



Publication No. RU-ASL-0721A
Replaces ASL-0121A and all previous versions

ASLA/ASLE SLIM-TEMP UNIT COOLER

Low and Medium Temperature
Small Walk-in Coolers & Freezers and
Display Cases

Air Defrost
4,800 to 17,300 BTUH

Electric Defrost
4,600 to 16,200 BTUH



SLIM-TEMP

Features

The Slim-Temp ALSA / ASLE Unit Coolers are compact and versatile products that are designed for cooling small walk-in coolers and freezers and display cases. Units feature smaller diameter tubing that reduces total refrigerant charge, energy-efficient EC motors that are IP67 rated to protect against dust, sand and water, and the slim profile maximizes available shelf space. Units are available with air or electric defrost, for low or medium temperature applications.

Standard Features

- Models meet DOE AWEF performance and California Title 24 regulations
- Dual Speed EC Motors
- All models require externally equalized Thermostatic expansion valves
- ASLA capacity ratings at +25°F evaporator temperature
- ASLE capacity ratings at -10°F evaporator temperature.
- All Aluminum low silhouette housing

- Fan motors are totally enclosed, permanently lubricated and thermally protected
- Electrical connection made at internal terminal blocks located at end opposite refrigerant connections for easier installation
- UL & cUL listed
- NSF approved

Optional Features

- Protective Russ-Proof epoxy coil coating extends the life of the coil

MODEL NUMBER NOMENCLATURE

CONFIGURABLE BASE MODEL

ASL	A	2	5	061	A	D	A
Slim-Temp Display Case	Defrost Type	Number of Fans	Fins Per Inch	BTUH in Hundreds	Unit Voltage	Motor Type	Revision
	A - Air E - Electric	2 - 6 fans			A - 115/1/60 D - 208-230/1/60	D - Dual Speed EC	

EVAPORATOR APPLICATION RATINGS

Multiple conditions combine to determine the application capacity of an evaporator. Walk-in space temperature, relative humidity, saturated suction temperature difference, and outdoor ambient temperature. All of the factors are considered when calculating an evaporator application rating. These ratings are considerably higher than the net capacity value used for DOE ratings (AWEF).

The AWEF of an evaporator is calculated using the dry coil capacity and the daily evaporator power consumption. Power consumption included fan and defrost power. Evaporator net capacity reported to the DOE database is dry coil capacity less the full power fan watts. DOE test conditions are at 10°F evaporator/SST temperature difference and less than 50% relative humidity and 96°F liquid temperature. These conditions create a uniform test method, but should not be used for equipment selection. The equipment selected would be too large for the application.

Russell's published application ratings are a guideline for proper equipment selection. They account for true operating conditions experienced by equipment.

Application Rating and Electrical Data - Air Defrost Models

Model Number	BTUH Capacity @ 25°F S.T. & 10°F TD		CFM	No. of Fans	Dual Speed EC Motors			
	R404A	R407A/ R448A/ R449A/B			Total Amps		MCA	MOPD
					115V/1	208-230V/1		
ASLA25048*DA	4,800	5,100	950	2	1.2	0.6	15.0	20
ASLA25061*DA	6,100	6,500	1,000	2	1.2	0.6	15.0	20
ASLA35073*DA	7,300	7,700	1,425	3	1.8	0.9	15.0	20
ASLA45098*DA	9,800	10,700	1,900	4	2.4	1.2	15.0	20
ASLA55122*DA	12,200	13,300	2,375	5	3.0	1.5	15.0	20
ASLA65158*DA	15,800	17,300	2,850	6	3.6	1.8	15.0	20

DISPLAY CASE UNIT COOLER

Application Rating and Electrical Data - Electric Defrost Models

Model Number	BTUH Capacity @ -10°F S.T. & 10°F TD		CFM	No. of Fans	Dual Speed EC Motors			Heaters	
	R404A	R407A/ R448A/ R449A/B			Total Amps	MCA^	MOPD^	Amps	Watts
					208-230V/1				
ASLE25046DDA	4,600	5,000	950	2	0.6	15.0	20	5.7	1,300
ASLE25058DDA	5,800	6,300	1,000	2	0.6	15.0	20	8.6	1,970
ASLE35070DDA	7,000	7,600	1,425	3	0.9	15.0	20	8.0	1,850
ASLE45094DDA	9,400	10,100	1,900	4	1.2	15.0	20	10.9	2,500
ASLE55117DDA	11,700	12,600	2,375	5	1.5	15.0	20	13.9	3,200
ASLE65150DDA	15,000	16,200	2,850	6	1.8	15.0	20	16.0	3,700

