



## GTS® GAS-TO-STEAM HUMIDIFIER

### LX Series

- *Condensing design provides for highest efficiency and PVC venting*
- *Ultra-low NOx and high efficiency in a single design*
- *Modulating output with minimum 5:1 turndown for accurate humidity control*
- *Universal water control for use with any water type*
- *Outdoor and indoor models for application flexibility*

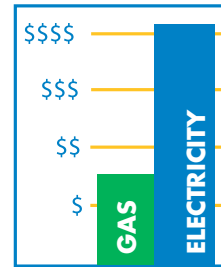
# SAVE WITH GAS HUMIDIFICATION

## LOWEST INSTALLATION AND OPERATING COSTS

The industry's first and best-selling gas-to-steam GTS® humidifier continues to be your best choice for reducing energy costs.

The condensing design of the GTS humidifier LX series results in the highest efficiency gas-fired humidifier available. Compared to non-condensing humidifiers, installation costs are reduced through use of PVC, CPVC, or polypropylene venting.

To calculate how much you can save by switching from an electric humidifier to a gas humidifier, use our Energy Savings Calculator at [www.dristeem.com](http://www.dristeem.com).



## FEATURES OF THE GAS-TO-STEAM HUMIDIFIER LX SERIES

- **Ten models** to fit application exact demand, between 50 – 600 lbs/hr (23 – 272 kg/h).
- **Ultra-low NOx** and **high efficiency** in one product.
- Modulating output with minimum **5:1 turndown** for accurate humidity control.
- DriSteem's smart drain technology adjusts drain intervals automatically based on **water quality**.
- **Space saving design**, for ease of installation and placement flexibility.
- **Enclosures for virtually any environment**. Outdoor or indoor, or factory-HVAC installed.
- **Accurate, responsive**, adjustable RH control due to full burner modulation and PID control.
- Easy firmware updates through the USB port on the **Vapor-logic control board**.
- **Extended capacity range** through linkage of up to 8 units under one controller.
- **Automatically cools discharged hot water** to 140°F (60 °C) to meet governing code safety requirements.
- **Full service access**. Lift-off panels provide easy access to all connection points.
- DriSteem's high-efficiency GTS humidifier incorporates **universal water control** for use with any water type.



## TOUCHSCREEN CONTROL OR REMOTE WEB ACCESS

DriSteem's Vapor-logic® controller includes as standard, operation through an intuitive touchscreen, or through a connected Web interface. This provides the capability to securely set up, view, or adjust humidifier system functions from virtually anywhere — and at any time.

## CONNECT WITH BACNET®, MODBUS®, OR LONTALK®

GTS humidifiers are fully interoperable with building automation systems using BACnet, Modbus, or optional LonTalk systems.

## PROVEN PERFORMANCE

- Thermal (combustion) efficiency:  
94% Higher Heating Value (HHV) of fuel  
103% Lower Heating Value (LHV) of fuel
- Control to  $\pm 3\%$  RH
- Low nitrogen oxide (NOx) emissions certified by SCAQMD to meet low NOx requirements of Rule 1146.2.
- On-board diagnostics verify system operation
- Variable-speed blower, modulating gas valve, and precision water fill provides consistent steam output

## APPLICATION FLEXIBILITY

- No need to change the control configuration based on water type when ordering equipment or retrofitting to fit new water sources in the field.
- Operates on natural or LP gas
- Outdoor models available for operation in any climate between -40 to 120°F (-40 to 60 °C).
- Requires only two-sided access, allowing installation in tight spaces
- Condensing design allows for PVC, CPVC, or polypropylene venting
- Horizontal or vertical venting

## MINIMAL MAINTENANCE

- Clean-out plate and removable panels provide easy access for inspection and servicing
- End-of-season auto drain minimizes microbial growth
- Automated drain and flush removes precipitated minerals from evaporating chamber
- Water surface skimming feature to drain away water surface debris and contaminants to minimize tank cleaning and risk of foaming.

## BUILT-IN SAFETY

- ETL approved for sealed combustion
- Self-contained infrared gas burner provide safety and reliability
- Gas valve closes if the flue becomes blocked, shutting down humidifier operation
- Low-water sensing mechanism with redundant backup shuts down burners in a low water condition
- Freeze protection
- Five temperature sensing and advanced control algorithms assure flue temperatures remain below design limits.



Learn More



# OPTIONAL WATER TREATMENT

## WATER TREATMENT SYSTEMS

### Dechlorination, water softening, and reverse osmosis equipment

*Enhances performance of and minimizes or eliminates humidifier maintenance requirements. Provides the cleanest water possible for humidification.*

Water quality is integral to the operation and longevity of humidification. Required maintenance, system performance, and water/energy usage are all affected by water quality. Operating with treated water reduces or eliminates hard water scale on equipment surfaces, thereby reducing maintenance requirements. Performance improves in systems using treated water with benefits such as reduced downtime and higher energy transfer.

DriSteem Water Treatment Systems offer:

- Complete suite of products available for all applications — dechlorination, water softening, and reverse osmosis systems
- Designed for use with all DriSteem humidification and evaporative cooling systems, or as a stand-alone system for other processes requiring water treatment
- Single point supply, drain, and electrical connections and system skidding available
- Supply multiple evaporative cooling or humidification systems with a single water treatment system
- Components can be used individually or as a complete water treatment solution

**Capacity:** 288–15840 gallons per day (100–5500 lbs/hr ; 45–2495 kg/hr)



## TYPICAL PLUMBED WATER TREATMENT SYSTEM



## **ACCURATE, RESPONSIVE CONTROL**

Vapor-logic is the control platform for all DriSteem nonpressurized steam generation humidifiers, water treatment, and evaporative cooling/humidification systems.

Vapor-logic provides accurate, responsive RH control, and PID control tunes the system for maximum performance.

**BACnet, Modbus, or LonTalk**, allow interoperability with multiple building automation systems. BACnet and Modbus are standard. LonTalk is available as an option.

**Web interface** provides the capability to set up, view, and adjust humidifier functions via Ethernet, either directly or remotely through a network.

**USB port** allows easy firmware updates, and data backup and restore capability.

**Real-time clock** allows time-stamped alarm and message tracking, and accurate drain and flush scheduling.

**Programmable outputs** allow remote signaling and device activation.

**Data logs** can be downloaded to a PC for viewing and analysis.

**Auxiliary temperature sensor/transmitter** allows temperature compensation control to prevent window condensation, or air temperature monitoring, such as in a duct.

**Multiple-humidifier control** allows staged control of up to 8 humidifiers with one controller.

**Enhanced diagnostics and data collection.**



USB port for  
firmware updates,  
downloading data logs,  
and data backup and restore.

# GTS HUMIDIFIER LX SERIES COMPONENTS AND PRINCIPLE OF OPERATION

## 1 Vapor-logic controller

Vapor-logic controls all humidifier functions as a stand-alone controller or integrated into a BACnet, Modbus, or LonTalk system.

## 2 Water level sensing probe

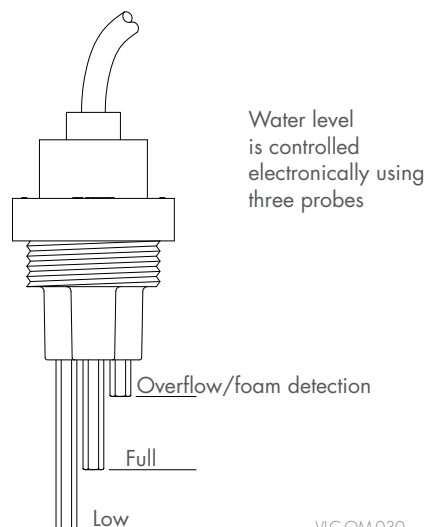
Water levels are electronically controlled using a three-rod probe.

