

PURE Humidifier Company
Sample Specification
“GXDDR” Series

Humidifier

The humidifier (patent no. 6,705,535) shall be forced draft combustion gas burner type humidifier as manufactured by PURE Humidifier Company of Chaska, Minnesota.

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

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

The gas heat exchanger shall be constructed of type 304 stainless steel with 2” round heat transfer tubes. Tubes shall be self cleaning via expansion and contraction of tubes. Coating of tubes is not required.

The humidifier shall require only 2 sides for service access.

The forced draft combustion burner shall be capable of expelling flue gases up to 100 ft (31 m) without the use of a power vent (sidewall or roof vented).

Unit shall be covered (except front face) with 3/4” (1.90 cm) thick fiberglass duct insulation. Insulation material shall have aluminum facing.

Provide support legs made of 1 1/4” x 1 1/4” x 1/4” (3.2 x 3.2 x .6 cm) angle iron and painted with gray enamel paint. Distance from humidifier bottom to floor shall be 24” (61 cm).

Humidifier control cabinet shall be factory mounted and wired to the face of the humidifier reservoir.

Humidifier is provided with a DCT-927 self actuated drain tempering kit. The drain tempering kit is designed to provide drain and condensate water at a temperature of less than 140 °F. The drain tempering kit is shipped loose

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 immersion heaters.

A stainless steel float operated water fill valve mounted on the top 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 1-1/2" (3.81 cm).

The humidifier shall have a 3/4" (1.9 cm) over-flow pipe to prevent overfilling of the humidifier reservoir.

The humidifier shall be provided with an ETL listed JIC NEMA 12 control cabinet, shipped factory mounted and wired to the reservoir. 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 gas valve interlock, tri-probe water level control, fused control circuit transformer, numbered terminal block and main power fuse(s).

The control cabinet shall have a factory wired time delay relay circuit. The delay circuit shall prevent cycling of the low water interlock circuit due to water fluctuations within the humidifier reservoir.

An INTAC[®] programmable electronic microprocessor humidifier control system shall be mounted and pre-wired to the humidifier control panel door. The INTAC[®] controller shall provide digital display of all humidifier functions. Controller comes with a wall mount modulating humidity sensor.