



Center Mount Unit Coolers

Technical Guide

Models TLC | Air Defrost

TLF | Electric Defrost

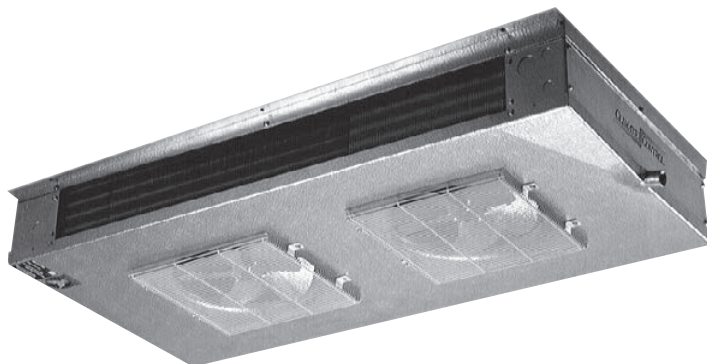


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Choose the most energy-efficient motor available for evaporators.



The EC motor is an energy sufficient option on Climate Control Center Mount evaporators. Available on all new equipment or as an easy-to-install, drop-in replacement aftermarket part from InterLink™ Commercial Refrigeration Parts. Because they are a drop-in replacement for existing shaded pole and PSC motors, installation is quick and easy. It's a high impact, quick payback solution for reducing costs and achieving green initiatives without replacing the entire system.

EC motors by InterLink are up to 75% energy efficient - that's a 51-59% increase over shaded pole motors and a 30-35% increase over permanent-split capacitor (PSC) motors. With all of this added efficiency, you can count on more energy savings and lower operational costs while taking a step in the right direction toward conserving our planet's resources.

Nomenclature

TLC	052	A	E
Model Series	Capacity	Electrical Code	Design Revision
TLC = Climate Control Center Mount, air defrost	# BTUH x 100	A = 115/1/60	
TLF = Climate Control Center Mount, electric defrost		B = 208-230/1/60	
		AE = 115/1/60 (EC)	
		BE = 208-230/1/60 (EC)	

Features & Benefits

Cabinet

- Air moves across the ceiling in both directions providing even air distribution throughout the cooler
- Compact, ceiling mount and center mount design allows for shelving and storage of product around all walls
- Heavy-gauge grained aluminum cabinet cleans easily and looks attractive
- Stainless steel screws prevent rust streaks
- Panels on ends quickly remove for complete access to refrigerant components and electrical terminal block during installation and servicing
- Quick disconnect, waterproof plug and receptacle for each motor in all models
- Wire fan guards with PVC coating for durability

Coil

- High-efficiency aluminum fins with full collars cover mechanically expanded copper tubes
- Coils are dehydrated and sealed at the factory
- Highest quality tubular heaters provide fast and economical defrost
- Generous coil surface gives proper compressor balance
- Standard adjustable defrost termination fan delay thermostat

Controls Options

- Quick Response Controller units come factory mounted with an electronic expansion valve, pressure transducer, temperature sensors and control board
- Beacon II™ units come factory mounted with an electronic expansion valve, pressure transducer, temperature sensors and control board

Drain Pan

- Double drain pan eliminates drain pan sweating
- Tapered mounting provides proper slope for condensate drainage to one end of the unit

Motors

- Motors are life lubricated and thermal overload protected
- EC motors (optional) available factory-installed or as a drop-in replacement through InterLink™ Commercial Refrigeration Parts in 115/1/60, 208-230/1/60 voltages

Additional Options

- Factory installed mounted components are available in these configurations:
 - Pre-assembled units come with mounted TXV, liquid line solenoid valve and room thermostat
 - Pre-charged units come with mounted TXV, liquid line solenoid valve, room thermostat, and quick connect fittings
 - Mounted TXV
 - Mounted TXV and solenoid valve
 - Mounted room thermostat
- Most models available with glycol circuiting (see glycol product brochure)
- Units available with stainless steel housing and drain pan
- Units available with copper fins. Air defrost units also available with polyester coated fins or various coil coatings options

PERFORMANCE DATA

Model TLC Air Defrost | 60 Hz

Model	Capacity				Fan Data		
	10°F TD 25°F SST	6°C TD -4°C SST	15°F TD 25°F SST	8°C TD -4°C SST	No.	CFM	m³H
	BTUH	Watts	BTUH	Watts			
TLC052	5,200	1,520	7,800	2,280	1	610	1,035
TLC076	7,600	2,230	11,400	3,340	2	1,300	2,210
TLC090	9,000	2,640	13,500	3,950	2	1,260	2,140
TLC102	10,200	2,990	15,300	4,480	2	1,220	2,075
TLC108	10,800	3,160	16,200	4,750	3	1,950	3,315
TLC134	13,400	3,920	20,100	5,890	3	1,890	3,210
TLC156	15,600	4,570	23,400	6,850	3	1,830	3,110
TLC179	17,900	5,240	26,850	7,860	4	2,520	4,285
TLC208	20,800	6,100	31,200	9,140	4	2,440	4,145
TLC249	24,900	7,290	37,350	10,940	5	3,050	5,185