Distributor Nozzle and Expansion Valves - All Models

Model Number	Part Numbers								No. of Circuits
	R404A				R407A/ R448A/ R449A/B				
	Nozzle @ 100°F Liquid	TXV	EEV	LSV	Nozzle @ 100°F Liquid	TXV	EEV	LSV	
ASLA25048*DA	1/2	SBFSE-AA-C	SER-A	E3	1/2	SBFDE-AA-C	SER-AA	E3	2
ASLA25061*DA	3/4	SBFSE-A-C	SER-A	E3	3/4	SBFDE-AA-C	SER-A	E3	2
ASLA35073*DA	3/4	SBFSE-A-C	SER-A	E3	3/4	SBFDE-AA-C	SER-A	E3	3
ASLA45098*DA	1	SBFSE-A-C	SER-B	E3	1	SBFDE-A-C	SER-A	E3	4
ASLA55122*DA	1-1/2	SBFSE-A-C	SER-B	E3	1-1/2	SBFDE-A-C	SER-B	E3	6
ASLA65158*DA	2	SBFSE-B-C	SER-B	E5	1-1/2	SBFDE-B-C	SER-B	E5	6
ASLE25046DDA	3/4	SBFSE-AA-Z	SER-A	E3	3/4	SBFDE-AA-Z	SER-AA	E3	3
ASLE25058DDA	1	SBFSE-A-Z	SER-A	E3	3/4	SBFDE-A-Z	SER-A	E3	3
ASLE35070DDA	1-1/2	SBFSE-A-Z	SER-A	E3	1	SBFDE-A-Z	SER-A	E3	4
ASLE45094DDA	1-1/2	SBFSE-A-Z	SER-B	E3	1-1/2	SBFDE-A-Z	SER-A	E3	6
ASLE55117DDA	2	SBFSE-A-Z	SER-B	E5	1-1/2	SBFDE-B-Z	SER-B	E5	6
ASLE65150DDA	2-1/2	SBFSE-B-Z	SER-B	E5	2	SBFDE-B-Z	SER-B	E5	6

Specifications - All Models

Model Number	Refrigerant Connections		Figure Number	Dimension (Inches)*				Approx. Ship Wt. (Lbs.)
	Liquid Line	Suction Line		Width	Length (W)	Height	Between Mounts (A)	
ASLA25048*DA	1/2	7/8	1	19-13/16	46-3/16	9-3/16	39	83
ASLA25061*DA	1/2	7/8	1	19-13/16	56-3/16	9-3/16	49	105
ASLA35073*DA	1/2	7/8	2	19-13/16	69-3/16	9-3/16	31	125
ASLA45098*DA	1/2	1-1/8	3	19-13/16	92-3/16	9-3/16	28-1/4	151
ASLA55122*DA	1/2	1-1/8	3	19-13/16	115-3/16	9-3/16	36	185
ASLA65158*DA	1/2	1-1/8	4	19-13/16	138-3/16	9-3/16	32-3/4	222
ASLE25046DDA	1/2	7/8	1	19-13/16	46-3/16	9-3/16	39	83
ASLE25058DDA	1/2	7/8	1	19-13/16	56-3/16	9-3/16	49	105
ASLE35070DDA	1/2	7/8	2	19-13/16	69-3/16	9-3/16	31	125
ASLE45094DDA	1/2	1-1/8	3	19-13/16	92-3/16	9-3/16	28-1/4	151
ASLE55117DDA	1/2	1-1/8	3	19-13/16	115-3/16	9-3/16	36	185
ASLE65150DDA	1/2	1-1/8	4	19-13/16	138-3/16	9-3/16	32-3/4	222

[^] MCA/MOPD represents motor circuit since defrost heaters are powered via condensing unit. * All dimensions are in inches. Air Defrost Models show selection at +25°F suction. Electric Defrost Models show selection at -10°F suction. Distributor tubes are 3/16" diameter and 18" long.

