

WhisperKOOL®

Quick Start Guide

Ceiling Mount 4000 / 8000 (H.E.)

Category	Specification	Notes	Provided (Y/N)
Dimensions	Evaporator: 16.1"L x 20.5"W x 15.5"H • Condenser: 31.18"L x 10.75"W x 21.18"H		N/A
Thermostat	Advanced digital display (50ft. cable), liquid-temperature-measuring bottle probe (50ft. cable)	Do not cut, splice, or modify display cable or bottle probe wires in any fashion. Thermostat not provided for 24V systems.	Y
Refrigerant	R134a	System does not come pre-charged with refrigerant. Nitrogen holding charge will need to be released prior to vacuum and charging process.	N
Line Set	Liquid Line: 1/4" • Suction Line: (Less than 50ft. 1/2") (Greater than 50ft. 5/8")	Do not exceed 100ft. Lineset length including equivalent fitting lengths for elbows and bends. See fitting equivalent length chart below.	N
Condensing Unit Service Valve Connection Sizes	Liquid service valve: Receives 1/4" OD copper pipe w/ threaded flare connection • Suction service valve: Receives 3/8" OD copper pipe w/ threaded flare connection (adapter required).	Condensing unit service valves utilize threaded connections. See line adapter chart below.	N/A
Evaporator Line Set Connection Sizes	Liquid line: 1/4" MNPT • Suction line: 1/2" MNPT	Evaporator lineset connections come equipped with threaded fittings. It is optional to remove the fittings and braze the line set connections instead. If utilizing the threaded fitting connections, see suction line adapter fitting chart below.	N/A
Drain Line	1/4" ID tubing	Braided or rigid tubing recommended. For more information, see pump performance specs below. Do not kink condensate tube.	N
Ducting	N/A		N
Registers & Grilles	N/A		N
Max External Static Pressure	0.35 inch WC		N/A
Evaporator Power Supply	115V (15 amp dedicated circuit required) 60Hz, 1 ∅	Do not use GFI	N/A
Condenser Power Supply	220V (15-amp dedicated circuit required) 60Hz, 1 ∅	Do not use GFI	N/A
Communication Wire	24V communication signal wire	24V communication signal wire must be run between evaporator and condenser. Use 18-5 solid thermostat wire. Stranded, braided, or shielded wire not recommended.	N/A

Line Set	Charge Total
10' Line Set	4.22lbs
20' Line Set	4.38 lbs
30' Line Set	4.54 lbs
40' Line Set	4.7 lbs
50' Line Set	4.86 lbs
60' Line Set	5.02 lbs
70' Line Set	5.18 lbs
80' Line Set	5.34 lbs
90' Line Set	5.5 lbs
100' Line Set	5.66 lbs

WhisperKOOL has provided the approximate refrigerant charge amount for initial start up based on the line set size. The tech will still need to dial in the desired subcooling to achieve optimum performance.

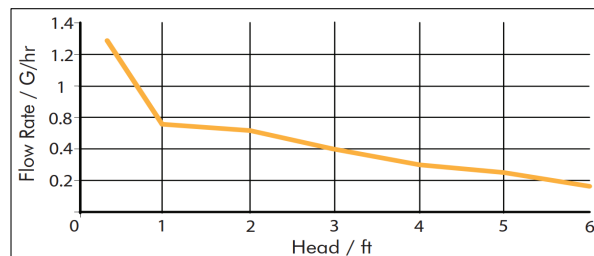
SUCTION LINE ADAPTER CHART		
Suction Line (OD)	Adapter Fitting at Condenser	Adapter Fitting at Evaporator
1/2"	3/8" FNPT x 1/2" MNPT	N/A
5/8"	3/8" FNPT x 5/8" MNPT	1/2" FNPT x 5/8" MNPT

FITTING EQUIVALENT LENGTH CHART					
Equivalent Length is expressed in Feet of Pipe					
Line Size OD	90° Short Radius Elbow	90° Long Radius Elbow	45° Elbow	U-Bend	Reverse U-Bend
1/4	1.2	0.7	0.2	1.4	1.4
3/8	1.3	0.8	0.3	1.6	1.6
1/2	1.4	0.9	0.4	1.8	1.8
5/8	1.5	1.0	0.5	2	2
3/4	1.9	1.3	0.6	2.6	2.6
7/8	2.3	1.5	0.7	3	3