Model TLC Air Defrost | 50 Hz†

Model	Capacity				Fan Data		
	10°F TD 25°F SST	6°C TD -4°C SST	15°F TD 25°F SST	8°C TD -4°C SST	No.	CFM	m³H
	BTUH	Watts	BTUH	Watts			
TLC052	4,950	1,450	7,410	2,170	1	550	935
TLC076	7,220	2,110	9,880	2,890	2	1,170	1,990
TLC090	8,550	2,500	12,830	3,760	2	1,135	1,930
TLC102	9,690	2,840	14,540	4,260	2	1,100	1,865
TLC108	10,260	3,000	15,390	4,510	3	1,755	2,985
TLC134	12,730	3,730	17,420	5,100	3	1,700	2,890
TLC156	14,820	4,340	22,230	6,510	3	1,650	2,800
TLC179	17,010	7,980	23,290	6,820	4	2,270	3,855
TLC208	19,760	5,790	29,640	8,680	4	2,200	3,735
TLC249	23,660	6,930	32,400	9,490	5	2,745	4,665

Model TLF Electric Defrost | 60 Hz

Model	Capacity				Fan Data		
	10°F TD -20°F SST	6°C TD -29°C SST	12°F TD -20°F SST	7°C TD -29°C SST	No.	CFM	m³H
	BTUH	Watts	BTUH	Watts			
TLF040	4,000	1,170	4,800	1,410	1	610	1,037
TLF054	5,400	1,580	6,480	1,900	2	1,300	2,210
TLF065	6,500	1,900	7,800	2,280	2	1,260	2,142
TLF090	9,000	2,640	10,800	3,160	3	1,950	3,315
TLF130	13,000	3,810	15,600	4,570	3	1,830	3,111
TLF174	17,400	5,100	20,880	6,120	4	2,440	4,148

Model TLF Electric Defrost | 50 Hz†

Model	Capacity				Fan Data		
	10°F TD -20°F SST	6°C TD -29°C SST	12°F TD -20°F SST	7°C TD -29°C SST	No.	CFM	m³H
	BTUH	Watts	BTUH	Watts			
TLF040	3,800	1,110	4,560	1,335	1	550	993
TLF054	5,130	1,500	6,160	1,890	2	1,170	1,989
TLF065	6,180	1,810	7,410	2,170	2	1,135	1,928
TLF090	8,550	2,500	10,260	3,000	3	1,755	2,983
TLF130	12,350	3,620	14,820	4,340	3	1,650	2,800
TLF174	16,530	4,840	19,840	5,810	4	2,200	3,733

† For EC motors, use 60 Hz capacity and airflow values (Units with EC motors operating at 50 Hz will not see a reduction in performance due to the electronic control of the motor)

SPECIFICATIONS

Model TLC Air Defrost | 60 Hz

Model	HP	PSC Motor				EC Motor			
		115/1/60		208-230/1/60		115/1/60		208-230/1/60	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
TLC052	1/15	0.9	90	0.5	90	0.9	55	0.5	55
TLC076	1/15	1.8	180	1.0	180	1.8	110	1.0	110
TLC090	1/15	1.8	180	1.0	180	1.8	110	1.0	110
TLC102	1/15	1.8	180	1.0	180	1.8	110	1.0	110
TLC108	1/15	2.7	270	1.5	270	2.7	165	1.5	165
TLC134	1/15	2.7	270	1.5	270	2.7	165	1.5	165
TLC156	1/15	2.7	270	1.5	270	2.7	165	1.5	165
TLC179	1/15	3.6	360	2.0	360	3.6	220	2.0	220
TLC208	1/15	3.6	360	2.0	360	3.6	220	2.0	220
TLC249	1/15	4.5	450	2.5	450	4.5	275	2.5	275

Model TLC Air Defrost | 50 Hz[†]