When the GTS humidifier is first activated, the fill valve opens and the evaporating chamber fills with water to the operating level.

## 3 Drain tempering device

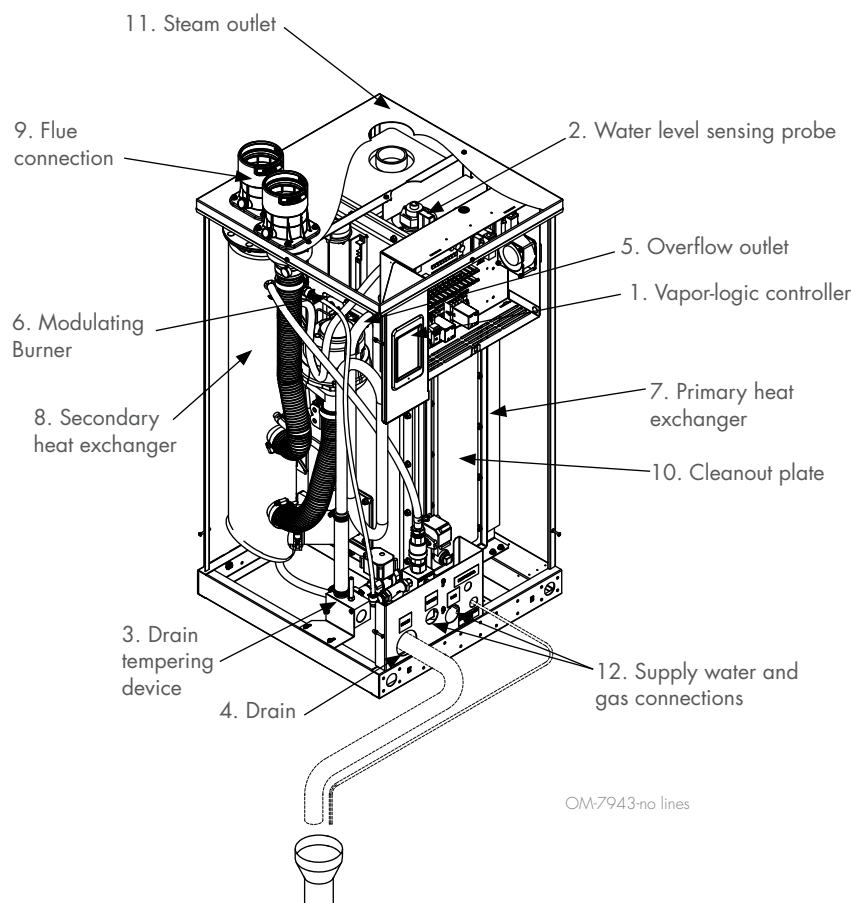
This factory-installed water-tempering device automatically cools discharged hot water to 140 °F (60 °C) to meet governing code requirements for safe discharge water temperature. Cooling discharged hot water also prevents damage to PVC drain piping.

## WATER LEVEL CONTROL



VLC-OM030

## GTS HUMIDIFIER LX SERIES COMPONENTS



OM-7943-no lines

Note: Dashed lines indicate supplied by installer



## **4 Drain**

Drain duration and frequency are automatically adjusted depending on water conductivity. To avoid possible stagnant water and microbial growth, the humidifier automatically drains if there is no call for humidity after a user-defined time period (72-hour default).

## **5 Overflow outlet**

The water skimmer reduces minerals in the evaporating chamber. Skimming occurs each time the humidifier fills. The skim time duration is user-adjustable. The water skimmer port also function as an overflow port.

## **6 Modulating burner**

Modulating burners provide fast and efficient heating. The burners have no standing pilot, thus saving energy and improving safety.

On a call for humidity, the burner ignites and ramp up to bring the burner to maximum output until the water in the evaporating chamber boils. The burner then begins to modulate based on demand. The fill valve opens and closes as needed to maintain the operating water level and consistent steam production.

## **7 Primary heat exchanger**

Stainless steel heat exchanger transfers energy from the burners to the water in the evaporating chamber to generate steam.

## **8 Secondary heat exchanger**

316 Stainless steel heat exchanger transfers remaining energy in the flue gas back into the system.

## **9 Flue connection**

PVC, CPVC, or polypropylene venting can be connected to remove products of combustion.

## **10 Cleanout plate**

The large cleanout plate allows access for easy removal of settled minerals.

## **11 Steam outlet**

Steam rises and exits through the steam outlet and travels to the dispersion unit through either steam hose or piping, where it is discharged into the airstream.

## **12 Supply water and gas connections**

Supply water and gas connections are labeled on the unit for easy installation.

# GTS SPECIFICATIONS, CAPACITIES, AND WEIGHTS

**Table 8-1:**  
GTS models, capacities, electrical specifications, turndown, and weights

| GTS<br>model | Maximum steam<br>capacity |      | Input |       |      | GTS humidifier<br>LX series* |     |                              |     | Burner<br>quantity | Turndown |        | Full load amps* |               |
|--------------|---------------------------|------|-------|-------|------|------------------------------|-----|------------------------------|-----|--------------------|----------|--------|-----------------|---------------|
|              |                           |      |       |       |      | Operating weight             |     | Shipping<br>(empty) weight** |     |                    |          |        |                 |               |
|              | lbs/hr                    | kg/h | MBh   | kW    | m³/h | lbs                          | kg  | lbs                          | kg  |                    | ratio    | lbs/hr | 120V<br>60 Hz   | 230V<br>50 Hz |
| LX-50        | 50                        | 23   | 61    | 17.8  | 1.7  | 304                          | 138 | 187                          | 85  | 1                  | 5:1      | 10     | 2.0             | 1.5           |
| LX-75        | 75                        | 34   | 91.5  | 26.8  | 2.5  | 304                          | 138 | 187                          | 85  | 1                  | 6:1      | 12.5   | 2.0             | 1.5           |
| LX-100       | 100                       | 45   | 122   | 35.8  | 3.4  | 300                          | 136 | 192                          | 87  | 1                  | 8:1      | 12.5   | 2.0             | 1.5           |
| LX-150       | 150                       | 68   | 183   | 53.6  | 5.1  | 450                          | 204 | 242                          | 110 | 1                  | 6:1      | 25     | 2.5             | 2.0           |
| LX-200       | 200                       | 91   | 244   | 71.5  | 6.8  | 706                          | 320 | 356                          | 161 | 1                  | 6.7:1    | 30     | 4.0             | 2.5           |
| LX-250       | 250                       | 113  | 305   | 89.4  | 8.5  | 706                          | 320 | 356                          | 161 | 1                  | 8.3:1    | 30     | 4.0             | 2.5           |
| LX-300       | 300                       | 136  | 360   | 105.5 | 10   | 709                          | 321 | 367                          | 166 | 1                  | 10:1     | 30     | 4.0             | 2.5           |
| LX-400       | 400                       | 181  | 488   | 143   | 13.5 | 1259                         | 571 | 593                          | 269 | 2                  | 13.3:1   | 30     | 6.5             | 3.5           |
| LX-500       | 500                       | 227  | 610   | 178.8 | 16.9 | 1259                         | 571 | 593                          | 269 | 2                  | 16.7:1   | 30     | 6.5             | 3.5           |
| LX-600       | 600                       | 272  | 720   | 211   | 20   | 1265                         | 574 | 615                          | 279 | 2                  | 20:1     | 30     | 6.5             | 3.5           |

\* For outdoor enclosures, see Table 13-1.

\*\* Add approximately 60-90 lbs (27-41 kg) for packaging material.

