ELECTRODE STEAM: DRISTEEM HUMIDIFIER XTP-E (INDOOR)

The XTP-E electrode steam humidifier series from DriSteem provides humidification for a wide range of applications and building types, including healthcare, museums, art galleries, commercial, industrial, and government facilities etc. Easy installation and minimal maintenance make the XTP-E series one of the most affordable, high quality humidification systems to purchase and install. DriSteem XTP-E series humidifiers are ideal for finished spaces and applications where space is limited. The XTP-E produces atmospheric steam that can utilize a steam blower to disperse steam into open spaces (SDU) or use dispersion tubes/dispersion panels for in-duct/AHU steam distribution.

Technical Characteristics

- 2 - 130 kg/h capacity
- Replaceable steam cylinder with electrodes
- Operates with potable water
  - 350 - 1250μS/cm conductivity range
  - Low conductivity cylinders available 125 - 350mS/cm
- Wide range of standard voltages
  - Including 230V- 1 phase, 400V- 3 phase, 50-60hz
  - 24VAC internal power circuit
- Painted galvanized steel enclosure (IP20)
- Vapor-logic® controller with LCD keypad

XTP-E electrode humidifier

Main Features

- Suitable for most comfort humidification requirements (+/- 10% of output)
- Mini-drain feature provides continuous steam production and improves low conductivity as well as providing extended cylinder life
- Hygiene: Adjustable End-of-Season drain
  - An electric drain valve is cabinet-mounted to allow cylinder to automatically drain periodically and at the end of the humidification season. The cylinder shall automatically and completely drain if it doesn't receive a humidity demand signal for a user-programmable number of hours (default 72 hours) and starts automatically after receiving a demand signal again (meets EN1717 requirements).
- Integrated drain water tempering: When drain water tempering is selected, drain water is automatically cooled down to below 60°C before entering the drain, allowing the use of PVC piping.
- Disposable plastic steam cylinders with integral high-water sensor to prevent overfilling.
- The cylinder has a large opening (32 mm) with removable strainer. This strainer reduces the number of blockages at the cylinder outlet. By removing the strainer, a simple rinsing of the cylinder is possible.
- Semi-rigid steam hose connection, hard pipe adapter option
- Enclosure is designed and secured to prevent accidental contact with electrical components.
- Steam cylinder and electrical compartments have removable doors
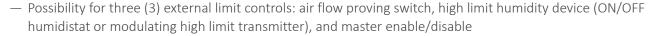
Vapor-logic® controller details

The Vapor-logic controller with keypad display is standard on each XTP-E steam humidifier and provides accurate, responsive RH control, while the PID control tunes the system for maximum performance.

- Operation
  - BACnet, LonTalk, or Modbus allow interoperability with multiple building automation systems.
  - All relevant control signal connections (mA and VDC) of external humidity controllers are possible, 0 (2)- 10 V or 0 (4)- 20 mA)
  - Web interface provides the capability to set up, view, and adjust system functions via Ethernet, either directly or remotely through a network.
  - Real-time clock allows time-stamped alarm and message tracking, and accurate drain and flush scheduling.
  - Programmable outputs allow remote signaling and device activation.
  - Possibility for three (3) external limit controls: air flow proving switch, high limit humidity device (ON/OFF humidistat or modulating high limit transmitter), and master enable/disable
  - The Vapor-logic controller uses an algorithm to monitor water conductivity – it auto tunes drain and fill cycles to keep electrical current within demand parameters. This optimizes humidifier performance based on water conditions and steam production.
  - Auxiliary temperature sensor/transmitter allows temperature compensation control to prevent window condensation, or air temperature monitoring, such as in a duct

- Troubleshooting and Maintenance
  - USB port allows easy firmware updates, and data backup and restore capability.
  - All software updates can be downloaded from Dristeem website (www.dristeem.com), free of charge
  - Data logs (from half week up to 15 weeks) can be downloaded to a PC for viewing and analyzing operating parameters, energy use, messages, alarms.
  - Test outputs function to verify component operation
  - Test humidifier function using simulated demand to validate performance

- Keypad Interface
  - Easy-to-use menus for all humidifier functions.
  - Protocols, messages, and alarms presented on the illuminated display

Vapor-logic controller keypad display

Technical Characteristics

Type (-)	Steam Cap (kg/h)	Amps (A)	Voltage (V)	Phase (Ph)	Steam Outlet (DN)	#	Dimensions HxWxD (mm)	Transp. Weight (k)
XTPE002	2	7.4	230**	1	DN22/40*	1	523x370x221	17
XTPE003	5	15	230	1	DN22/40*	1	523x370x221	17
XTPE003	5	5	400***	3	DN22/40*	1	523x370x221	17
XTPE006	8	9	400	3	DN22/40*	1	523x370x221	17
XTPE010	14	14	400	3	DN40	1	612x450x300	23
XTPE017	22	24	400	3	DN40	1	612x450x300	23
XTPE025	34	36	400	3	DN40	1	650x504x340	29
XTPE033	45	48	400	3	DN40	2	650x504x340	29
XTPE042	57	60	400	3	DN40	2	650x504x340	29
XTPE048	64	69	400	3	DN40	2	650x504x340	29
XTPE050	68	2x36	400	3	DN40	2	650x1005x340	63
XTPE067	90	2x48	400	3	DN40	4	650x1005x340	63
XTPE083	113	2x60	400	3	DN40	4	650x1005x340	63
XTPE096	130	2x69	400	3	DN40	4	650x1005x340	63

*With included adapter
**220-240V range
*** 380-400V range

Approvals

- CE certification, EN 1717
- XTP model available with ETL (UL/CSA), seismic certification and 480/600V models

Options

- LonTalk interface remote control
- Stainless steel enclosure
- Low conductivity cylinder 125µS/cm- 350µS/cm
- Outdoor units available (add link to outdoor unit)

Accessories

- Replacement cylinder kits
- High limit Humidistat
- Airflow proving switch
- RH transmitter

Product Resources

- XT series electrode humidifier product resources:
  www.dristeem.com/support-and-literature/literature-product-resources/by-product/xt-series

Continuous product improvement is a policy of DriSteem Corporation; therefore, product features and specifications are subject to change without notice.