MODEL ECLA

LOW PROFILE ENERGY COMPLIANT

AIR DEFROST UNIT COOLERS

Above +35° F Room Temperature

APPLICATION

The Model ECLA unit cooler is compact, low profile, and energy compliant unit designed to deliver maximum performance requiring the least amount of space. Units are designed with generous coil surface to maintain required temperature condition, and are suitable for use in walk-in coolers for meat, poultry, dairy products, beverages, produce or any other packaged products requiring storage temperature above +35°F.

SIZES

- There are 10 sizes available with capacities ranging from 5900 BTUH to 43,000 BTUH at 25°F SST.
- One through six fan models are available with air flow up to 4900 CFM.

CABINET

- Designed using long life aluminum components.
- Space inside unit cabinet for TXV or EXV mounting.
- Moisture tight wiring harness with quick connect motor plug.
- Knockouts provided for electrical conduits.
- Cabinet design features access door on each side for easy access to electrical and refrigeration components.

DESIGN

- Spun end sweat connections.
- External equalizer line provided with crimped end.
- Draw-thru design for uniform air flow through coil.
- Enhanced fin design and tubing with internal grooves for higher efficiency.
- Full collar, continuous plate type aluminum fin/copper tube coils provide efficient heat transfer surface.
- Units are pressurized with dry air at 15PSIG.

MOTORS

- High efficiency EC motors.
    - Dual speed.
    - 115V – 230V.
    - Totally enclosed, air over.
    - Thermal overload protection.
    - Single electrical connection for all motors.

*For AC motors contact factory.

FANS

- Common fan motors, fan blades and fan guards across all models.
- Dynamically balanced aluminum fans to provide vibration-free operation.
- Deep draw venturi provides optimal air flow.

DRAIN PAN

- 3/4" MPT drain connection.

TABLE 1: CAPACITY AND ELECTRICAL DATA

MODEL		ECLA059	ECLA069	ECLA119	ECLA141	ECLA179	ECLA213	ECLA239	ECLA284	ECLA356	ECLA428
CAPACITY (BTUH) @ 10°F TD	R448A/R449A	5900	6950	11900	14100	17900	21300	23950	28450	35600	42800
FPI		7	7	7	7	7	7	7	7	7	7
FAN DATA	NO. OF FANS	1	1	2	2	3	3	4	4	5	6
	TOTAL CFM	860	820	1720	1640	2580	2460	3440	3280	4100	4920
	AIR THROW (FT)	36	35	36	35	36	35	36	35	35	35
MOTOR DATA	RPM	1550/800	1550/800	1550/800	1550/800	1550/800	1550/800	1550/800	1550/800	1550/800	1550/800
TOTAL AMP (MAX)	115/1/60	0.72	0.72	1.44	1.44	2.16	2.16	2.88	2.88	3.60	4.32
	208-230/1/60	0.36	0.36	0.72	0.72	1.08	1.08	1.44	1.44	1.80	2.16
	WATTS	60	61	120	122	180	183	240	245	305	366
	AWEF	10.5	10.8	10.6	10.9	10.6	10.9	10.6	10.9	10.9	10.9
Approx. Shipping Weight (lbs)		50	55	82	90	115	125	146	162	242	292
Operating Ref. Charge (lbs)		1.3	1.6	2.4	2.9	3.2	4.5	4.3	5.8	7.2	8.5

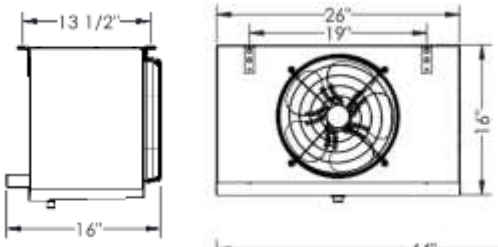
TABLE 2: RECOMMENDED TXV VALVE

MODEL		ECLA059	ECLA069	ECLA119	ECLA141	ECLA179	ECLA213	ECLA239	ECLA284	ECLA356	ECLA428
TXV VALVE	**R448A/R449A**	EFVE-1/2	EFVE-1	EFVE-1	EFVE 1 1/2	EFVE-2	EFVE-2	EFVE-2	EFVE-3	EFVE-4	EFVE-4-C

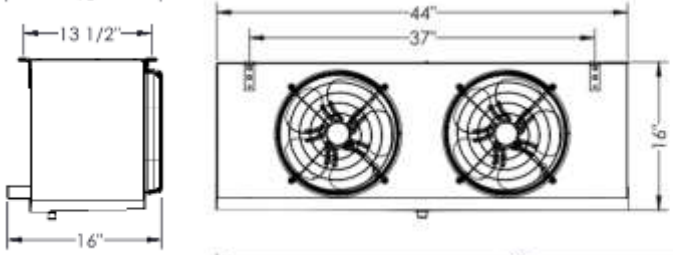
*For other refrigerants contact factory.