## LP GAS

All models operate at rated input

## HIGH ELEVATION

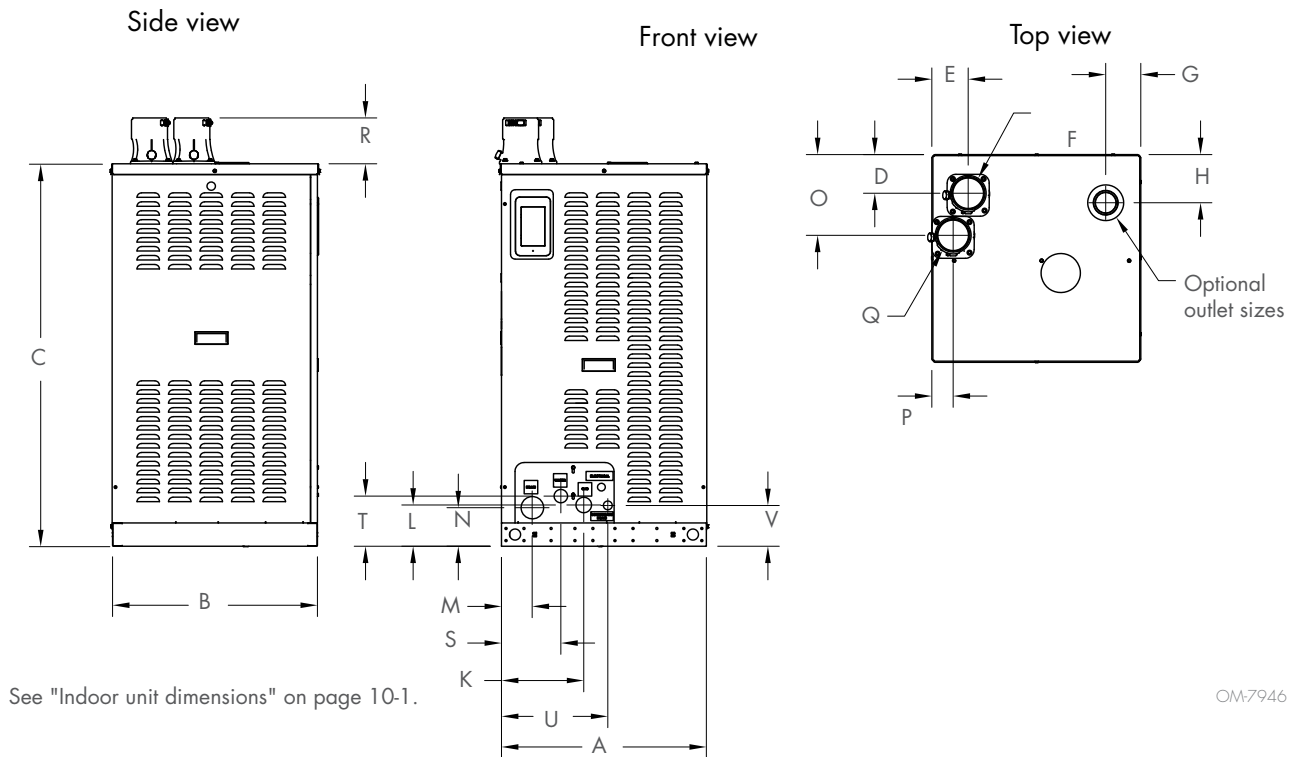
The input shown in Table 8-2 is derate when operating units at a high elevation.

**Table 8-2:**  
High elevation derate

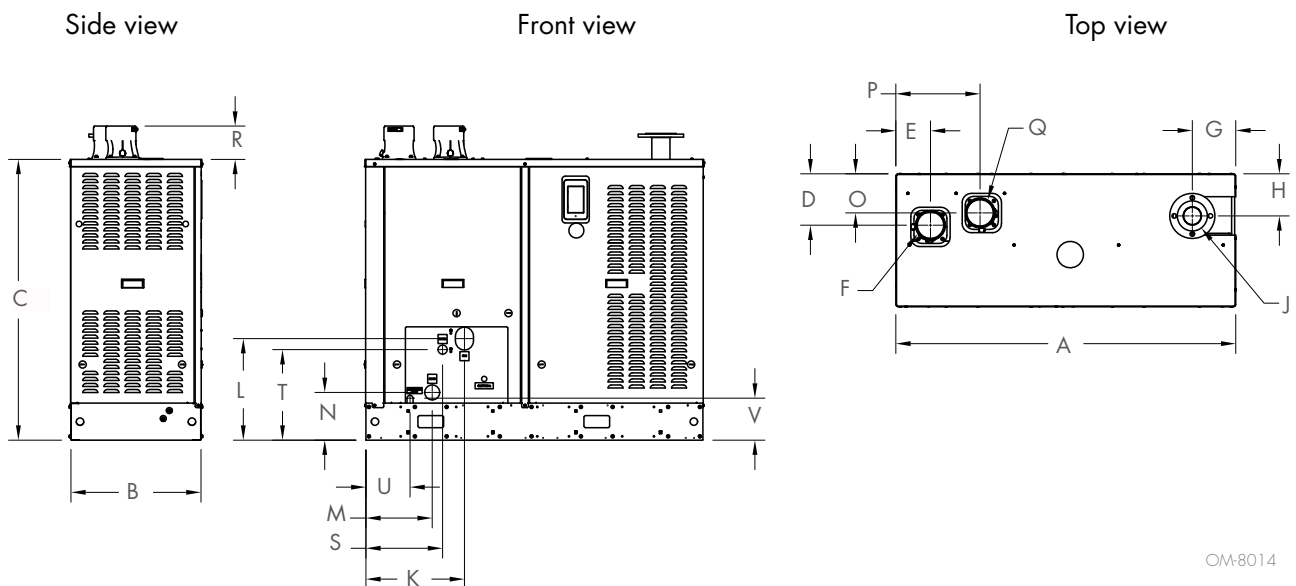
| Elevation |           | Input derate % |
|-----------|-----------|----------------|
| feet      | meters    |                |
| 0-2000    | 0-610     | 0              |
| 2001-2500 | 610-765   | 2              |
| 2501-3000 | 765-915   | 4              |
| 3001-3500 | 915-1065  | 6              |
| 3501-4000 | 1065-1220 | 8              |
| 4001-4500 | 1220-1370 | 10             |
| 4501-5000 | 1370-1525 | 12             |
| 5001-5500 | 1525-1675 | 14             |
| 5501-6000 | 1675-1830 | 16             |
| 6001-6500 | 1830-1980 | 18             |
| 6501-7000 | 1980-2135 | 20             |
| 7001-7500 | 2135-2285 | 22             |
| 7501-8000 | 2285-2440 | 24             |



