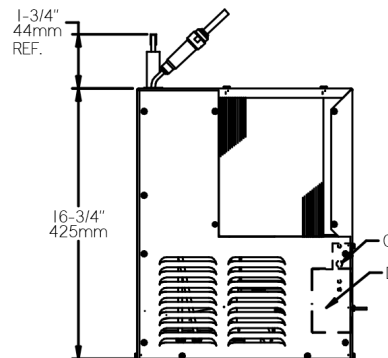
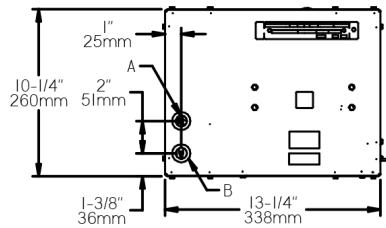


Installation / Care / Use Manual

Original Instructions Model : ECH82 230V Refrigeration Package



Legend

- A = 1/4" (6.4mm) O.D. Tube Water Outlet
- B = 3/8" (9.5mm) O.D. Tube Water Inlet
- C = Temperature Adjustment
- D = Electrical Inlet

Description

Remote Water Chillers are designed to reduce the temperature of potable water that is routed through the water chiller. This chiller is meant to be installed in a properly ventilated, non-visible location.

Ratings

- Electrical: 230VAC, 50Hz, (See nameplate for Amperage), 1 phase.
- Ambient Air Temperature: 50-100.4 °F (10-38 °C).
- Water Pressure: 20-100 psig (0.14-0.69 MPa).
- Maximum Water Temperature: 90 °F (32 °C).
- Refrigerant: HFC-R134a
- Ingress Protection: IP2x
- For Indoor Commercial Use only.

Definitions

DANGER – Indicates death or serious injury will result if proper precautions are not taken.

WARNING – Indicates death, serious injury or property damage can result if proper precautions are not taken.

CAUTION – Indicates some injury or property damage may result if proper precautions are not taken.

Authorized Service Personnel – Factory trained personnel or personnel having working knowledge of electrical, plumbing and machine (appliance) maintenance procedures.

Safety

DANGER

- Please read these instructions completely before starting the installation or performing any service. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death.
- After installation, keep these instructions in a safe location for future reference.
- Electric supply must be identical in voltage, cycle, and phase to that specified on nameplate.
- A means for disconnecting electrical supply to the unit must be incorporated in the fixed wiring in accordance with wiring rules. This is to allow electrical disconnection of the unit from electrical supply after installation.

WARNING

- For use with clean, clear potable drinking water only. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before the system.
- Installation and connection to water and electrical mains must be in compliance with local and national laws.
- All Installation and Service work must be performed by an authorized service personnel.

CAUTION

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instructions concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- To prevent a metallic taste or increased metal content in the water due to an electrolysis process caused by electrical feedback from the grounding of electrical equipment to water mains, connect to the water mains using the provided in-line strainer or a dielectric coupling.

Installation

For correct and safe installation, please read these instructions completely.

DANGER

- All Installation work must be performed by an authorized service personnel.
- Disconnect electrical supply serving the Installation area to reduce risk of electrocution.
- Unit not suitable for installations where water jets could be used.

WARNING

- Shut off water supply serving the Installation area to reduce risk of water damage.
- Installation area must have minimum required clearances and ventilation for safe operation.
- Never wire compressor directly to electrical supply.

CAUTION

- Hose-sets are not to be used for connecting to water mains.
- Tools/Items required but not provided.
 - o Safety Glasses
 - o Protective Gloves
 - o 5/16" (7.9mm) Socket Wrench or Flat Head Screwdriver
 - o Water Shut-off Valve

Installation Steps

1. It is important to insure proper ventilation. When mounting in an open area, to insure proper ventilation, maintain a 4" (102mm) clearance from cabinet louvers on each side of cooler. When mounting unit in a cavity or behind a wall, maintain a minimum space of 4" (102mm) on each side, 4" (102mm) on the top and a depth of 12" (305mm).
2. Connecting lines to be made of unplated copper. Thoroughly flush all lines to remove all foreign matter before connecting to cooler.
3. Connect in-line water strainer(Provided, Item 16) to chiller water inlet. See Figure 2.
4. Connect in-line water strainer to building supply with a water shut-off valve (not provided). See Figure 2.

Wiring Instructions

1. Turn off electrical supply to chiller circuit.
2. Remove front panel (Item 10) to gain access to electrical box using a 5/16" (7.9mm) socket wrench or a flathead screwdriver.
3. Rotate fan to insure proper clearance and free fan action.
4. Join electrical wire to unit using 3/8" cable clamp connector or appropriate conduit connector.
5. Connect ground wire to ground screw (provided).
6. Connect black wire to 230Vac.
7. Connect white wire to Neutral line.
8. Replace front panel (Item 10).

