

PURE Humidifier Company
Sample Specification
“SXDDR” Series

Humidifier

The humidifier shall be steam heated heat exchanger type as manufactured by PURE Humidifier Company of Chaska, Minnesota.

The humidifier shall be tested and approved by ETL/ETL-C Testing Laboratories, Inc (ETL #472940).

The humidifier shall have an evaporating reservoir with a gasket sealed cover which 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 304 stainless steel with welded joints.

The humidifier shall be designed to facilitate easy removal of the heat exchanger for periodic scale removal and inspection. The cover and heat exchanger shall be secured to the unit by the use of quick release clamps. The heat exchanger shall be removable from the side of the humidifier without disturbing the cover or injection tube system’s steam supply piping.

A stainless steel float operated low water cut-off switch shall be provided. The float switch shall provide positive low water cut-out of the humidifier steam supply valve.

A stainless steel float operated water fill valve mounted on the top of the reservoir near the front shall be provided. The fill valve shall provide automatic refilling of the humidifier reservoir. The water inlet shall be located to allow a minimum water gap of 1 ½” (3.81 cm).

The humidifier shall have a ¾” (1.9 cm) over-flow pipe to prevent overfilling of the humidifier reservoir.

A ¾” stainless steel ball valve shall allow for manual draining of the humidifier reservoir.

The heat exchanger shall be constructed of type 304 stainless steel with rectangular heat transfer tubes and headers for improved scale removal and cleaning. Tubes shall be self-cleaning via expansion and contraction of tube. Coating of tubes is not required.

A normally closed steam control valve with equal percentage flow characteristics, and which provides sufficient capacity as required, shall be provided. The valve operator, pneumatic modulating (standard) or electric modulating (optional) shall be supplied by PURE Humidifier Company.

The humidifier shall be supplied with a float and thermostatic condensate trap and a pipe line wye strainer.

The humidifier shall be provided with an ETL listed JIC NEMA 12 control cabinet, shipped loose (reference factory mounting option). The control cabinet shall be made of 14 gauge steel with ANSI 61 gray polyester powder coating, continuous hinge and oil-resistant gasket. The panel shall include a factory wired sub-panel with magnetic contactor(s), time delay relay, fused control circuit transformer, numbered terminal block and heater fuse(s).

The control system shall maintain humidification during the fill cycle to maintain a consistent relative humidity.

Injection tube(s) shall be 1 ½" (3.81 cm) O.D. type 304 stainless steel, .049" wall, and shall be as long as required by the humidifier model and duct size. For each "Angle Tube" or "Universal Tube", the unit cover shall have a matching connection so that the tube can be connected by using a 8" (20.32 cm) flexible connector with stainless steel hose clamps. Two piece duct plate shall be included for sealing the duct opening.