**FIGURE 9-1: LX MODELS 50 - 150 INDOOR UNIT DIMENSIONS**

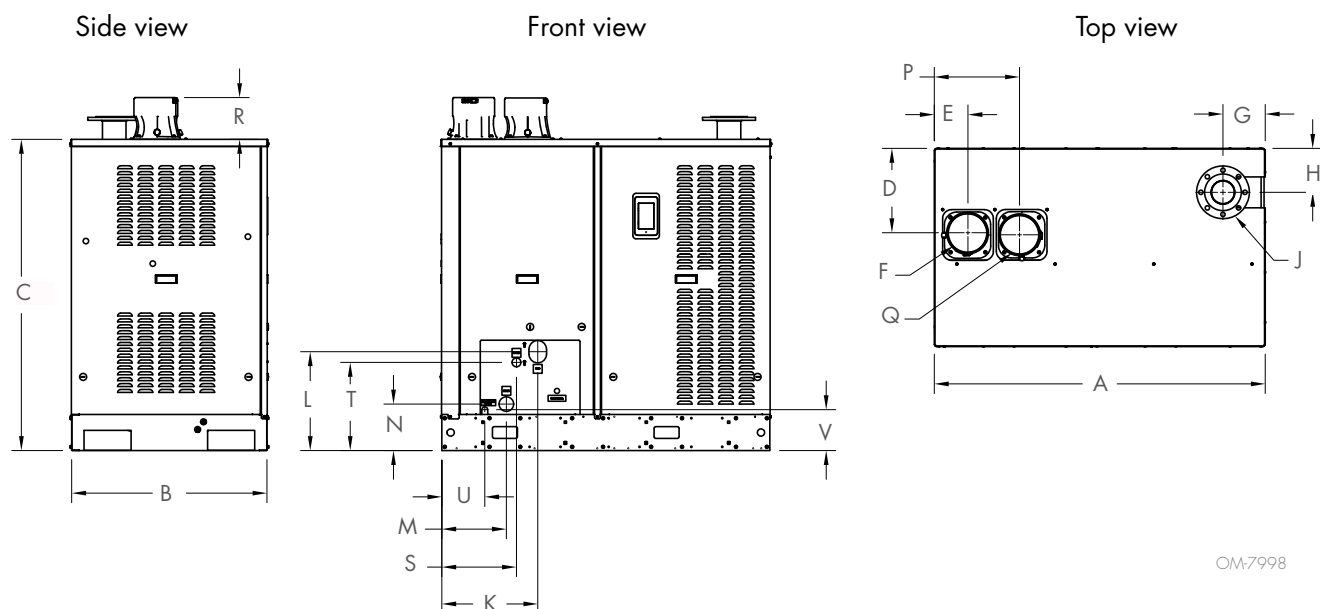


**FIGURE 9-2: LX MODELS 200 - 300 INDOOR UNIT DIMENSIONS**



# GTS HUMIDIFIER LX SERIES DIMENSIONS

**FIGURE 10-1: LX MODELS 400 - 600 INDOOR UNIT DIMENSIONS**



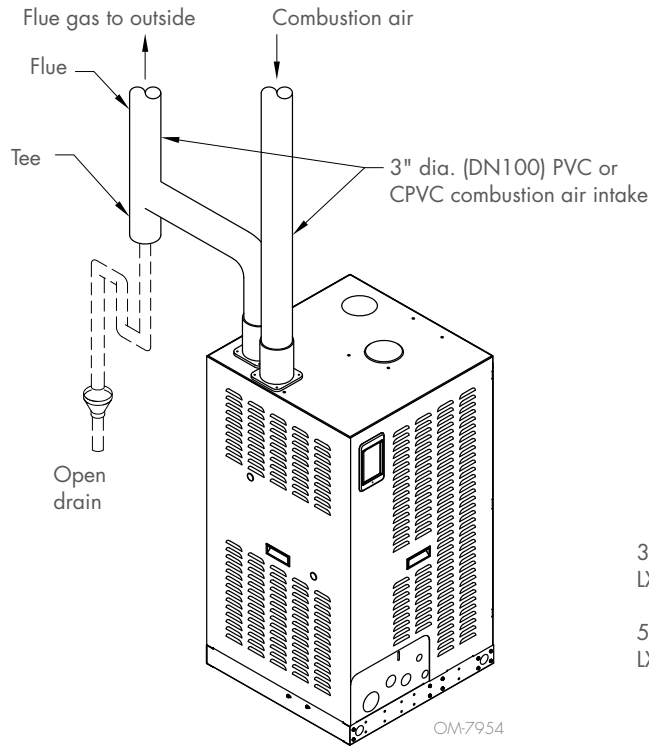
OM-7998

**Table 10-1:**  
**Indoor unit dimensions**

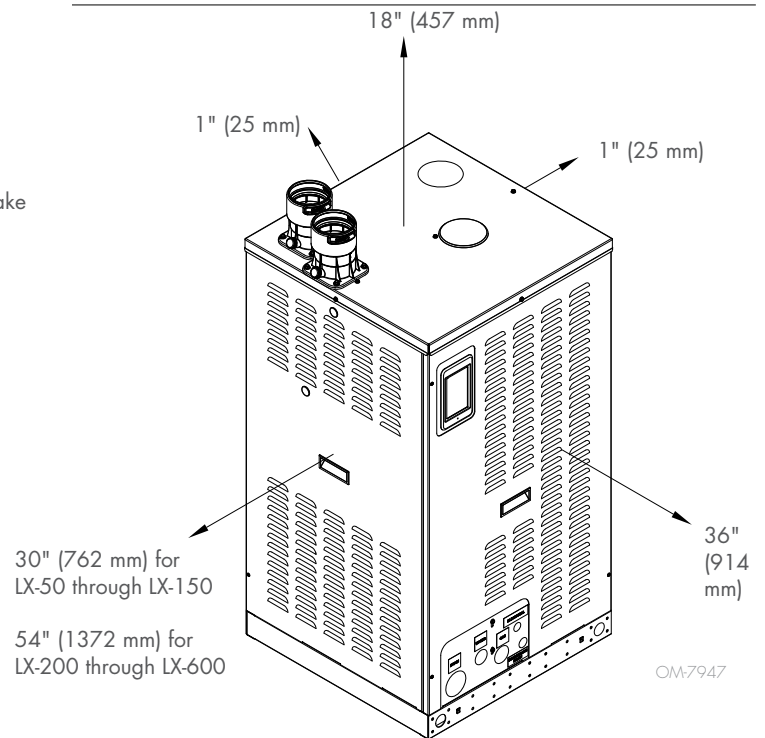
|   | Description                    | LX-50, LX-75, LX-100 |      | LX-150 |      | LX-200, LX-250, LX-300 |      | LX-400, LX-500, LX-600 |      |
|---|--------------------------------|----------------------|------|--------|------|------------------------|------|------------------------|------|
|   |                                | inches               | mm   | inches | mm   | inches                 | mm   | inches                 | mm   |
| A | Overall length                 | 23.25                | 590  | 32.25  | 819  | 56                     | 1422 | 56                     | 1422 |
| B | Overall width                  | 23.25                | 590  | 23.25  | 590  | 22                     | 559  | 34                     | 864  |
| C | Overall height                 | 42.75                | 1085 | 42.75  | 1085 | 47                     | 1194 | 53                     | 1346 |
| D | Flue position                  | 4.3                  | 109  | 4.3    | 109  | 8.7                    | 221  | 14.5                   | 368  |
| E |                                | 4.4                  | 112  | 4.4    | 112  | 5.61                   | 143  | 5.6                    | 142  |
| F | Flue diameter                  | 3                    | 76   | 3      | 76   | 4                      | 102  | 6                      | 152  |
| G | Steam outlet position          | 3.8                  | 97   | 3.8    | 97   | 7.1                    | 180  | 7                      | 178  |
| H |                                | 5.3                  | 135  | 5.3    | 135  | 6.9                    | 175  | 7.4                    | 188  |
| J | Steam outlet diameter          | 2                    | 51   | 2      | 51   | 3                      | 76   | 4                      | 102  |
| K | Gas inlet position             | 9.2                  | 234  | 9.2    | 234  | 16.6                   | 4022 | 16.6                   | 422  |
| L |                                | 4.6                  | 119  | 4.6    | 119  | 14.3                   | 363  | 14.3                   | 363  |
| M | Drain position                 | 3.5                  | 89   | 3.5    | 89   | 11                     | 279  | 11                     | 279  |
| N |                                | 4.5                  | 114  | 4.5    | 114  | 8                      | 203  | 8                      | 203  |
| O | Combustion air                 | 8.92                 | 227  | 8.92   | 227  | 6.5                    | 165  | 14.5                   | 368  |
| P |                                | 2.7                  | 69   | 2.7    | 69   | 14                     | 363  | 14.5                   | 368  |
| Q | Combustion air diameter        | 3                    | 76   | 3      | 76   | 4                      | 102  | 6                      | 152  |
| R | Flue and combustion air height | 5.5                  | 140  | 5.5    | 140  | 5.6                    | 142  | 7.1                    | 180  |
| S | Fill valve connection position | 6.59                 | 167  | 6.59   | 167  | 22.4                   | 569  | 22.4                   | 569  |
| T |                                | 5.60                 | 142  | 5.60   | 142  | 12.4                   | 315  | 12.4                   | 315  |
| U | Condensate Drain               | 11.8                 | 300  | 11.8   | 300  | 7.3                    | 185  | 7.3                    | 185  |
| V |                                | 4.55                 | 116  | 4.55   | 116  | 6.95                   | 177  | 6.95                   | 177  |

