

## **1. MEDICAL AIR TREATMENT SYSTEM WITH REFRIGERATED AIR DRYERS**

- A. Furnish and install, where shown on the drawings a prefabricated Medical Air Treatment system with refrigerated air dryers model 3DRZ\_\_\_\_\_ as manufactured by EMSE Corporation, Fairfield, NJ (1-800-935-EMSE).
- B. The unit furnished shall be a standard catalog item of the supplier regularly engaged in the business of providing packaged systems for hospitals and laboratories and shall meet and exceed the requirements of NFPA 99.
- C. The EMSE Duplex Refrigerated Air Dryer system shall be a completely packaged NFPA 99 and NEC compliant assembly featuring dual refrigerated air dryers, dual 0.5 micron after-filters, line pressure regulating valves, dew point monitor, CO monitor and other accessories required to meet and exceed the current code requirements. All components are pre-piped and pre-wired to single-point service connections. The only field connections are air intake, air discharge and the power connection. All interconnecting copper/brass piping as well as wiring is completed and operationally tested prior to shipment.
- D. Each unit consists of two identical banks of air treatment equipment, piped in parallel and provided with valves to by-pass either filter set for element replacement, maintenance and repair work on one of the sets while still treating medical compressed air through the other set without any sacrifice in air quality.
- E. Refrigerated self-contained cycling air dryers (designed to successfully operate at low load or no load conditions) utilize the minimum refrigerant charge for maximum environmental safety. No CFCs used. Maintenance-free high efficiency refrigerant compressors are standard. Moisture separator with automatic drain remove moisture down to +35oF pressure dew point. The dryers shall be equipped with electronic dew point temperature display and built-in electronic drain.
- F. 0.5 micron after-filters are prime efficiency coalescers with particle removal down to 0.5 micron.
- G. Downstream pressure regulators maintain constant discharge pressure of 55 PSIG (field adjustable).
- H. Digital dew point and CO monitors with alarm set points at 390F and 10 PPM are provided with dry contacts for connection to remote alarm panels. A "demand check" for maintenance is included per current NFPA 99 for each instrument.
- I. The Medical Air Treatment system is guaranteed in writing by the manufacturer for a period of 12 months from the date of start-up or 18 months from the date of shipment (whichever comes first) against defects in design, materials, or construction.



- J. The service of a factory trained representative will be available at the jobsite to check installation, start-up and instruct operating personnel in proper operation and maintenance.