

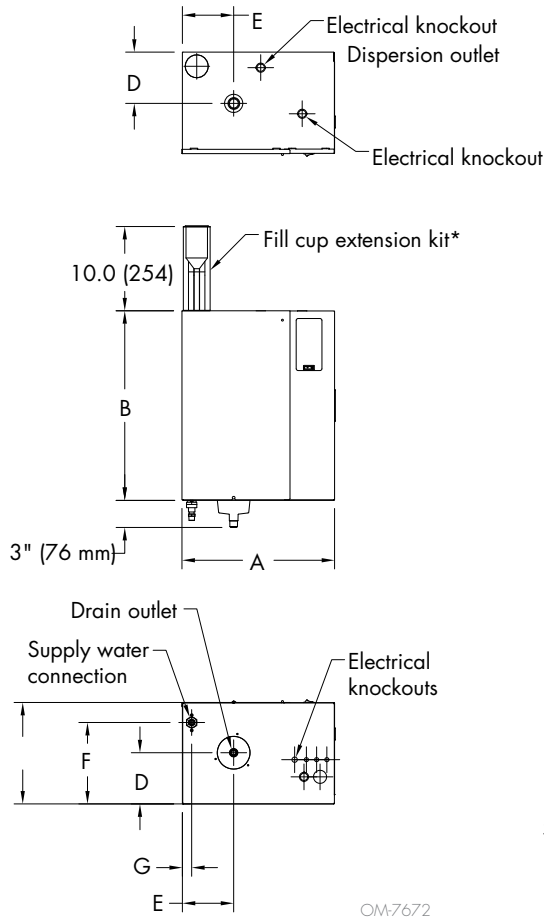


XT series humidifier dimensions

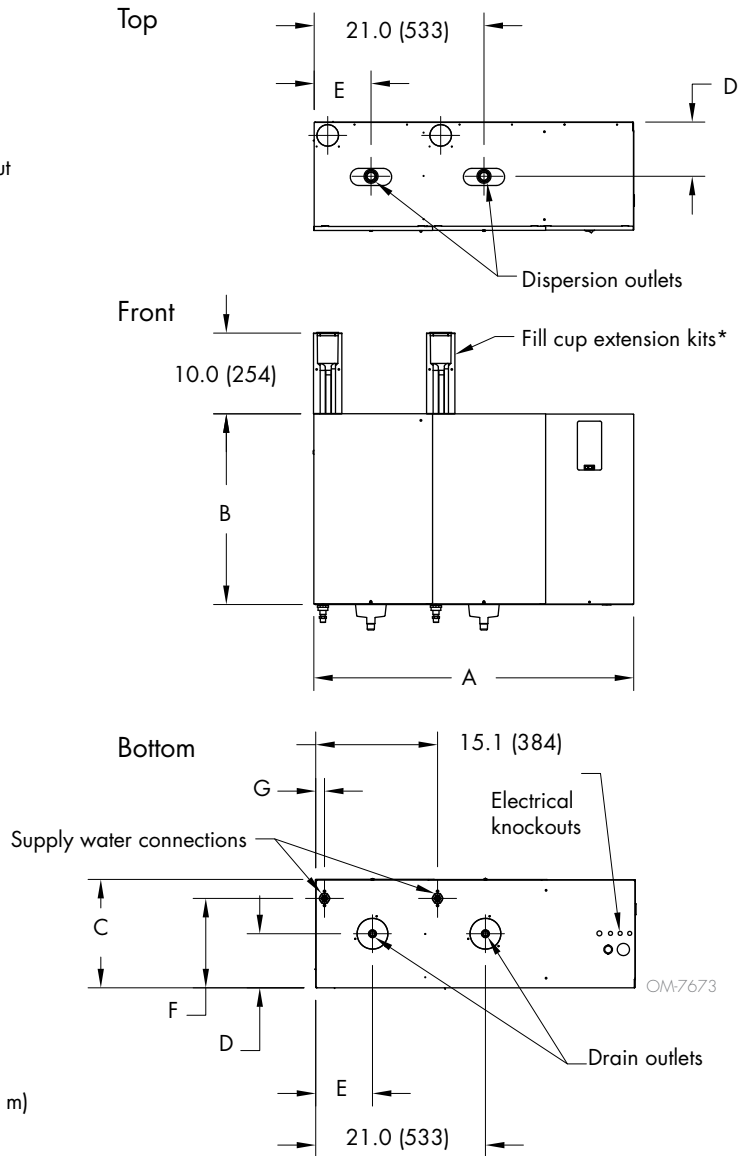
See dimension by Model number in Table 2-1