Model	HP	PSC Motor				EC Motor			
		110/1/50		220/1/50		110/1/50		220/1/50	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
TLC052	1/15	0.8	80	0.4	80	0.9	55	0.5	55
TLC076	1/15	1.7	160	0.8	160	1.8	110	1.0	110
TLC090	1/15	1.7	160	0.8	160	1.8	110	1.0	110
TLC102	1/15	2.5	240	1.2	240	1.8	110	1.0	110
TLC108	1/15	2.5	240	1.2	240	2.7	165	1.5	165
TLC134	1/15	2.5	240	1.2	240	2.7	165	1.5	165
TLC156	1/15	3.3	320	1.6	320	2.7	165	1.5	165
TLC179	1/15	3.3	320	1.6	320	3.6	220	2.0	220
TLC208	1/15	3.3	320	1.6	320	3.6	220	2.0	220
TLC249	1/15	4.2	400	2.0	400	4.5	275	2.5	275

Model TLF Electric Defrost | 60 Hz

Model	HP	PSC Motor		EC Motor		Heaters	
		208-230/1/60		208-230/1/60		208-230/1/60	
		Amps	Watts	Amps	Watts	Amps	Watts
TLF040	1/15	0.5	90	0.5	55	5.3	1200
TLF054	1/15	1.0	180	1.0	110	8.7	2000
TLF065	1/15	1.0	180	1.0	110	8.7	2000
TLF090	1/15	1.5	270	1.5	165	10.5	2400
TLF130	1/15	1.5	270	1.5	165	15.7	3600
TLF174	1/15	2.0	360	2.0	220	20.9	4800

Model TLF Electric Defrost | 50 Hz[†]

Model	HP	PSC Motor		EC Motor		Heaters	
		220/1/50		220/1/50		220/1/50	
		Amps	Watts	Amps	Watts	Amps	Watts
TLF040	1/15	0.4	80	0.5	55	5.0	1100
TLF054	1/15	0.8	160	1.0	110	8.3	1826
TLF065	1/15	0.8	160	1.0	110	8.3	1826
TLF090	1/15	1.2	240	1.5	165	10.0	2200
TLF130	1/15	1.2	240	1.5	165	15.0	3300
TLF174	1/15	1.6	320	2.0	220	20.0	4400

PHYSICAL DATA

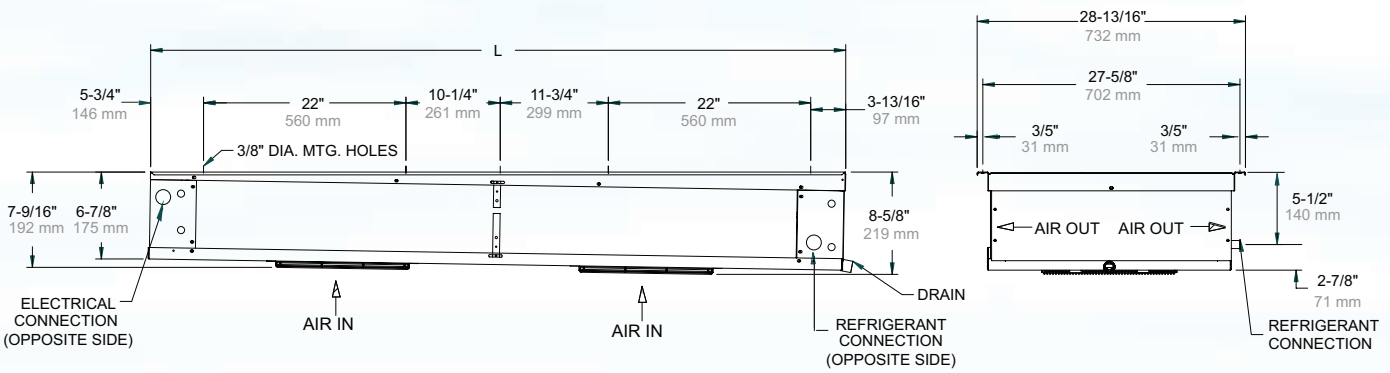
Model TLC Air Defrost

Model	No. of Fans	Connections (in.)		Approx. Net Wt.	
		Inlet OD	Suction OD	lbs.	kg
TLC052	1	1/2	7/8	42	19
TLC076	2	1/2	7/8	64	29
TLC090	2	1/2	7/8	70	32
TLC102	2	1/2	7/8	83	38
TLC108	3	1/2	7/8	105	48
TLC134	3	1/2	7/8	117	53
TLC156	4	1/2	7/8	123	56
TLC179	4	1/2	7/8	149	68
TLC208	4	1/2	1-1/8	164	74
TLC249	5	1/2	1-1/8	206	94

Model TLF Electric Defrost

Model	No. of Fans	Connections (in.)		Approx. Net Wt.	
		Inlet OD	Suction OD	lbs.	kg
TLF040	1	1/2	7/8	90	41
TLF054	2	1/2	7/8	120	54
TLF065	2	1/2	7/8	120	54
TLF090	3	1/2	7/8	160	73
TLF130	3	1/2	7/8	174	79
TLF174	4	1/2	1-1/8	218	99

