

# BPA Heat Pump Specification

Version 10/1/2017



Applicable to: Commercial Heat Pump Upgrades and Heat Pump Conversions

Note: Selected equipment must meet both cooling and heating Tier requirements (if listed)

Specification last updated 4/2017

## Heat Pumps - Air Source

Equipment Size (Btu/h)	Mode	Heating Type	Subcategory	Tier 1 (High Efficiency)	Tier 2 (Highest Efficiency)
<65,000	Cooling Mode	All	Split System	15 SEER	16 SEER
		All	Single Package	15 SEER	16 SEER
	Heating Mode	-	Split System	8.5 HSPF	9 HSPF
		-	Single Package	8 HSPF	8.2 HSPF
≥65,000 and <135,000	Cooling Mode	Electric Resistance (or None)	Split System and Single Package	12.2 IEER	13.6 IEER
		All Other	Split System and Single Package	12 IEER	13.4 IEER
	Heating Mode	-	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 and <240,000	Cooling Mode	Electric Resistance (or None)	Split System and Single Package	11.6 IEER	N/A
		All Other	Split System and Single Package	11.4 IEER	N/A
	Heating Mode	-	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
≥240,000 and <760,000	Cooling Mode	Electric Resistance (or None)	Split System and Single Package	10.6 IEER	N/A
		All Other	Split System and Single Package	10.4 IEER	N/A
	Heating Mode	-	N/A	N/A	N/A

## Heat Pumps - Water Source

Equipment Size (Btu/h)	Mode	Heating Type	Subcategory	Tier 1 (High Efficiency)	Tier 2 (Highest Efficiency)
<135,000	Cooling Mode	All	86° Entering Water	14 EER	N/A
	Heating Mode	-	68° Entering Water	4.6 COP	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

db—Dry Bulb

wb—Wet Bulb

The BPA specification is based on the Consortium for Energy Efficiency (CEE) Commercial Unitary Air-conditioning and Heat Pumps Specification, last updated January 12, 2016. BPA is a member of the CEE High Efficiency Commercial Unitary Air-conditioning and Heat Pump Initiative. As part of this Initiative, BPA has adopted CEE's Tier 1 and Tier 2 convention, in addition to a part-load metric in order to focus on energy efficiency savings rather than peak energy savings. More information about CEE can be found at <http://www.cee1.org/>