FIGURE 1-1: XT SERIES HUMIDIFIER DIMENSIONAL DRAWINGS

Models XTP 002 through 048



Models XTP 050 through 096



Notes:

- * Fill cup extension (Figure 4-2) is required for the following:
 - All XT Series humidifiers using Ultra-sorb or Rapid-sorb
 - When developed length of steam tubing is more than 20' (6 m) and duct static pressure exceeds 2" wc (498 Pa)
- Labeled dimensions: inches (millimeters).
- See mounting dimensions in Figure 3-1.
- See Figure 6-1 and Table 6-1 for units mounted in an outdoor enclosure.



XT series humidifier dimensions

See dimensional drawings in Figure 1-1

Table 2-1:
XT Series humidifier dimensions by model number

Dimension	Description	Model XTP							
		002, 003, 006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
		inches	mm	inches	mm	inches	mm	inches	mm
A	Cabinet width	14.6	370	17.7	450	19.9	504	39.6	1005
B	Cabinet height	20.6	523	24.1	612	25.6	650	25.6	650
C	Cabinet depth	8.7	221	11.8	300	13.4	340	13.4	340
D	Cabinet back edge to steam/drain outlet centers	4.5	114	6.0	152	6.7	170	6.7	170
E	Cabinet left edge to steam/drain outlet centers	4.4	112	6.0	152	7.0	178	7.0	178
F	Cabinet back edge to supply water connection center	6.1	156	9.2	235	10.8	275	10.8	275
G	Cabinet left edge to supply water connection center	1.0	25	1.0	25	1.1	28	1.1	28

Refer to Figure 6-1 and Table 6-1 for units mounted in an outdoor enclosure.

Table 2-2:
XT Series humidifier weights by model number

	Model XTP									
	002, 003		006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
	lbs	kg	lbs	kg	lbs	kg	lbs	kg	lbs	kg
Shipping weight	37	17	37	17	50	23	64	29	139	63
Maximum operating weight	38	17	46	21	79	36	115	52	219	99

Refer to Table 8-1 for units mounted in an outdoor enclosure.



