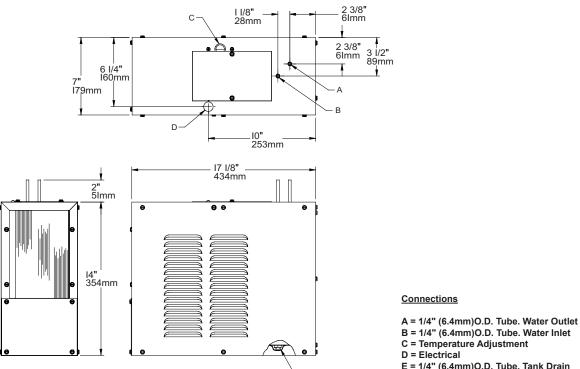
# **Installation / Care / Use Manual**

Original Instructions Model: ERS12Y 230V Refrigeration Package



B = 1/4" (6.4mm)O.D. Tube. Water Inlet

C = Temperature Adjustment

E = 1/4" (6.4mm)O.D. Tube. Tank Drain

### Description

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

### Ratings

- Electrical: 230VAC, 50Hz, A (see nameplate), 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.

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.

### 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

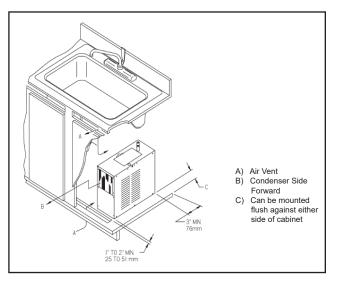
- · Shut off water supply serving the Installation area to reduce risk of water damage.
- Installation area must have minimum required clearances and ventilation for safe operation.
- Never wire compressor directly to electrical supply.

#### 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 Hex drives.
  - o Water Shut-off Valve with 3/8" (9.5mm) compression outlet.
  - o Fasteners for wall type.

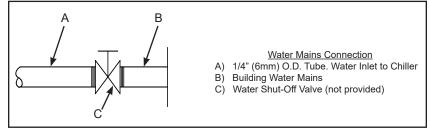
### **Installation Steps**

- 1. This unit can be installed underneath a commercial or industrial sink, in a cabinet not less than 36" (914mm) wide (inside dimension). Two air openings with a minimum of 40" (1016mm) square each, minimum of 75% open area, must be provided in the cabinet. One opening must be in the overhang of the toe space, the other opening near the top of the cabinet. The remote unit must be installed with a minimum of 3"(76mm) clearance between the unit and the rear wall of the cabinet. It can be installed flush against either side wall of the cabinet. The side louvers which are not against the cabinet must not be blocked by objects located within 4" (102mm) of the louvers. In addition, a minimum of 1 to 2" (25 to 51mm) clearance must be provided between the toe space air opening and front of the unit.
- Water inlet and outlet are 1/4" (6.4mm) O.D. tubes with connectors supplied.
- 3. Connecting lines to be of copper, thoroughly flushed to remove all foreign matter before being connected to cooler.
- 4. Connect cooler to building water mains with a shut-off valve and install a 3/8" (10mm) O.D. unplated copper tube between the valve and cooler. Remove burr from outside of water line. Insert water line into fitting until it reaches a positive stop, approximately 3/4" (19mm).



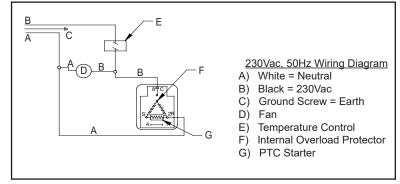
### **Wiring Instructions**

- 1. Turn off electrical supply to chiller circuit
- 2. Remove top cover to gain access to electrical box
- 3. Join electrical wire to unit using 3/8" cable clamp connector or appropriate conduit connector
- 4. Connect ground wire to ground screw (provided)
- 5. Connect black wire to 230VAC
- 6. Connect white wire to Neutral line
- 7. Replace top cover and turn on electrical supply.



## Start-Up

- 1. Open water shut-off valve.
- Purge air from all water lines by operating bubbler valve of fountain to which cooler is connected. Steady water stream assures all air is removed.
- 3. Rotate fan to insure proper clearance and free fan action.
- 4. Connect to electrical supply.



### **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 Hex drives.

### Service: Adjustments

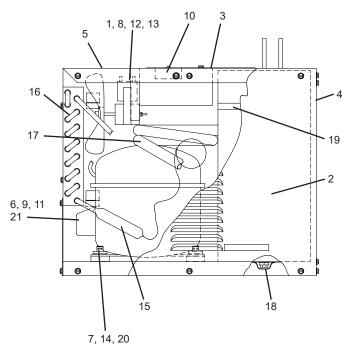
1. Temperature Control: Water temperature is factory set at 50°F ± 5° (10°C ± 2.8°) under normal conditions. For colder water, adjust screw on item no. 10 in clockwise direction.

### 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.
- 2. <u>Condenser Fan Motor</u>: Confirm condenser fan turns freely. If the condenser fan does not spin freely, have an authorized service personnel replace.
- 3. <u>Ventilation</u>: 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.
- 4. <u>Water Flow</u>: 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.
- 5. <u>Lubrication</u>: Motors are lifetime lubricated.

### **Replacement Parts: Parts List**

| ITEM NO. | PART NO.     | DESCRIPTION                |
|----------|--------------|----------------------------|
| 1        | 22000C       | BRACKET - FAN MOTOR        |
| 2        | 23084C       | PANEL - FRONT              |
| 3        | 23085C       | ELECTRICAL COVER           |
| 4        | 23086C       | PANEL-RIGHT SIDE & BACK    |
| 5        | 23087C       | LEFT SIDE                  |
| 6        | 35768C       | COVER - RELAY              |
| 7        | 19037000     | CLIP                       |
| 8        | 30824C       | BLADE - FAN                |
| 9        | 36171C       | OVERLOAD                   |
| 10       | 2000001204   | COLD CONTROL               |
| 11*      | 35967C       | COMPRESSOR SERVICE PACK    |
| 12       | 31395C       | MOTOR - FAN                |
| 13       | 111543043890 | NUT #6 HEX (FAN MOTOR MTG) |
| 14       | 100806740570 | GROMMET                    |
| 15       | 66199C       | DRIER                      |
| 16       | 61521C       | CONDENSER                  |
| 17       | 66606C       | HEAT EXCHANGER             |
| 18       | 62031C       | DRAIN PLUG                 |
| 19       | 66363C       | EVAPORATOR TANK ASSY       |
| 20       | 101516143550 | STUD - COMPRESSOR MOUNTING |
| 21       | 36166C       | RELAY                      |



\*INCLUDES RELAY & OVERLOAD. IF UNDER WARRANTY, REPLACE WITH SAME COMPRESSOR USED IN ORIGINAL ASSEMBLY. NOTE: All correspondence pertaining to any of the above water coolers or orders for repair parts MUST include Model No. and Serial No. of cooler, name and part number of replacement part.

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