



CLOSED LOOP DRY FLUID COOLERS

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I-R CLOSED LOOP - DRY FLUID COOLERS

SUGGESTED EQUIPMENT SPECIFICATIONS

Furnish **Ingersoll-Rand** closed loop coolers, arranged for vertical airflow. Coolers shall be draw-through design.

GENERAL

Each cooler shall consist of casing, drycooler coil, propeller fans direct-driven by individual fan motors, fan guards, and mounting legs.

Fan motors shall be furnished for operation on a _____ volt, _____ phase, _____ Hz, Power supply.

COIL

The cooler coil shall be constructed of copper tubes on a staggered tube pattern. Tubes shall be expanded into continuous, rippled aluminum fins. The fins shall have full-depth fin collars completely covering the copper tube.

Copper tubes shall be connected to heavy wall type L headers, inlet coil connector tubes shall pass through relieved holes in the tube sheet, for maximum resistance to piping strain and vibration.

Coils shall be factory tested at 300 PSIG, dehydrated, evacuated and sealed for shipment.

CASING

The cooler casing shall be constructed of bright aluminum sheet. Casing shall be divided into individual fan sections by full width baffles.

Structural support members, including coil support frame, motor and drive support shall be galvanized steel for strength and corrosion resistance.

Aluminum legs with rigging holes shall be provided for hoisting the unit into position.

FANS

Fans shall have aluminum blades. Fan shall be secured to fan shaft by means of a heavy-duty keyed hub and dual set screws. Fan diameter shall be 30" or less. Fans shall be factory balanced and run before shipment. Fan guards shall be heavy gauge, closed-mesh, and steel wire, with corrosion resistant finish.

FAN MOTORS

TEAO fan motors shall be equipped with rain slingers and permanently sealed ball bearings. Motors shall include built-in overload protection. Motors shall be rigidly mounted on die-formed galvanized steel supports.

ELECTRICAL CONTROL

All electrical connections shall be provided in weatherproof enclosure. The enclosure shall be integral with the cooler for pleasing appearance as well as functional protection, exception mdoel-1820 were the electrical components will be mounted in a Nema 4 enclosure on the pump skid. The cooler shall be provided with a disconnect switch mounted and wired. Fan cycling shall be used to control leaving fluid temperature by cycling fans in one or two steps. The 24-volt control circuit that is furnished consists of control transformer, fan contactors and temperature controls. Motor starters for the dual pumps are also included, along with the circuitry to automatically switch to the stand-by pump.