XT series humidifier mounting dimensions

FIGURE 3-1: XT SERIES HUMIDIFIER MOUNTING KEYHOLE LOCATIONS

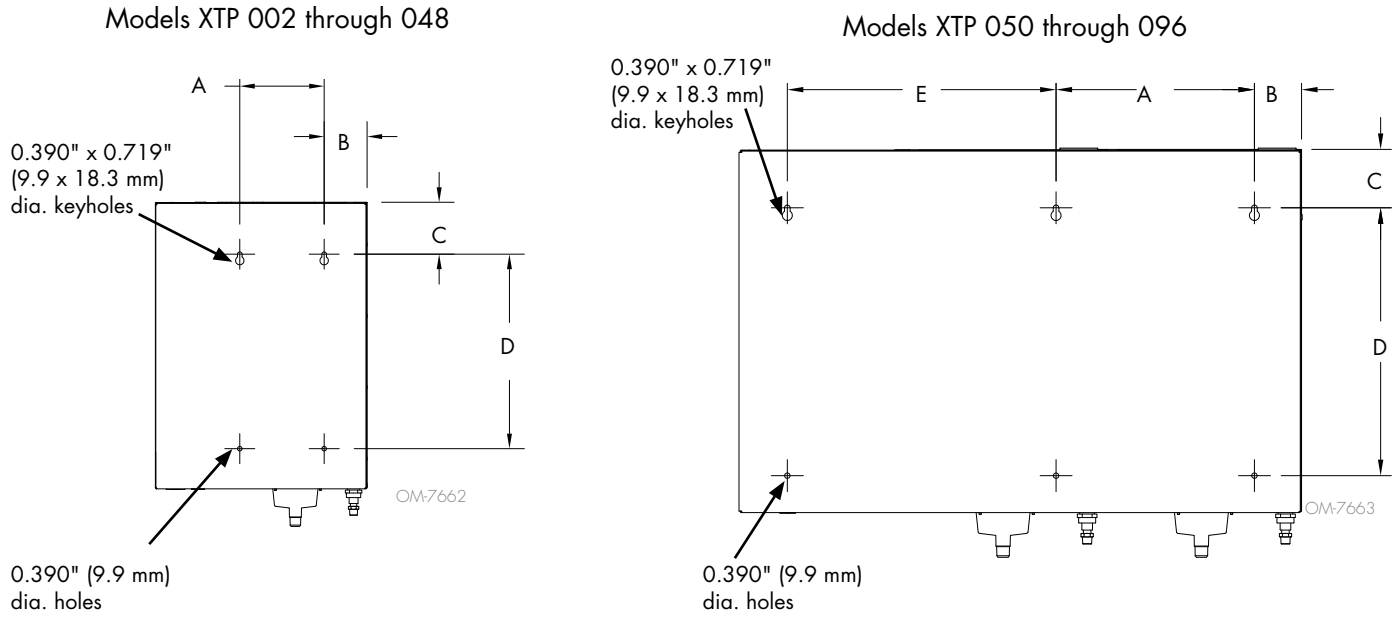


Table 3-1:
XT Series humidifier mounting keyhole dimensions

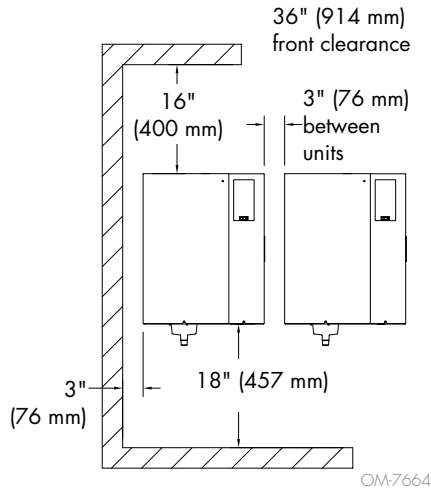
Dimension	Model XTP							
	002, 003, 006		010, 017		025, 033, 042, 048		050, 067, 083, 096	
	inches	mm	inches	mm	inches	mm	inches	mm
A	3.9	100	7.1	180	7.5	190	14.0	356
B	3.0	75	3.6	92	3.4	86	3.3	84
C	3.2	81	4.4	112	4.1	104	4.1	104
D	14.0	355	16.3	414	18.9	480	18.9	480
E	—	—	—	—	—	—	19.0	483

Refer to Figure 7-1 for units mounted in an outdoor enclosure.



XT series humidifier clearances and fill cup extension kit

FIGURE 4-1: XT SERIES INDOOR HUMIDIFIER RECOMMENDED MINIMUM CLEARANCES



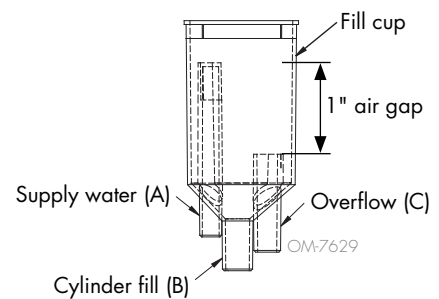
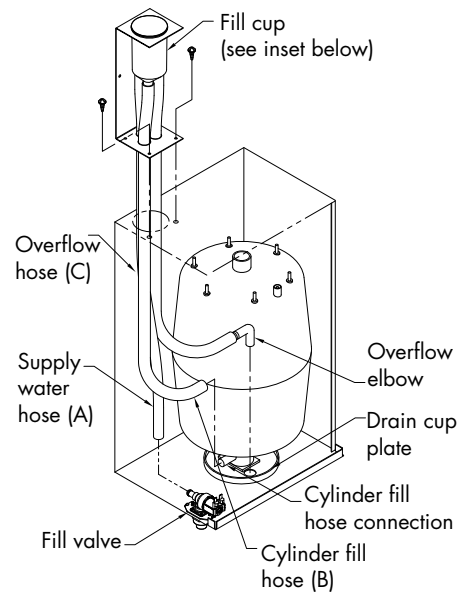
A fill cup extension (Figure 4-2) is required for the following:

All XT Series humidifiers using Ultra-sorb or Rapid-sorb

When developed length of steam tubing is more than 20' (6 m) and duct static pressure exceeds 2" wc (498 Pa)

Outdoor enclosure units include an integral fill cup extension kit.

