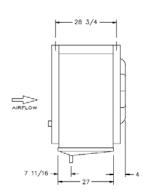


AIR DEFROST HIGH PROFILE UNIT COOLERS SERIES AHP

April 2016

Installation & Operating Instructions



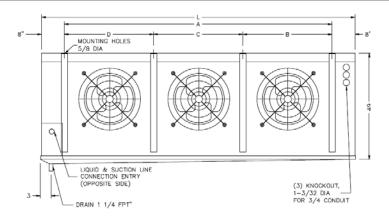




TABLE 1

Dimensional and Electrical Data

			Motors				Dimensions				Connections			Oper.	Approx.	
Unit	Air	Air		FLA			Inches				Inches			R-22	Shipping	
Model	Flow	Throw		230 V	460 V	575 V						Inlet	Suction	Drain	Charge	Wgt
No.	CFM	Feet	Qty	3 Ph	3 Ph	3 Ph	L	Α	В	С	D	OD	OD	FPT	lbs	lbs
				60 Hz	60 Hz	60 Hz										
AHP 490	9,960	70	1	6.8	3.1	2.5	69	53	-	-	53	1-1/8	1-5/8	1-1/4	12.0	460
AHP 590	9,420	70	1	6.8	3.1	2.5	69	53	-	-	53	1-1/8	1-5/8	1-1/4	16.0	490
AHP 675	9,250	65	1	6.8	3.1	2.5	69	53	-	-	53	1-1/8	1-5/8	1-1/4	18.0	525
AHP 720	9,100	65	1	6.8	3.1	2.5	69	53	-	-	53	1-3/8	1-5/8	1-1/4	24.0	555
AHP 980	19,200	70	2	13.6	6.2	5.0	122	106	-	53	53	1-3/8	2-1/8	1-1/4	24.0	765
AHP 1180	18,840	70	2	13.6	6.2	5.0	122	106	-	53	53	1-3/8	2-1/8	1-1/4	31.0	830
AHP 1350	18,500	65	2	13.6	6.2	5.0	122	106	-	53	53	1-5/8	2-1/8	1-1/4	39.0	895
AHP 1440	18,200	65	2	13.6	6.2	5.0	122	106	-	53	53	1-5/8	2-1/8	1-1/4	46.5	960
AHP 1770	28,260	70	3	20.4	9.3	7.5	175	159	53	53	53	1-5/8	2-5/8	1-1/4	46.6	1215
AHP 2025	27,750	65	3	20.4	9.3	7.5	175	159	53	53	53	1-5/8	2-5/8	1-1/4	55.2	1310
AHP 2160	27,300	65	3	20.4	9.3	7.5	175	159	53	53	53	1-5/8	3-1/8	1-1/4	67.5	1405

Air throw may vary with box loading

TABLE 2

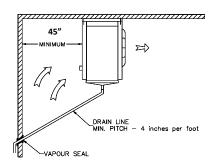
Performance and Expansion Valve Selection

+34ºF ROOM TEMPERATURE											
Unit	Capacity		SPORLAN		ALCO						
Model No.	BTUH	R-22	R-404A	R-134a	R-22	R-404A	R-134a				
AHP 490	49,000	SVE 4	SSE 4	SJE 3	HFE 5-1/2 HC	HFE 3-1/2 RC	HFE 4MC				
AHP 590	59,000	SVE 4	SSE 4	SJE 5	HFE 5-1/2 HC	HFE 5 RC	HFE 4MC				
AHP 675	67,500	SVE 5	SSE 6	SJE 5	HFE 5-1/2 HC	HFE 5 RC	HFE 6MC				
AHP 720	72,000	SVE 5	SSE 6	SJE 6	HFE 5-1/2 HC	HFE 5 RC	HFE 6MC				
AHP 980	98,000	SVE 8	OSE 9	OJE 6	HFE 8 HC	HFE 7 RC	HFE 7-1/2 MC				
AHP 1180	118,000	SVE 10	OSE 9	OJE 9	HFE 10 HC	HFE 10 RC	HFE 11 MC				
AHP 1350	135,000	SVE 10	OSE 9	OJE 9	HFE 10 HC	HFE 10 RC	HFE 11 MC				
AHP 1440	144,000	OVE 15	OSE 12	OJE 9	HFE 10 HC	HFE 10 RC	HFE 11 MC				
AHP 1770	177,000	OVE 15	OSE 12	OJE 12	HFE 15 HC	TRAE 12 RC	TRAE 10 MC				
AHP 2025	202,500	OVE 15	OSE 21	OJE 16	HFE 15 HC	TRAE 12 RC	TRAE 12 MC				
AHP 2160	216,000	OVE 20	OSE 21	OJE 16	HFE 15 HC	TRAE 12 RC	TRAE 12 MC				

MOUNTING

Model AHP Unit Cooler may be mounted using rod hangers, lag screws or bolts. It is recommended that minimum 3/8 inch hanging hardware be used. Unit must be hung level so that condensate drainage is properly maintained.

Proper air flow through the coil is very crucial to unit performance and maintenance of design storage space temperature. Therefore, a minimum of 45 inch space must be provided behind the unit for unrestricted air flow through the coil.



REFRIGERANT PIPING

Sizing and installation of all refrigerant piping must be in accordance with recommended and accepted practices for halocarbon refrigerants. Select expansion valve in accordance with selection data in Table II. Only expansion valve with external equalizer must be used. After the space temperature has reached design condition adjust expansion valve to obtain 6 to 8°F superheat at the suction line. If a suction/liquid heat exchanger is used, superheat reading for expansion valve must be taken at a point between the unit cooler and the heat exchanger.

Suction traps must be used where suction line rises above the unit cooler. Horizontal runs of suction line must slope down towards the compressor. This will assist in proper return of refrigerant oil to compressor.

WIRING

All wiring must be done in strict conformance to local and national electrical codes. Use unit name plate electrical data for conductor and fuse sizing. <u>Use Copper Conductors Only.</u> Unit must be grounded.

DRAIN LINE

Drain line must be pitched to effectively drain condensate. All drain lines subject to freezing temperatures must have drain line heaters and be insulated. Drain line traps must also be heated to prevent freeze-ups.

MAINTENANCE AND SERVICE CAUTION: DISCONNECT ALL POWER BEFORE SERVICE

FAN MOTORS

The only electrical component vulnerable to malfunction is the fan motor. In the event of motor failure, affected motor should be removed and tested away from the unit. Generally a failed capacitor may be the only problem. However, motors can fail due to bearing failure or other electrical causes. In such a situation, affected motor must be replaced.

DRAIN PAN

Periodic inspection of the drain pan is highly recommended. Clean any accumulated dirt with soap and warm water. If sign of improper drainage is apparent, check drain line pitch, drain line heater and P-trap for proper operation.

Clean unit casing, fan blades and fan guards using soap and warm water. Care must be taken to avoid water entering the motor. This can permanently harm the motor.

REPLACEMENT PARTS

FAN BLADE: FA1005 MOTOR: 230V/3 MA1075 FAN GUARD: GA1006 460V/3 MA1575

575V/3 MA1074

BEFORE 12/2016: MOTOR MOUNT LEG: BB1003 MOTOR MOUNT RING: BB1002

MOTOR MOUNT: BS4088A001

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

AFTER 12/2016:

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