

WhisperKOOL®

Quick Start Guide

Quantum 9000 / 12000 (H.E.)

Category	Specification	Notes	Provided (Y/N)
Dimensions	Evaporator: 16.1"L x 20.5"W x 15.5"H • 9000 Condenser: 31.18"L x 10.75"W x 21.18"H • 12000 Condenser: 31.18"L x 10.75"W x 23.25"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. 5/8") (Greater than 50ft. 3/4")	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 3/8" OD copper pipe w/ threaded flare connection • Suction service valve: Receives 1/2" 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: 3/8" 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	3/4" ID CPVC or PVC	P-Trap must be installed on drain line. Drain is gravity fed and must be assembled during installation. Use a soft tube-cleaning brush to clean out the drain line. Failure to use a soft brush could damage the drip tray of the unit and void the warranty.	N
Ducting	14" Diameter Return • 14" Diameter Supply	WhisperKOOL recommends a minimum of R-8 insulation. Reference local code for ducting insulation requirements. Max duct length: 25ft. supply and 25ft. Return	N
Registers & Grilles	Supply register size: 14" x 14" • Return grille size 14" x 14"	Return air filter size: 14" x 14" (Merv 8). Do not exceed Merv 8 rating for optimal airflow. Do not use linear slot diffusers	N
Max External Static Pressure	1.2 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	4.80lbs
20' Line Set	5.18 lbs
30' Line Set	5.55 lbs
40' Line Set	5.93 lbs
50' Line Set	6.30 lbs
60' Line Set	6.68 lbs
70' Line Set	7.05 lbs
80' Line Set	7.43 lbs
90' Line Set	7.80 lbs
100' Line Set	8.18 lbs

SUCTION LINE ADAPTER CHART		
Suction Line (OD)	Adapter Fitting at Condenser	Adapter Fitting at Evaporator
5/8"	1/2" FNPT x 5/8" MNPT	1/2" FNPT x 5/8" MNPT
3/4"	1/2" FNPT x 3/4" MNPT	1/2" FNPT x 3/4" 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.

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.

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Mounting the Unit	<ol style="list-style-type: none"> 1. Locate the desired installation location. 2. If utilizing an external or secondary drip tray, ensure the drip tray is installed on a level surface. 3. Use a stud finder to locate the ceiling joists. The ceiling joists will be the mounting surface for one end of the galvanized hanging straps. (NOTE: Plumber's tape/hanger strap not provided.) Cut four pieces of galvanized hanging straps long enough to extend from the ceiling joists to the screws located at the top corners of the evaporator unit. 4. If using a drill, set drill to 8 lbs. of torque to prevent stripping out the screw holes. screw through the appropriate hole on the hanger strap. Re-install the removed screw. Secure the free end of the hanger strap to the ceiling joist 5. Using a 5/16" hex head nut driver, remove (1) screw from the top corner of the evaporator unit and route the screw through the appropriate hole on the hanger strap. Re-install the removed screw. Secure the free end of the hanger strap to the ceiling joist to prevent the evaporator unit from moving out of place. Repeat this step for the remaining three corners. 	
Secondary Condensate Drain Pan	Check local codes and regulations regarding the disposal of condensation for specific installation requirements. A separate drain line will need to be installed.	
Sealing the Seams	Seal all seams with foil tape.	
P-Trap	<p>A P-trap must be connected to the unit to ensure proper drainage of condensation. Failure to install a P-trap will void the warranty.</p> <p>Use a soft tube-cleaning brush to clean out the drain line. Failure to use a soft brush could damage the drip tray of the unit and void the warranty.</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.