# CONNECTION SIZES AND CLEARANCE RECOMMENDATIONS

**FIGURE 11-1: GTS HUMIDIFIER LX SERIES  
OPTIONAL SEALED COMBUSTION CONNECTION**



**FIGURE 11-2: LX SERIES CLEARANCE RECOMMENDATIONS  
(INDOOR UNITS)**



**Table 11-1:  
Connection sizes**

| Description                     | LX-50, LX-75, LX-100            |    | LX-150                          |    | LX-200, LX-250, LX-300            |     | LX-400, LX-500, LX-600            |     |
|---------------------------------|---------------------------------|----|---------------------------------|----|-----------------------------------|-----|-----------------------------------|-----|
|                                 | inches                          | DN | inches                          | DN | inches                            | DN  | inches                            | DN  |
| Gas supply                      | 1/2 (pipe thread)               | 15 | 1/2 (pipe thread)               | 15 | 3/4 (pipe thread)                 | 20  | 1 1/4 (pipe thread)               | 32  |
| Sealed combustion piping        | 3                               | 80 | 3                               | 80 | 4                                 | 100 | 6                                 | 150 |
| Flue vent                       | 3                               | 80 | 3                               | 80 | 4                                 | 100 | 6                                 | 150 |
| Supply water                    | 3/8 (pipe thread - side)        | 10 | 3/8 (pipe thread - side)        | 10 | 3/8 (pipe thread - side)          | 10  | 3/8 (pipe thread - side)          | 10  |
|                                 | 1/2 (pipe thread - bottom)      | 15 | 1/2 (pipe thread - bottom)      | 15 | 1/2 (pipe thread - bottom)        | 15  | 1/2 (pipe thread - bottom)        | 15  |
| Drain                           | 1 (drain block)                 | 25 | 1 (drain block)                 | 25 | 1 (drain block)                   | 25  | 1 (drain block)                   | 25  |
| Steam outlet*                   | 2 (all steam: hose/pipe thread) | 50 | 2 (all steam: hose/pipe thread) | 50 | 3 (all steam: flange/pipe thread) | 80  | 4 (all steam: flange/pipe thread) | 100 |
| Flue gas condensate             | 5/8 (OD)                        | 18 | 5/8 (OD)                        | 18 | 5/8 (OD)                          | 18  | 5/8 (OD)                          | 18  |
| Condensate return (recommended) | 3/4 (pipe thread)               | 20 | 3/4 (pipe thread)               | 20 | 3/4 (pipe thread)                 | 20  | 3/4 (pipe thread)                 | 20  |

Notes:

\* For pipe thread steam outlet options, see DriCalc, DriSteam's free sizing and selection software, available at [www.dristeam.com](http://www.dristeam.com).

# GTS HUMIDIFIER LX SERIES OUTDOOR ENCLOSURE

## HEATED AND VENTILATED OUTDOOR ENCLOSURE

DriSteem offers a robust and affordable enclosure for installing the GTS humidifier outdoors. Independent testing has proven that the GTS installed within this outdoor enclosure provides error-free ignition and reliable operation under extreme conditions.

### OUTDOOR ENCLOSURE FEATURES

- **Protects in cold and hot climates.** To ensure complete safety and operation in all climates, the outdoor enclosure has heating and venting systems that ensure humidifier operation in temperatures from -40°F (-40°C) to 120°F (48°C). The outdoor enclosure can also be ordered without the heater package.
- **Install on the ground or roof.** The outdoor enclosure is ideal for facilities that have limited interior space.
- **Factory packaged.** The outdoor enclosure ships complete with a GTS unit pre-installed and tested, ready to easily connect to gas, water, steam, and electricity.
- **Certified, tested and proven.** GTS humidifiers and outdoor enclosures are CSA/AGA/CGA certified for outdoor operation. In addition, in-house testing has proven that the GTS and outdoor enclosure provide error-free ignition and reliable operation under extreme conditions.
- **Easy service access.** Easily removed panels provide access to all internal components.
- **Robust design.** The outdoor enclosure is ruggedly built to completely protect internal components. The enclosure is constructed of heavy-duty galvanized steel and is fully insulated. Serviceable gaskets on access panels ensure a tight seal.
- **Optional curb.** Factory-supplied curb provides base clearance and allows easy installation.

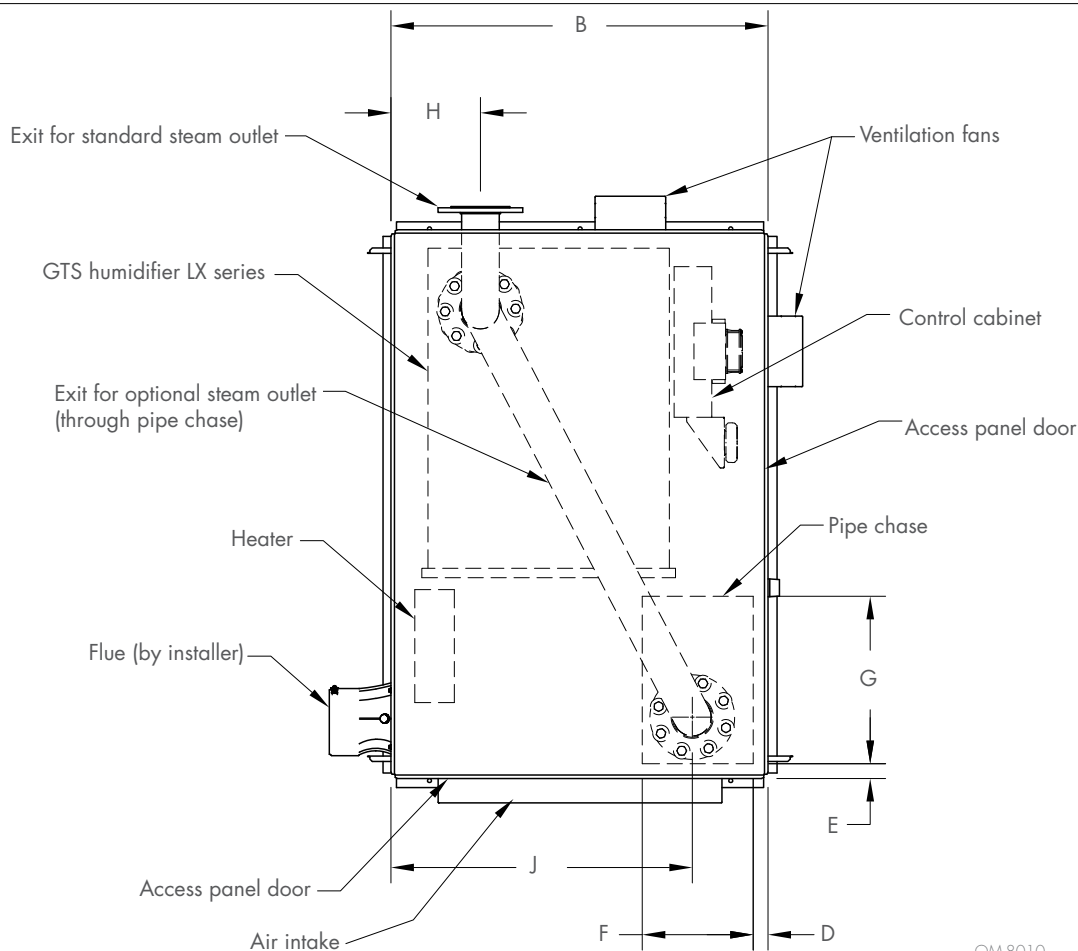
## GTS OUTDOOR ENCLOSURE



*The outdoor enclosure has heating and venting systems that ensure humidifier operation in temperatures from -40°F (-40°C) to 120°F (48°C). The outdoor enclosure can also be ordered with a factory-supplied curb.*

# GTS HUMIDIFIER LX SERIES OUTDOOR ENCLOSURE

**FIGURE 13-1: OUTDOOR ENCLOSURE TOP VIEW**



OM-8010

## DIMENSIONS

For outdoor unit weights, see Table 8-1.

