



INSTALLATION INSTRUCTIONS
CHILLED WATER SATELLITE 2 – 15 TON

INTRODUCTION

The chilled water units are designed such that they may be suspended from the ceiling or mounted on the floor or built up rack. Units are designed for use with a remote water chiller.

INSPECTION OF EQUIPMENT

Upon receipt of the unit, inspect for visible or concealed damage. Report any damage to the freight carrier, and file a damage claim.

SELECTION OF INSTALLATION SITE

Before unit is installed, a thorough study should be made of the structure. Careful consideration must be given to location of wiring, condensate disposal, ductwork, and accessibility to the unit for maintenance and servicing. It is recommended that a minimum of 24" clearance space be allowed on each side of the unit to accommodate maintenance and servicing. Attention must also be given to the floor, ceiling, or wall load limitations.

UNIT MOUNTING

As shown in (Fig. 1) units are equipped with two mounting channels for floor mounting or suspension rods. Field supplied 3/8-inch diameter rods are recommended, together with the proper washers and nuts.

CONDENSATE DRAINS

Units are equipped with a 3/4" IPS drains for removal of the water, which condenses on the chilled water coil. It is **EXTREMELY IMPORTANT** that the line attached to this connection contains a TRAP, to ensure positive draining. It is highly recommended that the trap be primed with water prior to start-up of the unit.

FILTERS

Throwaway filters are supplied with the unit and are an Underwriters Laboratories class 2 pleated extended surface type. Filters should be checked monthly for dirt accumulation and changed when necessary. Replacement filter must be the same as originally supplied. Removing the cover located on the right front corner of the unit (Fig. 1) attains Field access. **Note:** Unit must be shut off at the disconnect switch before the filter(s) are serviced and replaced. Be sure to check that the airflow direction arrows on the filters point in the right direction. 2-3ton units take (1) 20x20x2 filter and the 4-8ton units take (2) 14x25x2 filters.

CHILLED WATER CONNECTIONS

Copper sweat connections are provided at the side of the unit (See Fig. 1) Connection sizes are as follows:

MODEL	LINE SIZE
SCC-024 & 036	7/8 INCHES
SCC-048 & 060	1 1/8 INCHES
SCC-096	1 3/8 INCHES

ELECTRICAL

Power supply and control wiring supply are to be brought through the 7/8-inch diameter (1/2" KO) holes at the side of the unit (See Fig.1) Minimum wire size is 14 gauge for the power supply. For control wiring, 18-gauge wire is sufficient up to 50 feet in length. 16-gauge wire is sufficient for up to 100 feet in length. Consult the wiring diagram supplied on the unit control box cover, or in these instructions.

OPERATION OF SYSTEM

The chilled water valve has an electronic proportional control. The sensor located inside the remote controller provided determines the amount of opening of the valve. The sensor element is one whose resistance increases with temperature (2.2 ohms per F).

The controller bridge input network accepts the resistance signal from the sensor, compares it to the set point value, and converts and produces a DC milli-volt output signal which is amplified and sent to the valve actuator. This amplified signal results in a 2 to 15 volt DC output that appears at the IVI COM wires (Blue & Yellow) on the controller, and at the No. 2 and No. 3 terminals at the unit.

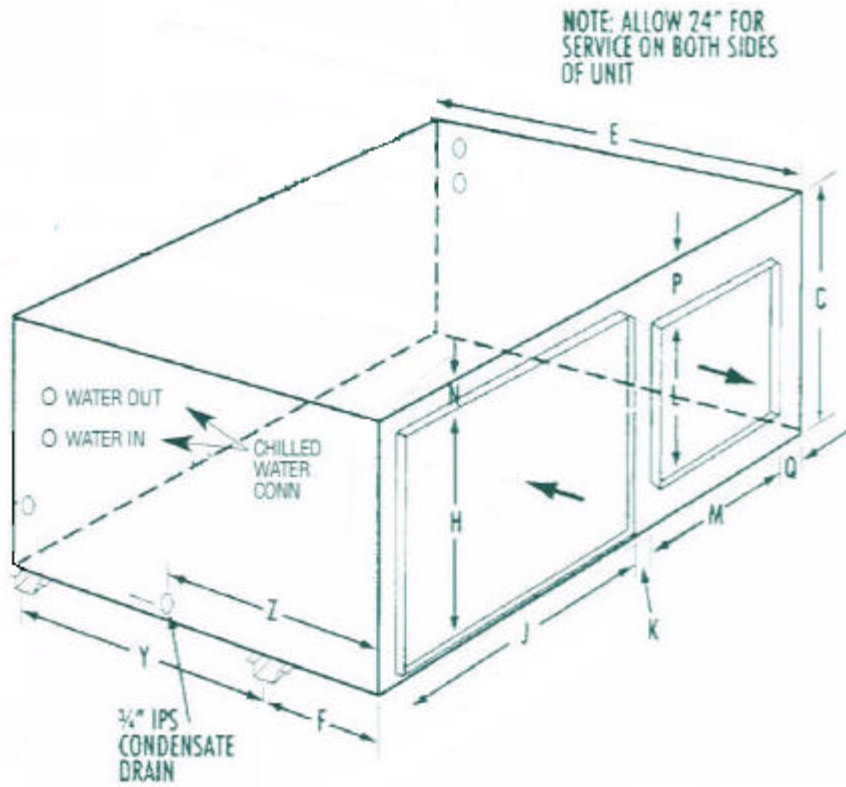
As shipped from the factory, the controller is calibrated such as to produce a 6-volt DC signal when the sensor is at the set point temperature. The controller has an adjustable throttling range. Throttling range is that number of degrees Fahrenheit difference, which will produce a change of 3 volt DC, or a change from a full closed to a full open valve. The possible ranges are 2, 3, 6, and 10 F. The controller is shipped with a 3 F throttling range. If a different range is required, merely remove the Brown controller wire from the 3 F pin and place it on the range required.

The control system also contains a switching sub base to which the controller is mechanically attached. This sub base provides the options of continuous or automatic fan operation, and system Off Cool Heat.

OPTIONAL ELECTRIC HEAT

Various electrical heat options are available. The wiring diagrams supplied with the chilled water unit should be consulted for the necessary interconnection wiring.

DIMENSIONS



Chilled Water Satellite																				
024, 036	43 ¹ / ₈	22	38 ³ / ₈	13	44 ³ / ₄	18	20	2 ³ / ₄	14	12	1 ¹ / ₄	2 ¹ / ₄	5 ¹³ / ₁₆						22 ⁵ / ₈	24
048, 060 072, 096,	51 ¹ / ₄	29	42 ¹ / ₄	11	53	23	28	2 ¹ / ₂	18	16	3 ¹ / ₄	5 ¹¹ / ₁₆	2 ⁷ / ₈						27 ¹ / ₈	25
120, 144, 180	70	29	34 ¹ / ₂	7 ¹ / ₂	71 ¹ / ₂	25	46	2 ¹ / ₂	20	18	1 ¹ / ₄	2	1 ¹ / ₄						24 ³ / ₄	20 ¹ / ₂