Dimensional Data



NOTE: All units have 1/4" OD external equalizer and 3/4" FPT drain connection

Model TLC Air Defrost

Model	No. of Fans	Dimensions	
		L	
		in.	mm
TLC052	1	31-1/2	800
TLC076	2	53-1/2	1359
TLC090	2	53-1/2	1359
TLC102	2	53-1/2	1359
TLC108	3	75-1/2	1918
TLC134	3	75-1/2	1918
TLC156	4	75-1/2	1918
TLC179	4	97-1/2	2477
TLC208	4	97 1/2	2477
TLC249	5	119-1/2	3035

Model TLF Electric Defrost

Model	No. of Fans	Dimensions	
		L	
		in.	mm
TLF040	1	31-1/2	800
TLF054	2	53-1/2	1359
TLF065	2	53-1/2	1359
TLF090	3	75-1/2	1918
TLF130	3	75-1/2	1918
TLF174	4	97-1/2	2477

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InterLink™ is your link to a complete line of dependable and certified commercial refrigeration parts, accessories and innovative electronic controls for all Climate Control equipment. At InterLink, we provide our wholesalers with a comprehensive selection of product solutions and innovative technologies for the installed customer base. And every product is built to ensure the same high performance standards with which all Heatcraft Refrigeration Products (HRP) brands are built — backed by a dedicated team to serve every customer need, delivering at the best lead times in the industry.

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For parts, please contact (800) 686-7278 or visit heatcraftprd.com.

Motor/Fan Blade/Fan Guards

Part #	Description	No. Fans
5036NS	Motor 115/1/60/50 PSC	1 - 5
5036PS	Motor 208-230/1/60/50 PSC	1 - 5
25317901	Motor 208-230/1/60 EC Totally Enclosed	1 - 5
25318001	Motor 115/1/60 EC Totally Enclosed	1 - 5
5110E	Fan Blade	1 - 5
5055F	Fan Guard - Wire	1 - 5
40003001	Motor Mount Plate	1 - 5

Standard Nozzle Selection

Model TLC Air Defrost

Model	No. of Fans	Distributor Tube (in.)		No. of Circuits	R-404A*	R-407A**
		OD	Length			
TLC052	1	3/16	18	2	L-1/2	L-1/4
TLC076	2	3/16	18	2	L-3/4	L-1/2
TLC090	2	3/16	18	4	L-3/4	L-1/2
TLC102	2	3/16	18	4	L-1	L-3/4
TLC108	3	3/16	18	4	L-1	L-3/4
TLC134	3	3/16	18	4	L-1	L-3/4
TLC156	4	3/16	18	6	L-1-1/2	L-1
TLC179	4	3/16	18	6	L-1-1/2	L-1
TLC208	4	3/16	18	6	L-1-1/2	L-1-1/2
TLC249	5	3/16	18	6	L-2	L-1-1/2

Model TLF Electric Defrost

Model	No. of Fans	Distributor Tube (in.)		No. of Circuits	R-404A*	R-407A**
		OD	Length			
TLF040	1	3/16	18	2	L-3/4	L-1/3
TLF054	2	3/16	18	2	L-3/4	L-1/2
TLF065	2	3/16	18	4	L-1	L-3/4
TLF090	3	3/16	18	4	L-1-1/2	L-3/4
TLF130	3	3/16	18	6	L-2	L-1-1/2
TLF174	4	3/16	18	6	L-2-1/2	L-1-1/2

Cabinet Components

Part #	Description	No. Fans
C26363A2	Drain Pan - Stucco	1
C26360A2	Drain Pan - Stucco	2
C26361A2	Drain Pan - Stucco	3
C26362A2	Drain Pan - Stucco	4
40820301	Drain Pan - Stucco	5
40820601	Drain Pan - White	1
40820701	Drain Pan - White	2
C26361A4	Drain Pan - White	3
C26362A4	Drain Pan - White	4
D20817A4	Drain Pan - White	5

Electrical Components

Part #	Description
22512601	Terminal Board
4267W	Defrost Termination / Fan Delay Thermostat
4550G	Filter (optional one per fan)

Electric Defrost

Part #	Description	Model	No. Fans
4400S	Coil Heater	040	1
4401S	Coil Heater	054, 065	2
4402S	Coil Heater	090	3
4403S	Coil Heater	130	3
4404S	Coil Heater	174	4

*Also suitable for R-507, R-502, R-134a, R-401A, R-402A, R-448A and R-449A

**Also suitable for R-407C, R-407F, R-22.

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 models with a saturated suction temperature of 10°F or higher

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



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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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CLIMATE

CONTROL

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