For clearances, see Figure 14-2.

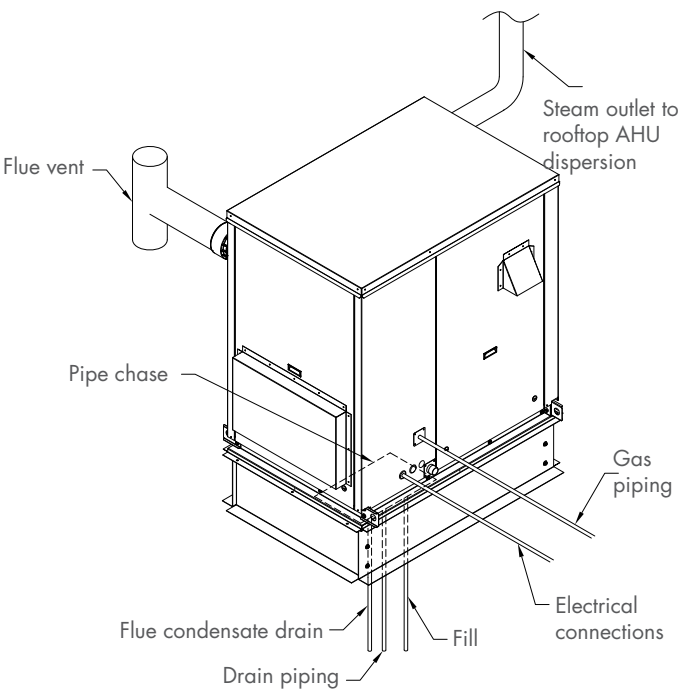
**Table 13-1:**

**Outdoor unit dimensions**

|   | Description                     | LX-50, LX-75, LX-100 |           | LX-150      |           | LX-200, LX-250, LX-300 |           | LX-400, LX-500, LX-600 |           |
|---|---------------------------------|----------------------|-----------|-------------|-----------|------------------------|-----------|------------------------|-----------|
|   |                                 | inches               | mm        | inches      | mm        | inches                 | mm        | inches                 | mm        |
| A | Enclosure length                | 36                   | 914.4     | 45          | 1143      | 57.35                  | 1456.59   | 57.35                  | 1456.59   |
| B | Enclosure width                 | 27.35                | 694.7     | 27.35       | 694.7     | 27.35                  | 694.69    | 39.10                  | 993.04    |
| C | Enclosure height                | 57                   | 1447.8    | 57          | 1447.8    | 62                     | 1574.8    | 62                     | 1574.8    |
| D | Pipe chase position             | 2.05                 | 52.02     | 2.05        | 52.02     | 2.05                   | 52.0      | 2.05                   | 52.02     |
| E |                                 | 6.51                 | 165.28    | 6.51        | 165.3     | 3.05                   | 77.4      | 2.05                   | 52.04     |
| F | Pipe chase size                 | 7                    | 177.8     | 7           | 177.8     | 7                      | 177.8     | 10                     | 254       |
| G |                                 | 11                   | 279.4     | 11          | 279.4     | 14                     | 355.6     | 16                     | 406.4     |
| H | Steam pipe position             | 6.46                 | 164.1     | 6.46        | 164.1     | 9.17                   | 233       | 8.965                  | 227.61    |
| J |                                 | 22.77                | 578.3     | 20.83       | 529.1     | 22.16                  | 562.84    | 31.48                  | 799.36    |
| K | Curb height                     | 14.0 - 36.0          | 356 - 914 | 14.0 - 36.0 | 356 - 914 | 14.0 - 36.0            | 356 - 914 | 14.0 - 36.0            | 356 - 914 |
| L | Height to bottom of flue outlet | 48.35                | 1228.1    | 48.35       | 1228.1    | 49.49                  | 1257      | 46.65                  | 1184.9    |

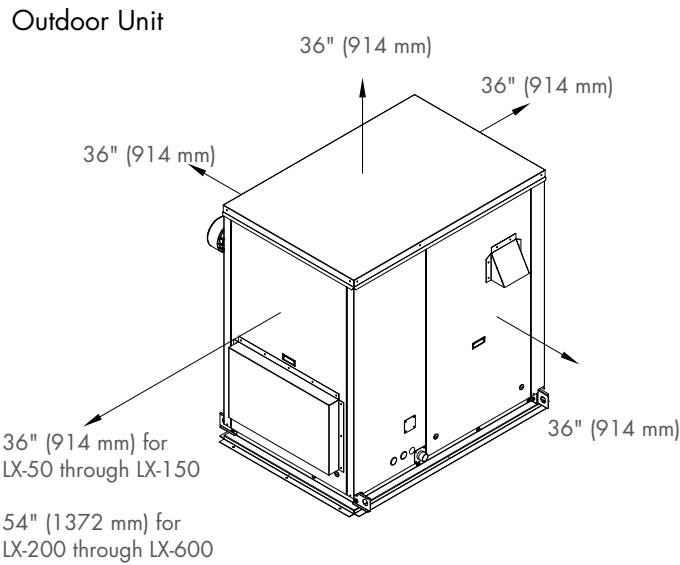
# GTS HUMIDIFIER LX SERIES OUTDOOR ENCLOSURE

FIGURE 14-1: OUTDOOR ENCLOSURE TYPICAL INSTALLATION OVERVIEW



OM-8004

FIGURE 14-2: LX SERIES CLEARANCE RECOMMENDATIONS (OUTDOOR UNITS)



