btu/h		68° Entering Water	4.6 COP	N/A		

SEER—Seasonal Energy Efficiency Ratio

EER—Energy Efficiency Ratio

HSPF— Heating Seasonal Performance Factor

wb-Wet Bulb

IEER—Integrated Energy Efficiency Ratio

COP—Coefficient of Performance

db—Dry Bulb