

## PTCS® Air Source Heat Pump Form (optional)

- 1) Enter all data on a mobile device or computer at [ptcs.bpa.gov](https://ptcs.bpa.gov) using the certified technician's account. This optional form can be filled out for later entry online. Issues entering data? Submit this form for entry:
  - Customers of Bonneville Power Administration (BPA) utilities: email [ResHVAC@bpa.gov](mailto:ResHVAC@bpa.gov), fax to 1.877.848.4074, or call 1.800.941.3867
  - Customers of PGE or Pacific Power: email [Residentialforms@energytrust.org](mailto:Residentialforms@energytrust.org) or call 1.866.365.3526
- 2) Submit the Registry Installation Report (found online) and additional required documents to the customer utility. Unless requested by the utility, submission of this form is not required.

### Site Information

PTCS Tech #	PTCS Tech Name	Install Date	Electric Utility	
Installation Site Address		Site City	Site State	Site Zip
Home Type: <input type="checkbox"/> Existing Site Built <input type="checkbox"/> New Construction Site Built <input type="checkbox"/> Manufactured: # of Sections <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3				
Heated Area: _____ Sq Ft		Foundation Type (Site Built): <input type="checkbox"/> Crawlspace <input type="checkbox"/> Full Basement <input type="checkbox"/> Half Basement <input type="checkbox"/> Slab		
Existing Heating System Being Replaced (If new home, indicate heating system installed):				
<input type="checkbox"/> Electric Forced Air w/out AC <input type="checkbox"/> Electric Forced Air w/ AC <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Air Source Heat Pump <input type="checkbox"/> Ground Source Heat Pump <input type="checkbox"/> Natural Gas Furnace (Gas Company: _____) <input type="checkbox"/> Other Non-Electric Space Heating: _____				
Back up Heat: <input type="checkbox"/> None <input type="checkbox"/> Electric Forced Air <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Natural Gas Furnace <input type="checkbox"/> Non-Electric Space Heating				

### New Heat Pump Equipment Data

*\*If less than 9.0 HSPF or 14 SEER, check with utility for requirements.*

AHRI #	SEER*	HSPF*	Outdoor HP Capacity (tons)
Heat Pump Make	Outdoor HP Model #		<input type="checkbox"/> Non Variable Speed HP Compressor <input type="checkbox"/> Variable Speed HP Compressor
	Indoor HP Model #		Balance Point? _____ Provide BP documentation to utility.

Did you perform all of your tests in Test Only/Check Charge mode?  Yes  No  N/A

### External Static Pressure Test

*Check unit operating at full capacity unless conditions do not permit.*

1. Measure return static pressure	1. Return Static Pressure	Units: <u>Use same units for TrueFlow test</u>
2. Measure supply plenum static pressure		<input type="checkbox"/> Pa <input type="checkbox"/> Inches H2O
3. Calculate external static pressure: add values in #1 and #2 values; ignore the minus sign	2. Supply Static Pressure	3. External Static Pressure

### TrueFlow Test

1. Measure NSOP (Normal System Operating Pressure) [A] 2. Check TrueFlow plate size and location 3. Measure TFSOP (Supply Pressure with TrueFlow Plate) [B] 4. Calculate Correction Factor [C] 5. Measure plate pressure 6. Enter Raw Flow CFM from tables [D] 7. Calculate Corrected Flow 8. Calculate CFM/ton	1. NSOP [A]	2a. Plate Size: <input type="checkbox"/> 14 <input type="checkbox"/> 20	2b. Plate location: <input type="checkbox"/> Air Handler <input type="checkbox"/> Return Grille
	3. TFSOP [B]	4. Correction Factor [C] from table or calculate $\sqrt{[A]/[B]}$	
	5. Plate Pressure	6. Raw Flow CFM from tables [D]	
	7. Corrected Flow CFM = [C] x [D]	8. CFM/ton	

# Refrigerant Charge Check

Run unit for at least 15 minutes in compressor-only mode before taking readings.

Outside Air Temp	°F	Mode unit tested in: <input type="checkbox"/> Heating (if ≤ 65°F) <input type="checkbox"/> Cooling (if > 65°F)
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Heating Mode (65°F or lower)	Cooling Mode (higher than 65°F)	Alternative Test Method
Supply Air (SA) Temp	Discharge Pressure	Specify method used
Return Air (RA) Temp	Discharge Temp [A]	Target
Temp Split (SA – RA)	Liquid Line Temp [B]	Test result
Expected Temp Split from table:	Sub cooling [A] – [B]	Meets specification? <input type="checkbox"/> Y <input type="checkbox"/> N

## Controls

<b>Compressor Low Ambient Lockout control (LAL) setting at 5° or less?</b> <input type="checkbox"/> Yes <input type="checkbox"/> Not Installed/Disabled <input type="checkbox"/> Non-Electric Backup <input type="checkbox"/> No	<b>Auxiliary (strip) heat lockout has been set to:</b> <input type="checkbox"/> 35°F <input type="checkbox"/> Below 35°F
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<b>HP Thermostat</b> Make	<b>HP Thermostat</b> Model
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**Is this a Multiple Capacity Compressor system?**

Yes; The discharge air sensor control is used to control auxiliary heat and is set no higher than 85°F or,

Yes; The staging thermostat is set warmer than 85°F and the resistance heat cannot operate at temperatures above 35°F, or

No, this does not apply.

### Notes