OM-8012

Table 14-1:  
Outdoor unit amps and weights

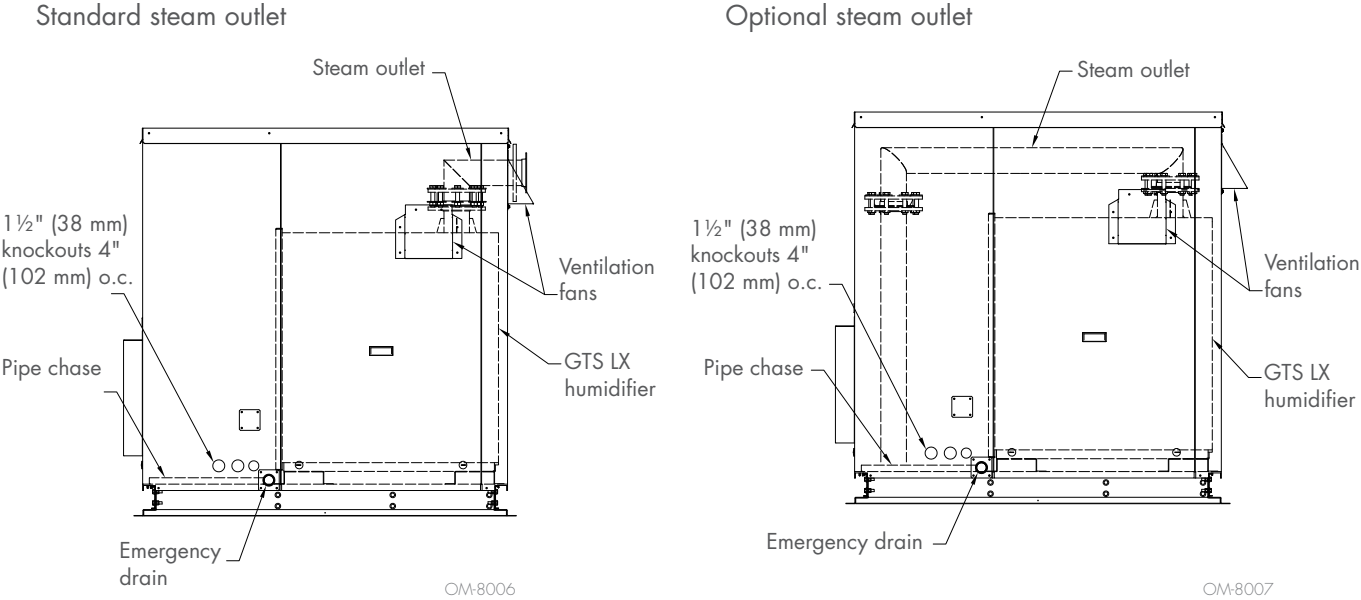
| Model  | Full Load Amps**<br>(Heater Package) |           | Full Load Amps**<br>(No Heater Package) |           | Operating weight |     | Shipping (empty) weight* |     |
|--------|--------------------------------------|-----------|---|-----------|------------------|-----|--------------------------|-----|
|        | 120V 60 Hz                           | 230V 50Hz | 120V 60Hz                               | 230V 50Hz | lbs              | kg  | lbs                      | kg  |
| LX-50  | 7.0                                  | 4.5       | 3.0                                     | 2.5       | 479              | 217 | 362                      | 164 |
| LX-75  | 7.0                                  | 4.5       | 3.0                                     | 2.5       | 479              | 217 | 362                      | 164 |
| LX-100 | 7.0                                  | 4.5       | 3.0                                     | 2.5       | 475              | 216 | 367                      | 166 |
| LX-150 | 7.5                                  | 5.0       | 3.5                                     | 3.0       | 629              | 285 | 421                      | 191 |
| LX-200 | 9.0                                  | 5.5       | 5.0                                     | 3.5       | 914              | 415 | 564                      | 256 |
| LX-250 | 9.0                                  | 5.5       | 5.0                                     | 3.5       | 914              | 415 | 564                      | 256 |
| LX-300 | 9.0                                  | 5.5       | 5.0                                     | 3.5       | 916              | 415 | 574                      | 260 |
| LX-400 | 16.5                                 | 8.5       | 7.5                                     | 4.5       | 1606             | 729 | 940                      | 426 |
| LX-500 | 16.5                                 | 8.5       | 7.5                                     | 4.5       | 1606             | 729 | 940                      | 426 |
| LX-600 | 16.5                                 | 8.5       | 7.5                                     | 4.5       | 1612             | 731 | 962                      | 436 |

\* Add approximately 60-90 lbs (27-41 kg) for packaging material.  
\*\* Full load amps listed are for the humidifier and the enclosure.

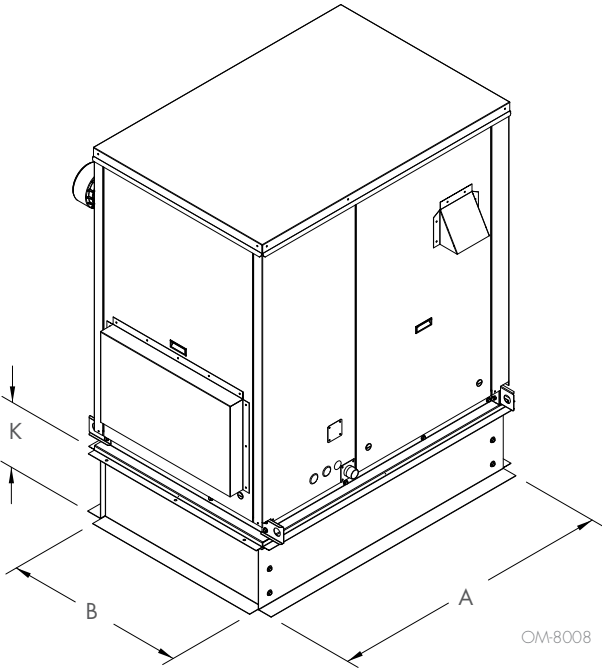


# GTS HUMIDIFIER LX SERIES OUTDOOR ENCLOSURE

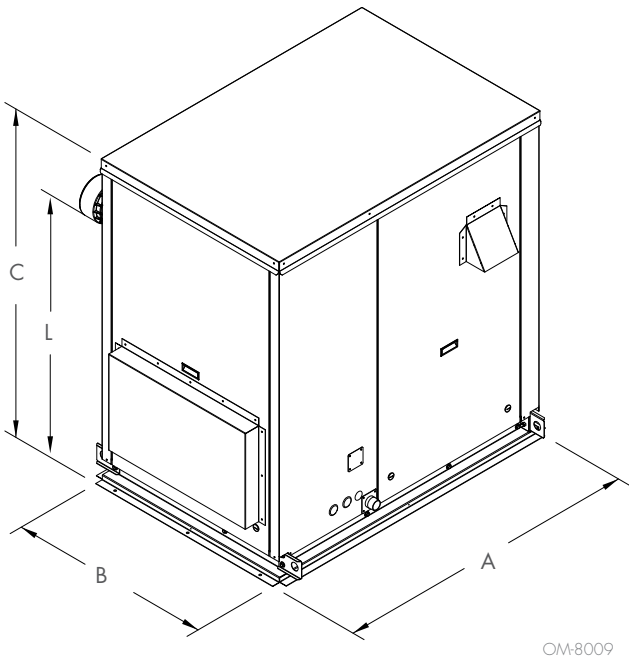
**FIGURE 15-1: GTS OUTDOOR ENCLOSURE WITH STANDARD OR OPTIONAL STEAM OUTLET, ELEVATION VIEW**