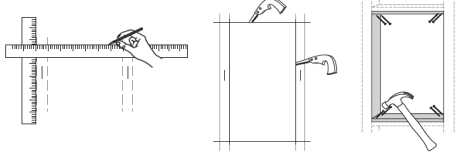
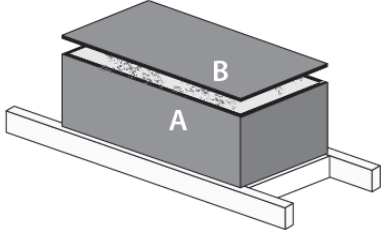
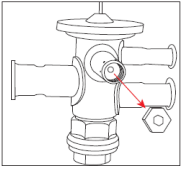
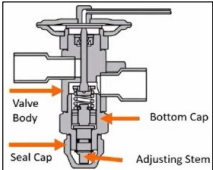
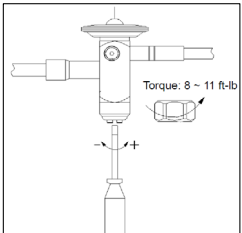
Max 100 ft. line including vertical rise and equivalent length of all fittings used.

DISCHARGE PIPE RUN CHART

TUBING SIZE
1/4" ID
BRAIDED



CONDENSATE PUMP	
Max Flow	Max Head
1.3G/Hr	16 ft.

Category	Specification	Notes
Mounting the Unit	<p>Locate the desired installation location. Using a stud finder, locate the ceiling joists on either side of the center point. Cut and frame an opening in the ceiling measuring 14.5" x 36".</p> <p>Make sure the framing is sufficient to support the weight of the cooling unit. Use only the mounting locations provided.</p> <p>Determine which orientation the unit will be installed in. Flush mount option is most common.</p>	
Insulation Blanket	<p align="center">⚠ WARNING ⚠</p> <p>The evaporator unit (fan coil unit) must be insulated using the insulation blanket provided in accordance with the installation manual. Refer to the insulation blanket installation instructions.</p> <p>Failure to follow the instructions provided will result in a poor vapor barrier, water damage, rust, and system corrosion which will void the warranty on your unit.</p> <p>Failure to properly insulate the evaporator unit may cause condensation to form on the surface of the housing and water damage to the surrounding structure, the cooling unit, and possibly the wine cellar.</p> <p>To avoid these issues, install the insulation kit and insulate the surface of the evaporator unit that is located outside of the wine cellar using the provided insulation blanket.</p>	
Danfoss TXV Adjustment	<p>Use a 5/32" hex key to remove the cap from the TXV superheat adjustment port. With the cap removed, insert the hex key into the superheat adjustment port.</p> <p>Increase superheat by turning the hex key clockwise. Decrease superheat by turning the hex key counterclockwise.</p> <p>When adjustments are finished replace the seal cap.</p>	
Sporlan TXV Adjustment	<p>Remove the seal cap using two wrenches. Use a 7/8" wrench on the bottom cap, and a 3/4" wrench on the seal cap.</p> <p>With the seal cap removed use a 3/16" service wrench to adjust the adjusting stem.</p> <p>When adjustments are finished replace the seal cap.</p>	
Sanhua TXV Adjustment	<p>Remove the seal cap using two wrenches. Use a 5/8" wrench on the lower body, and a 3/4" wrench on the seal cap.</p> <p>With the seal cap removed use a flathead screwdriver to adjust the regulation screw. Note: Stub screwdriver may be required due to space constraints inside evaporator unit.</p> <p>When adjustments are finished replace the seal cap.</p>	
Superheat Range	10-25°F	Fill out Warranty Checklist and submit to WhisperKOOL for approval.
Subcooling Range	5-15°F	Fill out Warranty Checklist and submit to WhisperKOOL for approval.
For additional information please refer to the Owner's Manual.		

