ELECTROVAP Self Contained Steam Humidifiers

Product Description

Electrovap humidifiers produce a pure, odorless vapor which is readily absorbed by the air to raise the humidity to the desired level. Electrovap humidifiers have been specifically designed to meet the most demanding commercial, industrial and high end residential humidification requirements. The Electrovap line includes units ranging from 6 to 200 lbs./hr. In addition, units can be electronically linked together to operate in sequence or parallel to meet larger humidification loads. Electrovap humidifiers use the latest in solid state technology to provide the most efficient form of electrode boiler humidification in terms of power consumption and on-off or variable output options. This, combined with an awareness of the needs of consultants, installers and maintenance engineers makes Electrovap the leader in the field of steam humidifiers. Consider these advanced features:

- On-off, step or proportional stream output.
- Heavy duty solid stainless steel electrodes.
- Accepts all standard control signals.
- Low voltage control circuits,
- Reliable operation,
- Pure, odorless steam,
- Fully automatic operation,
- Disposable or cleanable cylinders available.
- Can use tap water, soft water, RO or DI water.

Installation

Electrovap humidifiers require only a water supply, electrical power, and a drain. Pressure regulated water enters through an automatic fill valve with integral strainer into the steam production cylinder. Electrovap cylinders have electrodes made of heavy duty SOLID stainless steel plates, for long life and easy cleaning & service. In addition to On/Off, Step or Proportional control, Electrovap humidifiers can be adapted for either in-room or duct distribution. On/Off units may be easily upgraded later to proportional. Accessories include stainless steel duct steam distributors, Room distribution units, Standard & Electronic Humidistats, Air flow & Duct high limit controls, Remote alarm indicators, Humidifier/Dehumidifier staging, Digital display of desired humidity set point, and actual percent relative humidity at the sensor are also available.

Principal of Operation

Electrovap self-contained steam humidifiers use a common property of all natural water supplies, that of electrical conductivity. When a voltage is applied to the submersed stainless steel electrodes, an electrical current is produced, creating sufficient heat to rapidly boil the water. As a result, pure odorless steam is produced and supplied into air distribution systems or a room distribution unit. The water is, in a sense, it's own heating element. Although pure water will not conduct electricity, all natural water supplies contain trace amounts of minerals and salts which allow conductivity to take place. This method of using electrodes to produce steam eliminates the use of resistance heating elements which can be subject to frequent failure.

Self-Adapting

Electrovap humidifiers are capable of self-adapting to any water supply. Superior electronic design insures that steam generation is totally automatic and independent of water quality. Water conductivity in the cylinder is maintained by

periodic partial drain and fill cycles, the duration and frequency of which are automatically determined by onboard electronic monitoring circuits . These cycles are constantly updated and changed as required to maintain a constant steam output and insure minimum maintenance of the unit. Electrovap humidifiers can be adapted to operate with distilled, de-mineralized, or reverse osmosis water.

Low Maintenance Cost

Monitoring conductivity and draining of mineral build up in the cylinder provides extended cylinder life and reduces maintenance requirements. Users have a choice between disposable or cleanable cylinders. Solid stainless steel electrodes insure that even the disposable cylinders can be flushed out and reused many times. Cleanable cylinders can be opened for service or to replace electrodes and parts eliminating the need to replace the entire cylinder. Residual water in the cylinder need not be drained when the unit is out of service for any period of time, this means proper water mineral concentration is maintained for quick steam production on startup. Our

solid stainless steel electrodes are not damaged by being continuously immersed in water and the previous boiling sterilizes the water, eliminating potential bacterial problems associated with standing water.

Safety Features

Electrovap units incorporate magnetic circuit breaker protection of control circuitry and integral fusing of fill and drain valves to ensure complete safety. Electrical circuitry is designed to prevent over-current operation. Electrovap is inherently fail-safe as the water is its own low water cut-off. No water, no operation. Choosing Electrovap means choosing the latest innovation in quality, economy and safety. All units are UL listed and CSA approved.

Options and Accessories

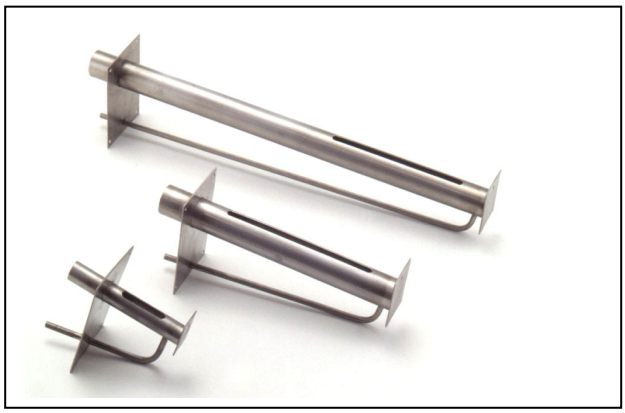
ELECTROVAP Proportional + Digital

The Electrovap proportional sensor and integral digital controller eliminates the need for an independent control system. This is a very important feature of the Electrovap proportional system. The electronic humidity sensor is a one piece unit with a simple three wire connection which draws power from the main circuit board. A digital display on the front panel clearly shows output of the unit in lbs/hr, the relative humidity set point, and actual % R.H. measured at the sensor. This allows real time monitoring of humidifier operation and area conditions. Electrovap's proportional circuit board has been specifically designed so that a dehumidifier can be connected to it allowing both humidification and dehumidification in one unit. These unique functions make the Electrovap proportional completely independent as well as economical and practical, particularly for small and medium sized installations. The Electrovap proportional humidifier is able to respond to the following standard external control signals:

0-10 V DC	0-135 Ohm
4-20mA DC	1-1000 Ohm
0-20 V DC	

In-duct Steam Distribution Pipes

Electrovap stainless steel distribution pipes have a special condensate drain tube to eliminate water in the air duct. Distribution pipe are available in any length to match flow rates and duct sizes.



Room Distribution Unit

Where a Electrovap is to be used for free discharge and without a ducted air distribution system, a room distribution unit is available. This is mounted directly on top of the Electrovap unit and replaces the steam hoses and in duct steam pipes. A small built in fan gently and quietly blows steam into the room.

ELECTROVAP Main Components

Dimensions and Weights.

Dimension	1 Cyl. 5-9	1 Cyl. 13-22	2 Cyl. 34-44	3 Cyl. 90
Height(in)	19.25	24.50	24.50	24.50
Width(in)	18.50	21.75	33.25	42.00
Depth(in)	8.75	10.75	10.75	10.75
Weight(lb)	33	48	66	99