DIMENSIONAL DATA

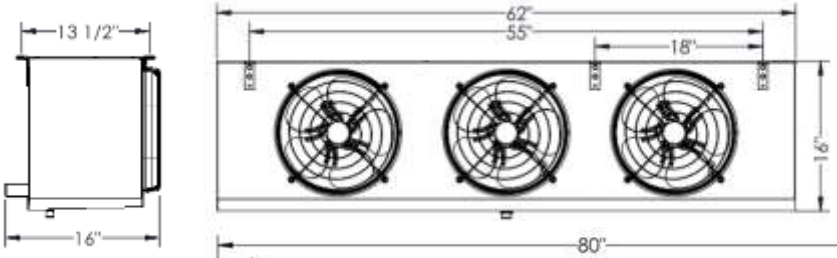
1 FAN UNIT



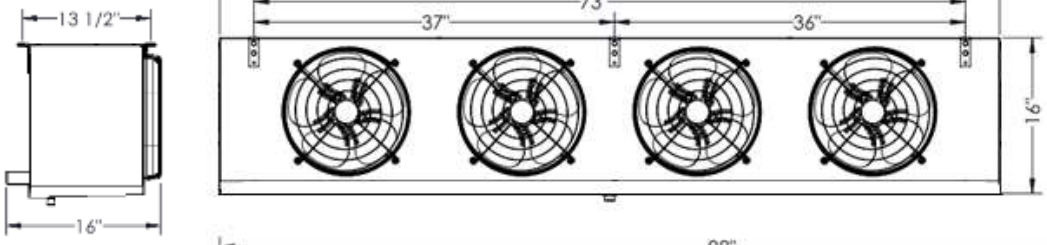
2 FAN UNIT



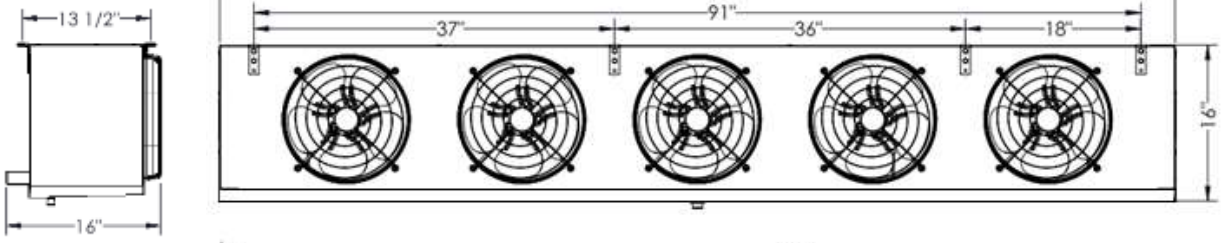
3 FAN UNIT



4 FAN UNIT



5 FAN UNIT



6 FAN UNIT

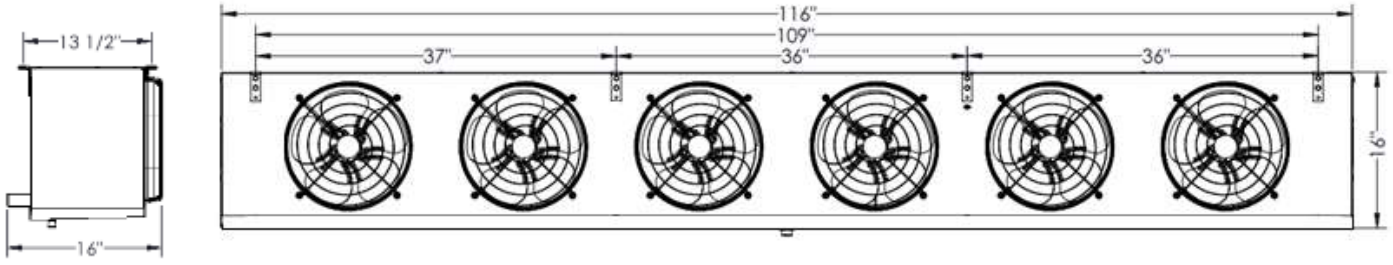


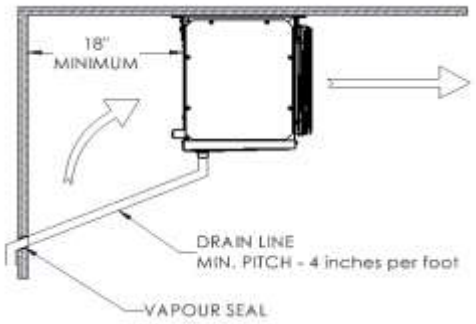
TABLE 3: CONNECTION SIZE

MODEL	ECLA059	ECLA069	ECLA119	ECLA141	ECLA179	ECLA213	ECLA239	ECLA284	ECLA356	ECLA428
CONNECTIONS (in.): INLET OD :	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"
SUCTION OD :	7/8"	7/8"	7/8"	7/8"	1-1/8"	1-1/8"	1-1/8"	1-1/8"	1-3/8"	1-3/8"
EQUALIZER OD :	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"

INSTALLATION AND OPERATING GUIDE

MOUNTING

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



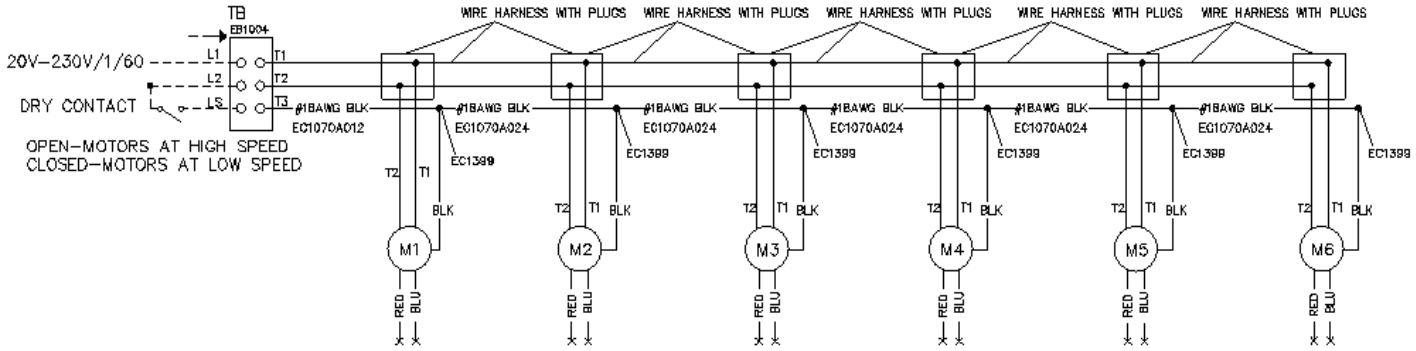
Proper air flow through the coil is very crucial to unit performance and maintenance of design storage space temperature. Therefore, a minimum of 18 inch space must be provided behind the unit for unrestricted air flow through coil.

WIRING

All wiring must be done in strict conformance to local and national electrical codes. Use unit name plate electrical data for MCA and MFS. Use copper conductors only. Unit must be grounded.

Please note that unit will comply with AWEF as provided in table #1 only when motors are switched to low speed during off-cycle. To do so, dry contact wired between one of the power leads and 3rd terminal has to be closed.

CAUTION: DISCONNECT ALL POWER BEFORE SERVICE.



REFRIGERANT PIPING

Sizing and installation of all refrigerant piping must be in accordance with recommended and acceptable practices for specified refrigerants. Only expansion valves with external equalizer must be used, see recommended TXV size in the table #2. After the space temperature has reached design condition, adjust expansion valve to obtain recommended 6°F 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 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.

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

FAN MOTORS

The only electrical component vulnerable to malfunction is the fan motor. In the event of motor failure, affected motor should be removed, tested away from the unit, and replaced if necessary.

CLEANING

Clean unit casing and fan guards using soap and warm water. Care must be taken to avoid water entering the motor, this could permanently damage the motor.

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, or P- trap for proper operation.

REPLACEMENT PARTS

- ✓ FAN BLADE : FA1006
- ✓ FAN GUARD : GA1005
- ✓ EC MOTOR (115V-230V) : MA1172
- ✓ MOTOR MOUNT : BB1004
- ✓ DRAIN PAN : 1 FAN : BA6649A001
  - 2 FAN : BA6704A001
  - 3 FAN : BA6650A001
  - 4 FAN : BA6705A001
  - 5 FAN : BA6651A001
  - 6 FAN : BA6652A001

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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