**FIGURE 15-2: OUTDOOR ENCLOSURE MOUNTED ON A CURB**



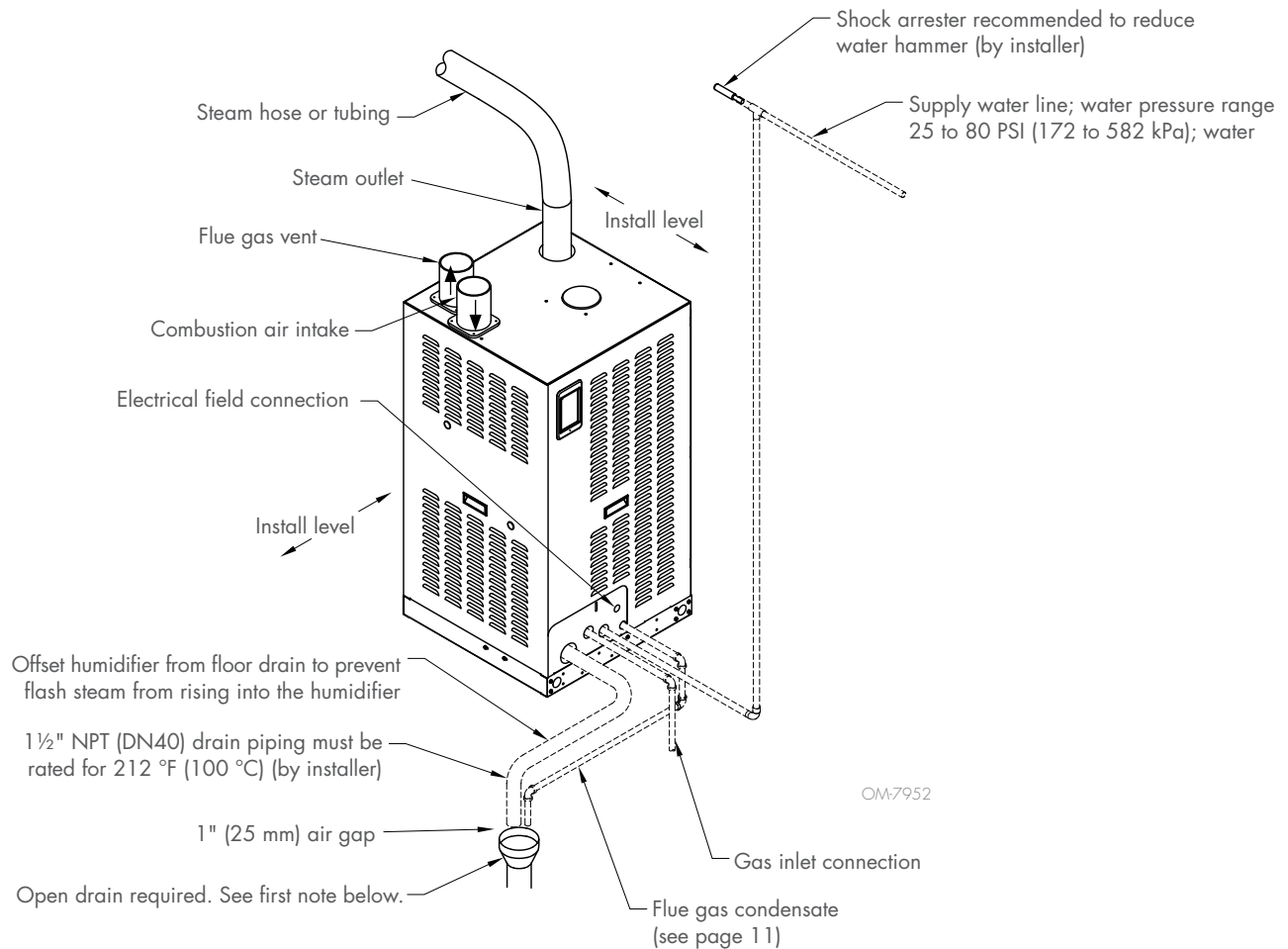
**FIGURE 15-3: OUTDOOR ENCLOSURE MOUNTED FLUSH**



Refer to Table 13-1.

# GTS HUMIDIFIER LX SERIES PIPING

**FIGURE 16-1: GTS HUMIDIFIER LX SERIES FIELD PIPING OVERVIEW**



## Notes:

- Locate air gap only in spaces with adequate temperature and air movement to absorb flash steam; otherwise, condensation may form on nearby surfaces. Refer to governing codes for drain pipe size and maximum discharge water temperature.
- Dashed lines indicate provided by installer.
- Humidifier flue gases must be vented to the outside atmosphere.
- Supply water inlet is more than 2" (51 mm) above skim/overflow port, eliminating the possibility of backflow or siphoning from tank. No additional backflow prevention is required; however, governing codes prevail.
- For additional backflow prevention installation, install at a minimum of 40' (12 m) from the humidifier.
- Damage caused by chloride corrosion is not covered by your DriSteem warranty.

# GTS HUMIDIFIER LX SERIES STEAM DISPERSION OPTIONS

## ULTRA-SORB STEAM DISPERSION PANELS

Features of all Ultra-sorb models:

- **Guaranteed, shortest non-wetting distance**  
Install within inches of downstream devices.  
Rapid, drip-free steam absorption means steam does not condense on downstream devices.
- **Reduce wasted energy and condensate up to 85%**  
High-Efficiency Insulated Tubes significantly reduce airstream heat gain and condensate production. (Standard on Model XV; optional on Models LV, LH, and MP.)
- **Higher capacities per insulated tube increase efficiency, reduce cost**  
Insulated dispersion tubes produce less condensate and, therefore, have more steam available for humidification, increasing the capacity of each tube. As a result, fewer tubes can meet application requirements, further lowering condensate production and heat gain while reducing resource consumption and cost.
- **Lowest installation cost**  
Panels ship pre-assembled and install quickly with easy mounting, steam, and condensate connections.

### Models LV and LH: Most versatile

- **Disperse pressurized or nonpressurized steam**  
Models LV and LH disperse steam generated by pressurized steam boilers or by nonpressurized steam generators such as DriSteem's GTS, STS, Vaporstream, Vapormist, and XT Series humidifiers.
- **Capacity**  
Pressurized steam: Up to 4000 lbs/hr (1815 kg/h)  
Nonpressurized steam: Up to 1850 lbs/hr (840 kg/h)
- **Options**  
High-Efficiency Insulated Tubes  
316 stainless steel construction  
Seismic certification



Model LV:  
Vertical tubes



Model LH:  
Horizontal tubes

### Model MP: Lowest total installed cost

- **Disperse pressurized or nonpressurized steam**  
Model MP disperses steam generated by pressurized steam boilers or by nonpressurized steam generators such as DriSteem's GTS, STS, Vaporstream, Vapormist, and XT Series humidifiers.
- **Same side steam inlet and drain** for reduced piping
- **In-frame drain piping** maximizes available face dimensions and minimizes blank-off requirements.
- **Integral steam header** allows clear space on exterior wall of AHUs or ducts
- **Capacity**  
Pressurized steam: Up to 2720 lbs/hr (1235 kg/h)  
Nonpressurized steam: Up to 700 lbs/hr (318 kg/h)
- **Options**  
High-Efficiency Insulated Tubes  
304 or 316 stainless steel frame



Ultra-sorb Model MP  
Lowest total installed cost

# GTS STEAM DISPERSION OPTIONS

## NONPRESSURIZED STEAM DISPERSION

### Rapid-sorb® dispersion tube system

*Single header with multiple tubes, short non-wetting distance*

- Shorter non-wetting distance, compared to a single dispersion tube
- Models available in sizes from 10" x 10" (254 x 254 mm) and up
- For horizontal or vertical airflows with header inside or outside duct
- Available with High-Efficiency Dispersion Tubes (see below)

**Capacity:** Up to 2100 lbs/hr (955 kg/h)



### Single dispersion tube

*Installation flexibility*

- Low-capacity dispersion for horizontal or vertical airflows.
- Available as a High-Efficiency Dispersion Tube

**Capacity:** up to 97 lbs/hr (44.1 kg/h)



### Space distribution unit (SDU-E)

*Remote or non-ducted dispersion*

- Space distribution units (SDUs) include an internal fan for applications without use of ducted air.

**SDU-E capacity:** Up to 102 lbs/hr (46.3 kg/h))



### Area-type fan (For Models LX-200, LX-250, and LX-300 only)

*Quiet steam dispersion for open spaces*

- Mounts directly on top of GTS humidifier

**Capacity:** Up to 300 lbs/hr (136 kg/h)





**DRI-STEEM Corporation**

A subsidiary of Research Products Corporation  
DriSteem U.S. operations are  
ISO 9001:2015 certified

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**EXPECT QUALITY FROM THE INDUSTRY LEADER**

Since 1965, DriSteem has been leading the industry with creative and reliable humidification solutions. Our focus on quality is evident in the construction of DriSteem products. DriSteem leads the industry with a Two-year Limited Warranty and optional extended warranty.

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