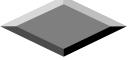
CONTINUOUS REFRIGERANT DEHYDRATOR™

FOR USE ON FLOODED EVAPORATOR AC/R SYSTEMS

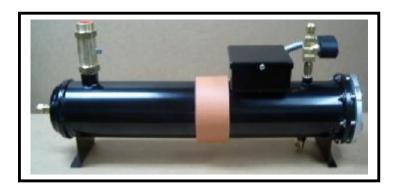
Continuously removes, moisture, acid, sludge and particulates from any flooded evaporator AC/R Refrigeration systems.



Literature File No. 1144-02

Special Features & Benefits:

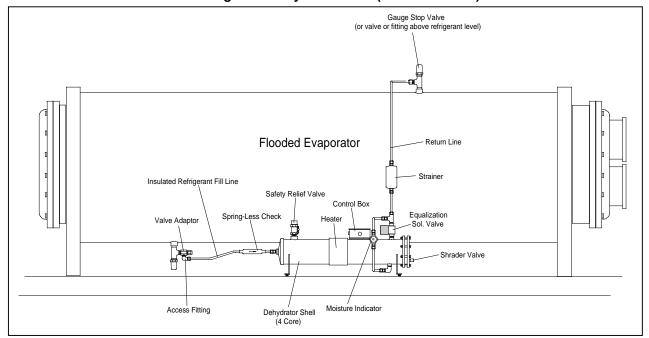
- <u>Continously removes moisture (Dehydrates) approximately 4,200 pounds of refrigerant per week, in the same process it also removes acids, sludge and particulates.</u>
- Helps Restore Chiller to peak operating performance.
- Maintains system Moisture and Acid free.
- Operates 24 hours a day whether chiller is on or off.
- Operation is totally automatic.
- Easy to install (120 VAC power supply and two 3/8" connections).
- There are no mechanical or ejector pumps, the system uses only gravity, heat and pressure differential to operate.
- Utilizes 4 Super High Capacity filter cores for high moisture removal. (Filter cores have 3 times the moisture absorbing capacity of standard cores).
- Reduces maintenance and helps prevent premature failure.
- Refrigerant charge does not have to be "pulled" to install.



SPECIFICATIONS FOR MODEL CD-120 • ELECTRICAL REQUIREMENTS: • 120 Volts AC • 60 Hz • OPERATING ENVIRONMENT • 40°F to 130°F CORES 4 Super High Moisture Capacity • Height: 12" -- Depth 6" " -- length 29" • DIMENSIONS • WEIGHT • 22 lbs (shipping weight 30 lbs approximate) • CONNECTIONS • Two 3/8" OD connection • PRESSURES • Maximum Operating Pressure 350 psi • REFRIGERANT PROCESSED, AVERAGE • 4200 pounds per week (approximate) • 12.5 pounds refrigerant per cycle (approximate) • REFRIGERANT PROCESSED PER CYCLE

Refrigerant Line Hook-up

Requires only two 3/8" OD line connections between the refrigeration system and the Continuous Refrigerant Dehydrator unit (see illustration).



OPERATIONAL OVERVIEW

The **Continuous Refrigerant Dehydrator** is a passive device that can be attached to any AC/R refrigeration system with a *flooded evaporater* for the purpose of continuous cycle refrigerant charge dehydration. In the process acids, sludge and particulates are also removed.

The Continuous Refrigerant Dehydrator comprises a modified replaceable four core filter-dryer shell fitted with a spring less inlet ball check valve, 350 watt electric band heater, heater cycle timer, moisture indicating sight glass, 300 psi safety relief valve and 1/4" access valve.

The dryer shell inlet is connected to the evaporator's refrigerant charging valve, or other suitable valve having access to liquid refrigerant in the evaporator. The outlet of the drier shell is connected to a suitable valve or fitting on the evaporator above the liquid refrigerant level.

Moisture laden refrigerant is allowed to flow by gravity through the inlet check valve into the dryer shell for a preset timed interval. The refrigerant is continuously dehydrated and cleaned as it passes through the four special super high moisture capacity cores. These special high capacity cores have triple the moisture capacity of standard cores and are recommended for systems with excessive moisture.

At the end of the pre-set timed period the heater is energized for a second pre-set timed period. As the liquid refrigerant becomes heated sufficient vapor pressure is generated to push the now dehydrated and clean refrigerant from the dryer shell back into the evaporator.

At the end of the refrigerant transfer timed period the heater is de-energized allowing more wet refrigerant to flow by gravity into the dryer shell wherein the cycle repeats itself over and over non-stop around the clock whether the chiller is operating or not.

The Continuous Refrigerant Dehydrator is capable dehydrating approximately 4,200 pounds of wet refrigerant per week.

