# **HVAC Efficiency Requirements**



TVA EnergyRight for Business & Industry

#### VARIABLE REFRIGERANT MULTI-SPLIT HEAT PUMPS

Size (Btu/h)	Sustem Turne		els				
5128 (Btu/11)	System Type	SEER	SEER2	IEER	COP*	HSPF	HSPF2
< 65,000 Btu/h (single-phase)	Multi-split	14	13.3			8	6.8
≥ 65,000 Btu/h and < 135,000 Btu/h				14.1	3.4		
≥ 135,000 Btu/h and < 240,000 Btu/h	System			13.5	3.3		
≥ 240,000 Btu/h and < 760,000 Btu/h				12.5	3.2		

#### **UNITARY HEAT PUMPS**

Size (Btu/h)	System Type	Minimum Efficiency Levels						
Size (blu/ii)	System Type		SEER2	IEER	COP*	HSPF	HSPF2	
< 65,000 Btu/h (single-phase)	Split System	14	13.3			8	6.8	
	Single Package	14	13.3			8	6.7	
≥ 65,000 Btu/h and < 135,000 Btu/h				14.1	3.4			
≥ 135,000 Btu/h and < 240,000 Btu/h	Split System & Single Package			13.5	3.3			
≥ 240,000 Btu/h and < 760,000 Btu/h	onigie i dekage			12.5	3.2			

### PACKAGED TERMINAL HEAT PUMPS (PTHP)

Capacity (Btu/h)	Minimum Efficiency Levels				
	EER	COP			
6,000	14.3				
7,000	14.5	4			
8,000	13.9				
9,000	13.6	3.8			
10,000	13.2	3.0			
11,000	12.8	3.7			
12,000	12.5	5.7			
13,000	12.1	3.6			
14,000	11.8	3.0			
15,000					
16,000	- 11.4	3.5			
17,000	11.4	5.5			
18,000					

All Non-CEE Advanced Tier HVAC units must exceed deemed program efficiency requirement tables on pages 1 and 2. Any CEE Advanced Tier HVAC units must meet or exceed deemed program efficiency requirement tables on page 2

Equipment must exceed only one of the efficiency categories listed in the efficiency standards tables, based on the size of the unit.

All equipment must meet AHRI standards (210/240, 320 or 340/360), be listed by a Nationally Recognized Testing Laboratory (ETL, UL, etc.), and use a minimum ozone depleting refrigerant (e.g., HCFC or HFC).

\*Many heat pumps list two COP ratings: one which applies to an outdoor temperature of 47° Fdb and 43° Fwb and another which applies to an outdoor temperature of 17°Fdb and 15°Fwb. The COP stanard listed in the table applies only to the COP rating at an outdoor temperature of 47°Fdb and 43°Fwb.

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UNITARY A/C UNITS								
Size (Ton)	Size (kBtu/h)	System Type	Minim	Minimum Efficiency Levels				
	Size (KD(U/II)	System type	SEER	IEER				
< 3.75	< 45	Split System	14	13.3				
< 3.75	< 45	Single Package	14	13.4				
≥ 3.75 to < 5.4	≥ 45 to < 65		14	13.4				
≥ 5.4 to < 11.25	≥ 65 to < 135	Split System & Single Package			14.8			
≥ 11.25 to < 20	≥ 135 to < 240				14.2			
≥ 20 to < 63.3	≥ 240 to < 760				13.2			
≥ 63.3	≥ 760				12.5			

UNITARY A/C UNITS - CEE ADVANCED TIER								
Size (Ton)	Size (kBtu/h)	System Type	Minimum Efficiency Levels					
		System type	SEER	SEER2	IEER	EER		
< 5.4	< 65	Split System	18	17.1		13		
< 5.4	< 65	Single Package	17	16.3		12.5		
≥ 5.4 to < 11.25	≥ 65 to < 135	Split System			18	12.6		
≥ 11.25 to < 20	≥ 135 to < 240	& Single Package			17	12.2		
≥ 20 to < 63.3	≥ 240 to < 760				14.5	10.8		

All Non-CEE Advanced Tier HVAC units must exceed deemed program efficiency requirement tables on pages 1 and 2. Any CEE Advanced Tier HVAC units must meet or exceed deemed program efficiency requirement tables on page 2.

Equipment must exceed only one of the efficiency categories listed in the efficiency standards tables, based on the size of the unit.

All equipment must meet AHRI standards (210/240, 320 or 340/360), be listed by a Nationally Recognized Testing Laboratory (ETL, UL, etc.), and use a minimum ozone depleting refrigerant (e.g., HCFC or HFC).