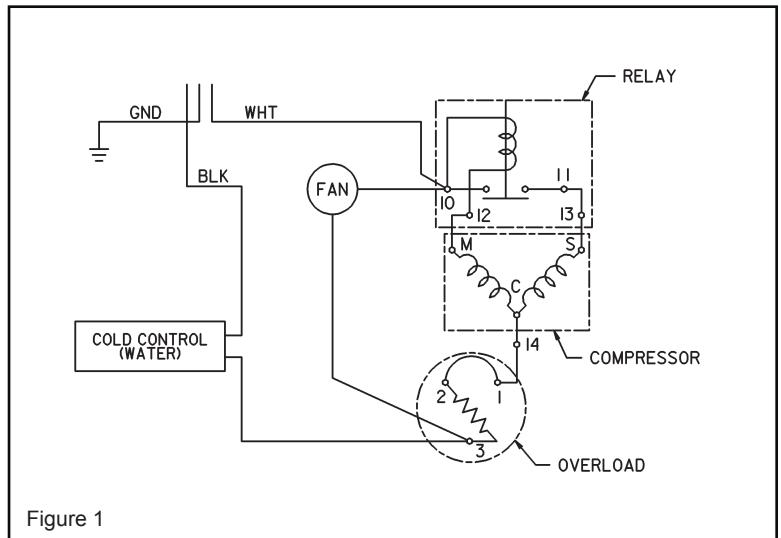


Figure 1

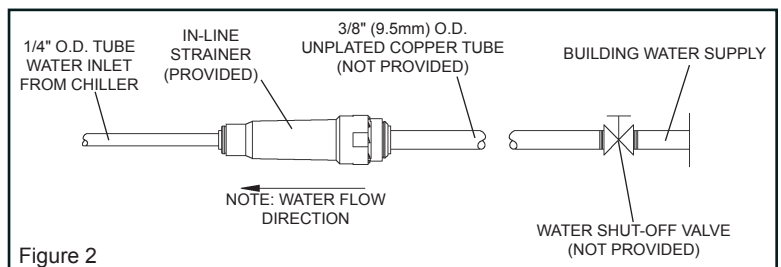


Figure 2

Start-Up

1. Open water shut-off valve
2. Purge air from all water lines by operating bubbler valve of fountain to which chiller is connected. Steady water stream assures all air is removed. Check all water connections for leaks. Fix all leaks before proceeding.
3. Rotate fan to insure proper clearance and free fan action.
4. Turn on electrical supply.

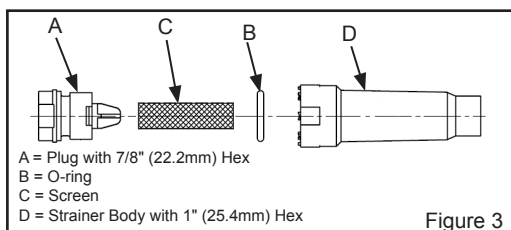


Figure 3

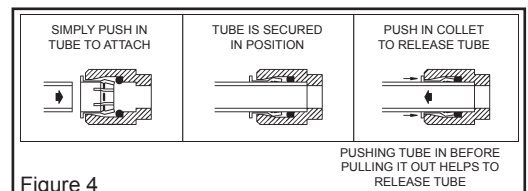


Figure 4

Service

For proper and safe servicing, please read these instructions completely.

DANGER

- All Service and Maintenance must be performed by an authorized service personnel.
- Disconnect electrical supply to the unit before any service work to reduce risk of electrocution.
- Shut off water supply serving the unit before any service work to reduce risk of water damage.

CAUTION

- Tools/Items required but not provided, for Servicing:
 - o Safety Glasses
 - o Protective Gloves
 - o 5/16" (7.9mm) Socket Wrench or Flat Head Screwdriver

Service: Adjustments

1. **Temperature Control:** Factory set for 50°F ± 5° (10°C ± 2.8°) water under normal conditions. To adjust water temperature, turn off electrical supply, remove front panel (Item 10) using a 5/16" (7.9mm) socket wrench or flat head screwdriver, and turn screw on cold control (Item 9) clockwise for colder, counter clockwise for warmer.

Service: Inspection/Cleaning

- Inspect Water Chiller twice each year for proper operation and performance.
 - Inspection of the unit will require disconnecting electrical supply, removal of panels, etc. and reassembly and return to service practices.
1. **Condenser Fan Motor:** Confirm condenser fan turns freely. If the condenser fan does not spin freely, have an authorized service personnel replace.
 2. **Ventilation:** Cabinet louvers and condenser fins should be periodically cleaned with a brush, air hose or vacuum cleaner. Cleaning should be done twice each year or more frequently if needed due to environment. Excess dirt or poor ventilation can cause no cold water and compressor cycling on the compressor overload protector.
 3. **Water Flow:** Confirm proper water flow. If water flow is slow, inspect filter or inline strainer for restriction. Replace filter cartridge if required. Disassemble inline strainer and clean if required. See Figure 3.
 4. **Lubrication:** Motors are lifetime lubricated.
 5. **Actuation of Quick Connect Water Fittings:** Cooler is provided with lead-free connectors which utilize an o-ring seal. To remove tubing from the fittings, relieve water pressure and push in on gray collar while pulling on the tubing. To insert tubing, push tube straight into fitting until it reaches a positive stop, approximately 3/4" (19mm). See Figure 4.

Replacement Parts: Parts List

ITEM NO.	PART NO.	DESCRIPTION
1	98724C	KIT - EVAP REPLACE ASSY
2	28478C	CABINET
3	98776C	KIT - CONDENSER/DRIER
4	0000000244	KIT - FAN MTR/BLADE/NUT/SHROUD (50Hz)
5	20282C	BRACKET - FAN MOUNTING
6	98778C	KIT - HEAT EXCHANGER/DRIER
7	66703C	DRIER
*8	1000002147	COMPRESSOR SERVICE PAK (50Hz)
9	98773C	KIT - COLD CONTROL/SCREWS
10	28477C	PANEL - FRONT
11	98751C	KIT - ELECT/RELAY/COVER/OL (50Hz)
12	98777C	KIT - COMPRESSOR MTG HDWE
13	50930C	BUMPER
14	27303C	BASEPLATE
15	22300C	PANEL - REAR
16	55996C	IN-LINE STRAINER
17	56237C	SHROUD

***INCLUDES RELAY & OVERLOAD. IF UNDER WARRANTY, REPLACE WITH SAME COMPRESSOR USED IN ORIGINAL ASSEMBLY.**

NOTE: All correspondence pertaining to any of the above water cooler or orders for repair parts MUST include model number and serial number of cooler, name and part number of replacement part.