SLIM-TEMP

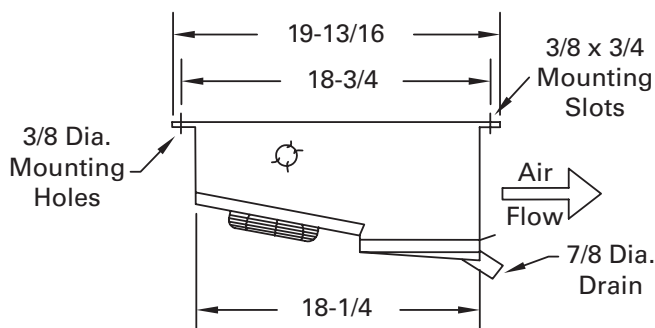
Specifications - AWEF Ratings - All Models

Department of Energy Annual Walk-In Energy Factor (AWEF) Rating

Base Model Number	AWEF	Base Model Number	AWEF	Base Model Number	AWEF
Cooler Models¹ - Air Defrost		Cooler Models¹ - Electric Defrost		Freezer Models² - Electric Defrost	
ASLA25048*DA	9.00	ASLE25046DDA	9.00	ASLE25046DDA	3.99
ASLA25061*DA	9.00	ASLE25058DDA	9.00	ASLE25058DDA	3.99
ASLA35073*DA	9.00	ASLE35070DDA	9.00	ASLE35070DDA	4.02
ASLA45098*DA	9.00	ASLE45094DDA	9.00	ASLE45094DDA	4.07
ASLA55122*DA	9.00	ASLE55117DDA	9.00	ASLE55117DDA	4.09
ASLA65158*DA	9.00	ASLE65150DDA	9.00	ASLE65150DDA	4.12

1. If the model has a numerical value in the AWEF table, the following statement applies: "The refrigeration system is designed and certified for use in walk-in cooler applications."
2. If the model has a numerical value in the AWEF table, the following statement applies: "The refrigeration system is designed and certified for use in walk-in freezer applications."

Physical Dimensions



Notes:

All dimensions are in inches.

Due to continuing product development, specifications are subject to change without notice.

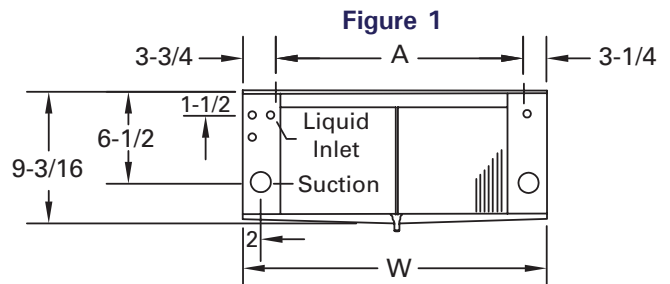


Figure 2

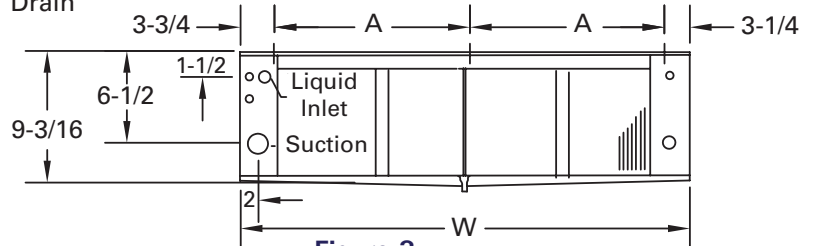


Figure 4

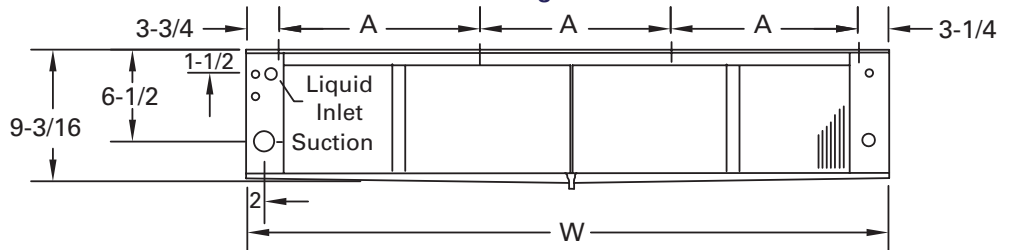


Figure 4

