

Appendix A CEESM Commercial Unitary Air-conditioning and Heat Pumps Specification

CEE periodically revises its specifications. See www.cee1.org or www.ceeform.org for the most recent version. For Terms and Conditions of these specifications, see www.cee1.org/terms.php3.

Initiative Participants have the option to promote the full-load metric or part-load metric or both metrics in this specification as the basis for their participation in the CEE High Efficiency Commercial Unitary Air-conditioning and Heat Pump Initiative. This applies to all specifications in the Initiative. Refer to the [Initiative](#) for more information on the metrics.

Unitary Air-conditioner Specification

Effective January 12, 2016

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	CEE Advanced Tier*	Test Procedure
Air Conditioners, Air Cooled (Cooling Mode)	<65,000 Btu/h	All	Split System	15 ¹ 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 <135,000 Btu/h	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	AHRI 340/360
		All Other	Split System and Single Package	11.5 EER 12.7 IEER	12 EER 13.8 IEER	12.4 EER 17.8 IEER	
	≥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	
		All Other	Split System and Single Package	11.5 EER 12.2 IEER	12 EER 13 IEER	12 EER 16.8 IEER	
	≥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	

¹ 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.

	≥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	
Air Conditioners, Water 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	14 EER 14.8 IEER	N/A	
		All Other	Split System and Single Package	N/A	13.8 EER 14.6 IEER	N/A	
	Air Conditioners, Evaporatively Cooled	<65,000 Btu/h	All	Split System and Single Package	N/A	14 EER	N/A
≥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.

Unitary Heat Pump Specification

Effective January 12, 2016

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	Test Procedure	
Air Cooled (Cooling Mode)	<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	11.1 EER 12 IEER	11.6 EER 13.4 IEER		
	≥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	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	10.1 EER 10.4 IEER	N/A		
	Air Cooled, (Heating Mode)	<65,000 Btu/h	-	Split System	8.5 HSPF	9 HSPF	AHRI 210/240
			-	Single Package	8.2 HSPF	8.2 HSPF	
≥65,000 and <135,000 Btu/h		-	47°F db/43°F wb Outdoor Air	3.4 COP	N/A	AHRI 340/360	
		-	17°F db/15°F wb Outdoor Air	2.4 COP	N/A		
≥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		
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
VRF Air Cooled (Cooling Mode)	<65,000 Btu/h	All	Multisplit System	15 SEER 12.5 EER	16 SEER 13 EER	AHRI 1230
	≥65,000 and <135,000 Btu/h	Electric Resistance (or None)	Multisplit System	11.7 EER 14.9 IEER	N/A	
	≥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

EER—Energy Efficiency Ratio

HSPF— Heating Seasonal Performance Factor

IEER—Integrated Energy Efficiency Ratio

COP—Coefficient of Performance

Variable Refrigerant Flow Multisplit Heat Pump Specification

Effective January 12, 2016

Equipment Type	Size Category	Heating Section Type	Subcategory	CEE Tier 1	CEE Tier 2	Test Procedure
VRF Air Cooled (Cooling Mode)	<65,000 Btu/h	All	Multisplit System	15 SEER 12.5 EER	16 SEER 13 EER	AHRI 1230
	≥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	
	≥135,000 and <240,000 Btu/h	Electric Resistance (or None)	Multisplit System	10.9 EER 13.7 IEER	N/A	
			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		
VRF Air Cooled, (Heating Mode)	<65,000 Btu/h	-	Multisplit System	8.5 HSPF	9.0 HSPF	
	≥65,000 and <135,000 Btu/h	-	47°F db/43°F wb Outdoor Air	3.4 COP	N/A	
			17°F db/15°F wb Outdoor Air	2.4 COP	N/A	
	≥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)	<135,000 Btu/h	All	Multisplit System 86° Entering Water	14 EER	N/A
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	

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 COP—Coefficient of Performance
 db—Dry Bulb