

CCW - Central Water Cooled Chillers



Cooling Technology's Central Water Cooled Chiller is designed for either indoor or outdoor locations.

The CCW line features a screw compressor (CCW-40 semi-hermetic reciprocating) and a shell and tube evaporator and condenser. Its compact design and open frame reduces floor space requirements.

The model is designed for use with a remote pump/tank station.

Our CCW line of chillers is available in 40 to 140 ton capacities.

SUPERIOR BY DESIGN

Our use of the highest quality components and a robust design assures a dependable, long lasting trouble free machine and a clean corrosion free environment. All components are bolted to a heavy gauge steel frame. The frame design incorporates lifting eyes to enable the chiller to be lifted to high elevations with ease.

COMPRESSOR

The CCW 40 uses a Semi-hermetic Reciprocating compressor. The CCW 50+ ton units use a screw compressor and water cooled condenser with fan cycling to maintain head pressures. Capacity is accurately controlled by cylinder unloading, or, in case of the screw compressor, infinite control to approximately 25% part load.

EVAPORATOR & CONDENSER

The CCW series uses a shell and tube evaporator and condenser. The shell & tube design has inner-fin tubing and segmented baffles. Its shell, connector and heads are steel, while the baffles tubes, and tube sheet are copper.

The evaporators boast a mere 3 foot tube length through 130 nominal tons of capacity while our larger size CCW units have a 3½ foot tube length. The evaporators are tested in accordance with ARI standard 480-95.

Why choose a shell and tube design. The shell and tube design is more resistant to localized freeze-ups. They also resist process fluid residuals from clogging up the evaporator and premature failure. They are legendary for ease of field service.

Should it become necessary, your service technician can clean the condenser. The CCW comes complete with water regulating valve to maintain head pressures.

HOST OF SAFETIES

A full range of safeties (with indicating warning lights) is standard: high refrigerant pressure relief valve, automatic low refrigerant pressure cut-off, manual high refrigerant pressure cut-off, low oil pressure cut-off, freeze protection, multiple stage thermostat and fault indicating pilot lights.

ELECTRICALS

All electrical components are mounted in a NEMA 4 rated electrical panel that is professionally wired and numbered to correspond with the electrical schematic.

CTI's rugged MCS Microprocessor Controller keeps the chiller running at its most energy-efficient level. A "control zone" – based on leaving fluid temperature – reduces compressor cycling and improves unit part load efficiency. It is the most user-friendly controller available and, with its extremely fast Windows based system, provides full protection, monitoring and control via RS-232 or RS-484 port. Other features of the controller include status & dynamic graphing mode, automatic history storage for all points and battery backed up ram & clock (see chiller microprocessor controller specifications for details).

Our attention to detail extends to our choosing to use long life, LED indicator lights. The CCW chiller is fully wired, charged with refrigerant at the factory and tested under simulated load conditions before shipment to your job site.

AVAILABLE OPTIONS

CTI offers several options for our CCW line of chillers. The chillers are designed to be coupled with the CTI pump/tank stations. See tank and pump specifications for more information on pump/tank configurations. In addition to the pump and tank, an automatic water make-up valve can be added to maintain the liquid level or a side stream filter to promote a clean running system. We offer several alarms which can be added to the chiller as well: low water level alarm, high temperature and low temperature alarms.