

Residential Package Unit Heat Pump with Electric Heat Start-Up Sheet

Proper start-up is critical to customer comfort and equipment longevity

Start-Up Date	<input type="text"/>	Company Name	<input type="text"/>	Start-Up Technician	<input type="text"/>
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Owner Information

Name	<input type="text"/>	Address	<input type="text"/>	Daytime Phone	<input type="text"/>
City	<input type="text"/>	State or Province	<input type="text"/>	Zip or Postal Code	<input type="text"/>

Equipment Data

Unit Model #	<input type="text"/>	Unit Serial #	<input type="text"/>
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General Information (Check all that apply)

<input type="radio"/> Residential	<input type="radio"/> New Construction	<input type="radio"/> Roof level	<input type="radio"/> Down flow
<input type="radio"/> Commercial	<input type="radio"/> Retrofit	<input type="radio"/> Grade level	<input type="radio"/> Side flow

Unit Location and Connections (Check all that apply)

<input type="checkbox"/> Unit is level and installed on:	<input type="checkbox"/> Slab	<input type="checkbox"/> Roof curb	<input type="checkbox"/> Duct connections are complete:	<input type="checkbox"/> Supply	<input type="checkbox"/> Return
<input type="checkbox"/> Condensate drain properly connected per the installation instructions		<input type="checkbox"/> Condensate trap has been primed with water			

Filters

<input type="checkbox"/> Filters installed	Number of filters	<input type="text"/>	Filter size	<input type="text"/>	<input type="radio"/> Filter located inside	<input type="radio"/> Filter located outside
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Additional Kits & Accessories Installed (Check all that apply)

<input type="checkbox"/> Refrigerant safety kit	<input type="checkbox"/> Low ambient kit	<input type="checkbox"/> Anti-recycle timer	<input type="checkbox"/> Crank case heater	<input type="checkbox"/> Filter frame kit
<input type="checkbox"/> Transformer kit	<input type="checkbox"/> Economizer	<input type="checkbox"/> Roof curb kit	<input type="checkbox"/> Burglar bar kit	<input type="checkbox"/> Hail guard kit
<input type="checkbox"/> Manual fresh air damper kit		<input type="checkbox"/> Motorized fresh air damper kit		

Electrical Connections & Inspection (Check all that apply)

<input type="radio"/> Single phase	<input type="radio"/> Three phase	<input type="radio"/> 208 volts AC	<input type="radio"/> 230 volt AC	<input type="radio"/> 460 volts AC	<input type="radio"/> 575 volts AC	
<input type="checkbox"/> Inspect wires and electrical connections		<input type="checkbox"/> Transformer wired properly for primary supply voltage		<input type="checkbox"/> Ground connected		
<input type="checkbox"/> Low voltage present at control board "R & C"			Measured voltage "R" and "C" outdoor unit control board			<input type="text"/>
<input type="checkbox"/> Line voltage present at disconnect		Measured voltage "L1 to L2"		<input type="text"/>	"L2 to L3"	<input type="text"/>
Compressor amperes "L1"		<input type="text"/>	"L2"	<input type="text"/>	"L3"	<input type="text"/>
Total amperes "L1"		<input type="text"/>	"L2"	<input type="text"/>	"L3"	<input type="text"/>
<input type="radio"/> Single stage compressor		<input type="radio"/> Two stage compressor				

Air Flow Setup

Blower Type & Set-Up	<input type="radio"/> ECM	COOL	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
		ADJUST	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
		DELAY	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
		HEAT	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
	<input type="radio"/> X-13	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
<input type="radio"/> PSC	<input type="radio"/> Low	<input type="radio"/> Medium Low	<input type="radio"/> Medium	<input type="radio"/> Medium High	<input type="radio"/> High	

Supply static (inches of water column)	<input type="text"/>	Supply air dry bulb temperature	<input type="text"/>	Outside air dry bulb temperature	<input type="text"/>
Return static (inches of water column)	<input type="text"/>	Return air dry bulb temperature	<input type="text"/>	Return air wet bulb temperature	<input type="text"/>
Total external static pressure	<input type="text"/>	Temperature drop	<input type="text"/>	Supply air wet bulb temperature	<input type="text"/>

Refrigerant Charge and Metering Device

<input type="radio"/> R-410A <input type="radio"/> R-22	Data plate - lbs / Oz <input type="text"/>	Suction line temperature <input type="text"/>	Discharge pressure <input type="text"/>
<input type="radio"/> TXV <input type="radio"/> Fixed Orifice	Discharge line temperature <input type="text"/>	Suction pressure <input type="text"/>	Liquid line temperature <input type="text"/>
TXV# / Orifice size <input type="text"/>		Superheat <input type="text"/>	Subcooling <input type="text"/>

Electric Heat (Supplemental and Emergency Heat)

Electric heat kit - Model number <input type="text"/>		Serial number <input type="text"/>		Rated KW <input type="text"/>	
<input type="radio"/> Single Phase	Measured Amperage	Heater 1 <input type="text"/>	Heater 2 <input type="text"/>	Heater 3 <input type="text"/>	
<input type="radio"/> Three Phase		Heater 4 <input type="text"/>	Heater 5 <input type="text"/>	Heater 6 <input type="text"/>	
Number of elements <input type="text"/>	Measured Voltage	Heater 1 <input type="text"/>	Heater 2 <input type="text"/>	Heater 3 <input type="text"/>	
		Heater 4 <input type="text"/>	Heater 5 <input type="text"/>	Heater 6 <input type="text"/>	
Heating return air dry bulb temperature <input type="text"/>		Heating supply air dry bulb temperature <input type="text"/>		Air temperature rise <input type="text"/>	

Clean Up Job Site

Job site has been cleaned, indoor and outdoor debris removed from job site
 Tools have been removed from unit
 All panels have been installed

Unit Operation and Cycle Test

Operate the unit through continuous fan cycles from the thermostat, noting and correcting any problems
 Operate the unit through cooling cycles from the thermostat, noting and correcting any problems
 Operate the unit through mechanical heating cycles from the thermostat, noting and correcting any problems
 Operate the unit through emergency heating cycles from the thermostat, noting and correcting any problems

Owner Education

Provide owner with the owner's manual
 Explain operation of system to equipment owner
 Explain thermostat use and programming (if applicable) to owner
 Explain the importance of regular filter replacement and equipment maintenance

Comments and Additional Job Details