

AIR DEFROST MEDIUM PROFILE UNIT COOLERS SERIES AMP

April 2016

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Installation & Operating Instructions

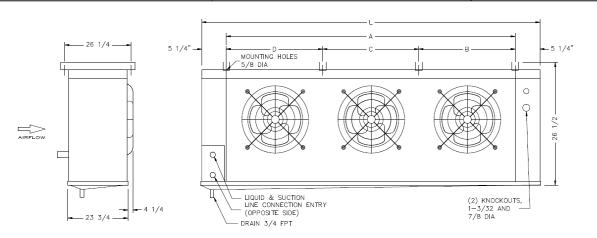


TABLE 1	Dimensional and Electrical Data									Q	9 QU					
		Motors				Dimensions				Connections			Oper.	Approx.		
Unit	Air		FLA			Inches				Inches			R-22	Shipping		
Model	Flow		230 V	230 V	460 V	575 V						Inlet	Suction	Drain	Charge	Wgt
No.	CFM	Qty	1 Ph	3 Ph	3 Ph	3 Ph	L	А	В	С	D	OD	OD	FPT	lbs	lbs
			60 Hz	60 Hz	60 Hz	60 Hz										
AMP 195	4,030	1	4.0	-	1.2	1.0	55	44-1/2	-	-	44-1/2	5/8	7/8	3/4	6.1	194
AMP 240	3,920	1	4.0	-	1.2	1.0	55	44-1/2	-	-	44-1/2	5/8	7/8	3/4	8.8	215
AMP 275	3,860	1	4.0	-	1.2	1.0	55	44-1/2	-	-	44-1/2	5/8	7/8	3/4	11.0	238
AMP 300	3,740	1	4.0	-	1.2	1.0	55	44-1/2	-	-	44-1/2	5/8	1-1/8	3/4	13.2	259
AMP 390	8,060	2	12.0	6.9	2.4	2.0	98	87-1/2	-	43	44-1/2	5/8	1-1/8	3/4	12.7	263
AMP 465	7,840	2	12.0	6.9	2.4	2.0	98	87-1/2	-	43	44-1/2	7/8	1-3/8	3/4	16.9	387
AMP 550	7,720	2	12.0	6.9	2.4	2.0	98	87-1/2	-	43	44-1/2	1-1/8	1-3/8	3/4	21.1	410
AMP 610	7,480	2	12.0	6.9	2.4	2.0	98	87-1/2	-	43	44-1/2	1-1/8	1-3/8	3/4	25.3	437
AMP 700	11,760	3	16.0	6.9	3.6	3.0	141	130-1/2	43	43	44-1/2	1-3/8	1-5/8	3/4	25.0	548
AMP 800	11,580	3	16.0	6.9	3.6	3.0	141	130-1/2	43	43	44-1/2	1-3/8	1-5/8	3/4	30.0	563
AMP 910	11,220	3	16.0	6.9	3.6	3.0	141	130-1/2	43	43	44-1/2	1-3/8	1-5/8	3/4	37.5	598

Air throw may vary with box loading

TABLE 2

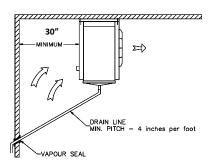
Performance and Expansion Valve Selection

+34ºF ROOM TEMPERATURE									
Unit	Capacity		SPORLAN		ALCO				
Model No.	BTUH	R-22	R-404A	R-134a	R-22	R-404A	R-134a		
AMP 195	19,500	FVE 1-1/2	FSE 1-1/2	FJE 1-1/2	HFE 1-1/4 HC	HFE 1-1/2 RC	HFE 1-1/2 MC		
AMP 240	24,000	FVE 2	FSE 2	FJE 1-1/2	HFE 1-1/2 HC	HFE 1-1/2 RC	HFE 1-3/4 MC		
AMP 275	27,500	FVE 3	FSE 2	FJE 2	HFE 2 HC	HFE 2 RC	HFE 2-1/2 MC		
AMP 300	30,000	FVE 3	SSE 3	SJE 2-1/2	HFE 2 HC	HFE 2 RC	HFE 2-1/2 MC		
AMP 390	39,000	FVE 3	SSE 3	SJE 2-1/2	HFE 3-1/2 HC	HFE 3-1/2 RC	HFE 4 MC		
AMP 465	46,500	SVE 4	SSE 4	SJE 3	HFE 3-1/2 HC	HFE 3-1/2 RC	HFE 4 MC		
AMP 550	55,000	SVE 4	SSE 4	SJE 5	HFE 3-1/2 HC	HFE 3-1/2 RC	HFE 4 MC		
AMP 610	61,000	SVE 5	SSE 6	SJE 5	HFE 5 HC	HFE 5 RC	HFE 4 MC		
AMP 700	70,000	SVE 5	SSE 6	SJE 5	HFE 5 HC	HFE 5 RC	HFE 6 MC		
AMP 800	80,000	SVE 8	SSE 7	SJE 6	HFE 5 HC	HFE 7 RC	HFE 6 MC		
AMP 910	91,000	SVE 8	SSE 7	OJE 6	HFE 6 HC	HFE 7 RC	HFE 7-1/2 MC		

MOUNTING

Model AMP 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 30 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. Use Copper Conductors Only. 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:	FA1007	MOTOR:	230V/1	MA1061					
FAN GUARD:	GA1008		230V/3	MA1087					
			460V/3	MA1008					
			575V/3	MA1001					
	BB1005								
		MOTOR MOUNT	RING:	BB1002					

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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