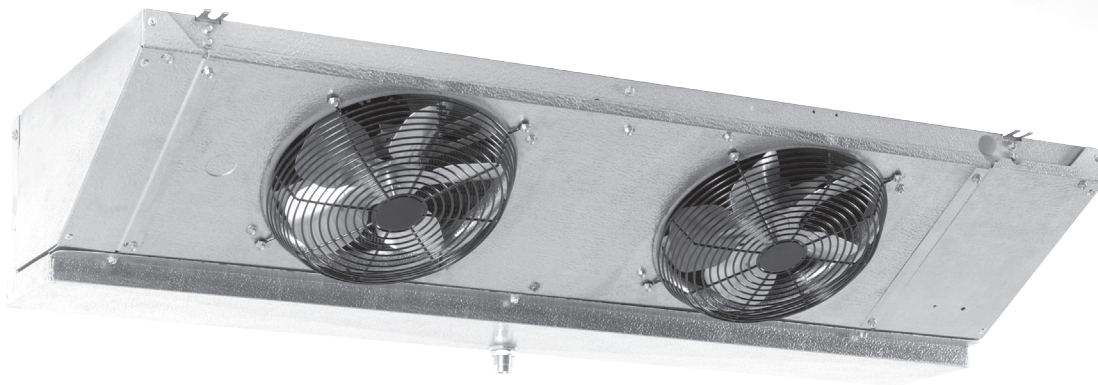




Extended Thin Profile Unit Cooler

Technical Guide

Models LTA | Air Defrost
LTL | Electric Defrost



BOHN

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Nomenclature

LT	A	053	B	A
Model Series	Model Type	Capacity	Electrical Code	Design Revision
Bohn Extended Thin Profile Unit Cooler	A = Air defrost	# BTUH x 100 (R-404A)	AE = 115/1/60	
	L = Electric defrost		BE = 208-230/1/60	

Cabinet

- Low height makes it the most compact unit for reach-in display cases where space is limited, giving the case a clean look and allowing for more shelving and product storage
- Textured aluminum cabinet
- Easy access to motors, refrigerant and electrical components with front access panel
- Modular front access panels provide easy access to motors and can be removed independently of the drain pan
- Plastic vibration isolators for fan panels and drain pan reduce noise and vibration
- Liquid-line solenoid wire harness comes standard for quick installation

Coils

- Internally enhanced tube design produces better unit performance
- Blow-through coil means air is discharged through the coil
- Heaters are attached to the coil for easier serviceability

Controls

- Defrost termination control
- Fan delay control
- Heater safety control

Options

- Reverse air flow
- Beacon II™ compatible
- Quick Response Controller compatible
- Smooth white painted cabinet
- Pre-assembled units with factory mounted TXV, liquid-line solenoid and room thermostat
- Coated coil for corrosion protection

PERFORMANCE DATA

Model LTA Air Defrost

Model	Capacity				Fan Data			EC Motor				
	R-404A		R-407A/C/F, R-448A/R-449A		No.	CFM	m³H	HP	115/1/60		208-230/1/60	
	10°F TD 25°F SST	6°C TD 4°C SST	10°F TD 25°F SST	6°C TD 4°C SST					Amps		Watts	
	BTUH	Watts	BTUH	Watts								
LTA053SA	5,300	1,550	5,900	1,730	2	850	1,450	1/15	2.0	60	1.2	54
LTA079SA	7,900	2,310	8,700	2,550	3	1,350	2,300	1/15	3.0	90	1.8	81
LTA102SA	10,200	2,990	11,200	3,280	4	1,800	3,100	1/15	4.0	120	2.4	108
LTA134SA	13,400	3,930	14,700	4,310	5	2,250	3,850	1/15	5.0	150	3.0	135
LTA172SA	17,200	5,040	18,600	5,450	6	2,550	4,350	1/15	6.0	180	3.6	162

Model LTL Electric Defrost

Model	Capacity				Fan Data			EC Motor		
	R-404A		R-407A/C/F, R-448A/R-449A		No.	CFM	m³H	HP	208-230/1/60	
	10°F TD -20°F SST	6°C TD -4°C SST	10°F TD -20°F SST	6°C TD -4°C SST					Amps	
	BTUH	Watts	BTUH	Watts						
LTL046SA	4,600	1,350	5,000	1,460	2	850	1,450	1/15	1.2	54
LTL068SA	6,800	1,990	7,300	2,150	3	1,350	2,300	1/15	1.8	81
LTL093SA	9,300	2,720	10,000	2,940	4	1,800	3,100	1/15	2.4	108
LTL115SA	11,500	3,370	12,400	3,640	5	2,250	3,850	1/15	3.0	135
LTL133SA	13,300	3,900	14,400	4,210	6	2,550	4,350	1/15	3.6	162

Capacity Correction Factor

Electric Defrost Units

Saturated Suction Temperature °F	+20	-10	-20
Saturated Suction Temperature °C	-7	-23	-29
Multiply Capacity By	1.11	1.00	0.96

Note:

LTA/LTL Models with EC Motors are suitable for 50 Hz operation

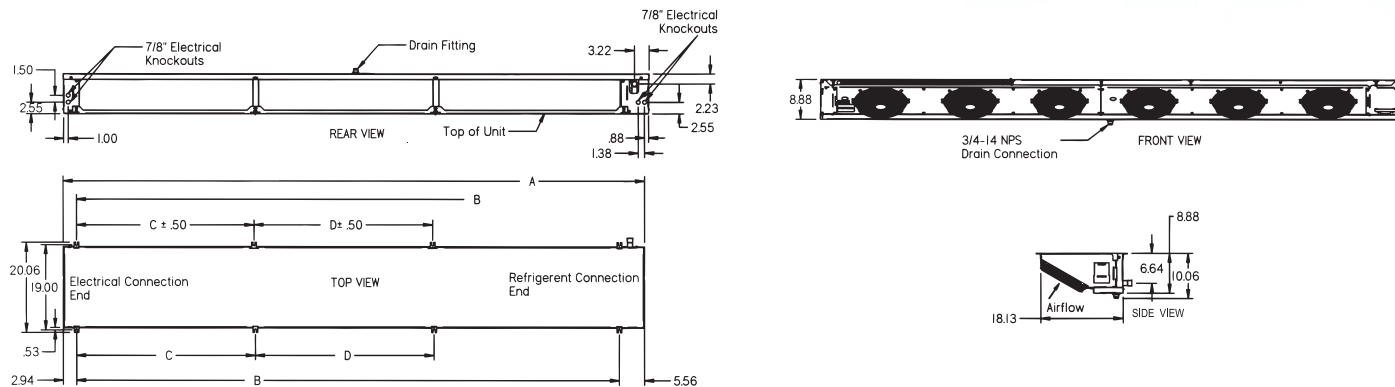
Model LTA Air Defrost

Model	No. of Fans	Connections (in.)				Approx. Net Wt. (lbs.)
		Coil Inlet OD	Suction OD	External Equalizer OD	Drain MPT	
LTA053	2	1/2	5/8	1/4	3/4	48
LTA079	3	1/2	5/8	1/4	3/4	69
LTA102	4	1/2	7/8	1/4	3/4	85
LTA134	5	1/2	7/8	1/4	3/4	108
LTA172	6	1/2	1-1/8	1/4	3/4	124

Model LTL Electric Defrost

Model	No. of Fans	Connections (in.)				Approx. Net Wt. (lbs.)
		Coil Inlet OD	Suction OD	External Equalizer OD	Drain MPT	
LTL046	2	1/2	5/8	1/4	3/4	48
LTL068	3	1/2	5/8	1/4	3/4	69
LTL093	4	1/2	7/8	1/4	3/4	85
LTL115	5	1/2	7/8	1/4	3/4	108
LTL133	6	1/2	1-1/8	1/4	3/4	124

DIMENSIONAL DATA



Dimensional Data For All Models

Air Defrost	Electric Defrost	No. of Fans	Dimensions							
			A		B		C		D	
			in.	mm	in.	mm	in.	mm	in.	mm
LTA053	LTL046	2	49-3/8	1,254	40-7/8	1,038	-	-	-	-
LTA079	LTL068	3	69-1/8	1,756	60-5/8	1,540	-	-	-	-
LTA102	LTL093	4	88-7/8	2,257	80-3/8	2,042	40-7/8	1,038	-	-
LTA134	LTL115	5	108-5/8	2,759	100-1/8	2,543	40-7/8	1,038	-	-
LTA172	LTL133	6	128-3/8	3,261	119-7/8	3,045	40-7/8	1,038	39-1/2	1,003

STANDARD NOZZLE SELECTION

Model LTA Air Defrost

Model	Distributor Tube (in.)		No. of Circuits	R-404A, R-507A	R-407A, R-407F, R-407C	R-448A, R-449A	R22 Nozzle*
	OD	Length					
LTA053SA	3/16	21.5	2	L-1/3	L-1/3	L-1/2	L-1/4
LTA079SA	3/16	21.5	2	L-1/2	L-1/2	L-3/4	L-1/3
LTA102SA	3/16	21.5	4	L-3/4	L-3/4	L-1	L-1/2
LTA134SA	3/16	21.5	4	L-1	L-1	L-1	L-3/4
LTA172SA	3/16	21.5	5	L-1-1/2	L-1	L-1-1/2	L-3/4

Model LTL Electric Defrost

Model	Distributor Tube (in.)		No. of Circuits	R-404A, R-507A	R-407A, R-407F, R-407C	R-448A, R-449A	R22 Nozzle*
	OD	Length					
LTL046SA	3/16	21.5	3	L-1/2	L-1/2	L-3/4	L-1/3
LTL068SA	3/16	21.5	3	L-3/4	L-3/4	L-1	L-1/2
LTL093SA	3/16	21.5	5	L-1	L-1	L-1-1/2	L-3/4
LTL115SA	3/16	21.5	5	L-1-1/2	L-1	L-1-1/2	L-1
LTL133SA	3/16	21.5	5	L-1-1/2	L-1-1/2	L-2	L-1

NOTE:

Nozzles sized for 90-100°F liquid temperature at expansion valve.

Contact Application Engineering for guidance if

- Liquid temperature is not 90-100°F
- Evaporator TD is not 10°-15°F (room temperature – saturated suction temperature)
- Electric defrost and hot gas models with a saturated suction temperature of 10°F or higher

Caution: Refrigeration system will not perform properly without correct nozzle!

*R-22 Nozzles for informational purposes only. Not included with stocking evaporators

Notes



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Since product improvement is a continuing effort, we reserve the right to make changes in specifications without notice.

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