## **PURE Humidifier Co.**

**Sample Specification**

**“ER” Series**

**Humidifier**

The humidifier shall be electrically heated immersion heater type as manufactured by PURE Humidifier Co. of Chaska, Minnesota.

The humidifier shall be tested and approved by ETL/ETL-C Testing Laboratories, Inc.

The humidifier shall have an evaporating reservoir with a gasket-sealed cover that is capable of operating at pressures of at least 19” (48 cm- W.C.) without steam or water leaks. The reservoir shall be made of type 304L stainless steel with welded joints.

A surface water flusher shall be included to drain away a portion of the water upon each refill cycle. This is to allow mineral deposits produced by earlier evaporation cycles to be removed. Flusher shall be designed for minimal water waste and efficient flushing.

The immersion heater(s) shall be incoloy-sheathed and designed for 80 watts per square inch. They shall be attached to the reservoir cover and be easily removed for cleaning or inspection. Expansion and contraction of the heater sheath allows mineral build-up to flake off.

A solenoid-operated water fill valve shall be factory-mounted on the body of the humidifier reservoir. The fill valve shall be located to allow a minimum water gap of 1-1/2” (3.81 cm).

The humidifier shall have a manual reset over-temperature switch factory-installed on the humidifier reservoir cover. The temperature switch shall provide humidifier over-temperature protection.

A solid state, plug-in type control module shall be factory-mounted in the controls box and shall electronically control the automatic refilling, low water cut-off, high water cut-off, manual surface water flushing, and safety switch interlock functions. The module shall include automatic drain functions to drain the reservoir. A cumulative timer shall be field adjustable between 10 to 150 hours of operation. When the system is activated the fill valve will be energized to provide a cool-down tempering of the water prior to draining.

The control module shall incorporate LED lights to indicate safety switch interruption, power, fill, heat ready, and drain. The control module shall control all water level control functions through a Tri-Probe sensor mounted on the cover of the humidifier reservoir. The Tri-Probe sensor with stainless steel shield shall electrically sense the water level within the reservoir.

SCR Modulation, 100% solid state power controller shall be provided in the control box. The SCR power controller will modulate the humidifier between 0-100% of its rated capacity according to humidistat demand.

The electrical control box shall be mounted on the humidifier cover. The control box shall include a magnetic contactor, water level control module, fused control circuit transformer, numbered terminal block, and heater fuse(s). The high voltage wiring shall be shielded to prevent shock hazard. The modulating control voltage shall be field adjustable to match the controlling input signal.