FIGURE 4-2: FILL CUP EXTENSION KIT



XT series humidifier fusing and line currents

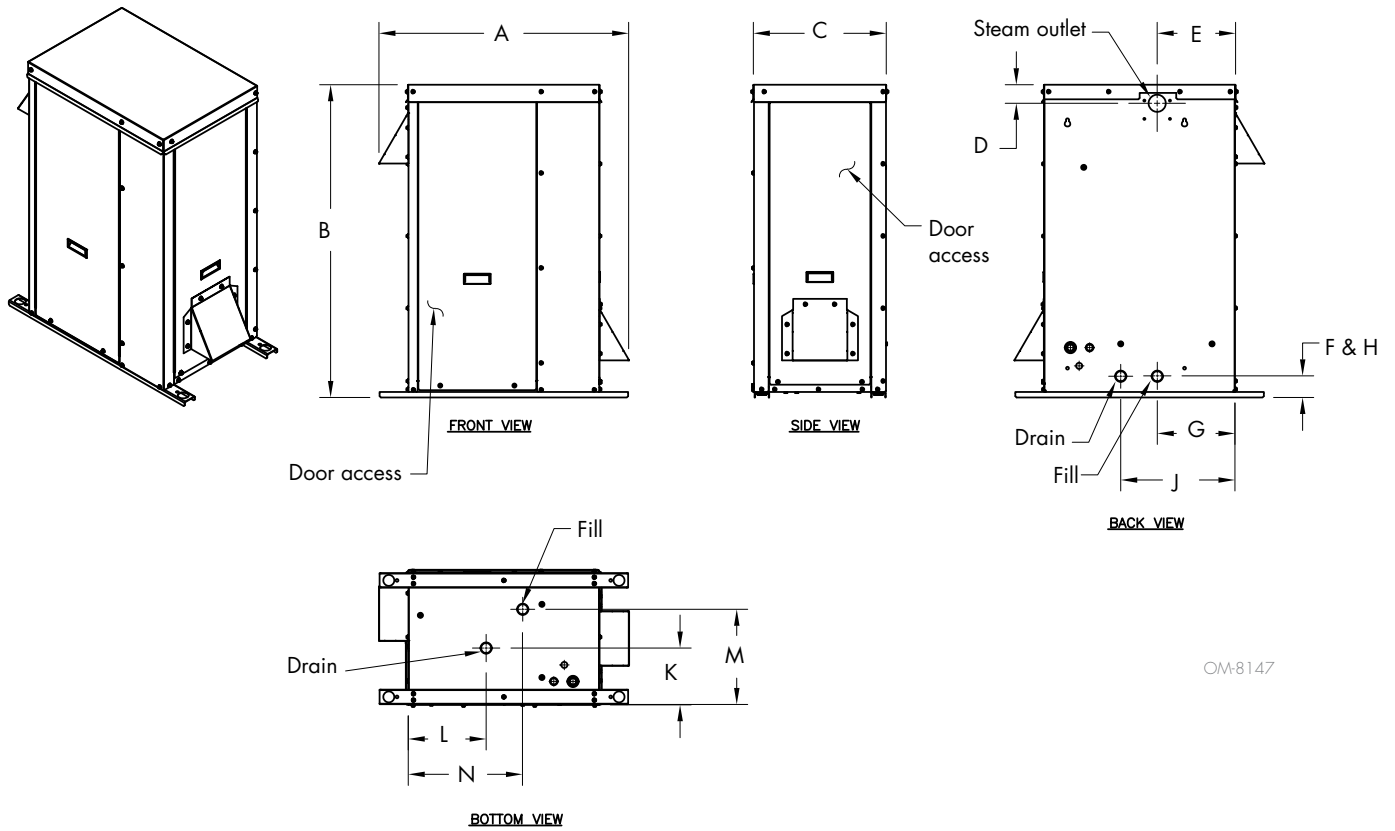
Table 5-1:
Line currents and recommended fusing for XT Series humidifiers⁽¹⁾

Model XTP	Nominal steam capacity		kW	Phase	Volts	Maximum line current (amps)	Recommended fusing (amps)	Low conductivity cylinder option**
	lbs/hr	kg/h						
002	5	2	1.7	1	120	17	25	yes
					208	10	15	yes
					230	8	15	yes
					240	8	15	yes
003	10	5	3.3	1	208	19	25	yes
					230	17	25	yes
					240	17	25	yes
					277	14	20	yes
					400	10	13	yes
					480	8	15	N/A
				3	600	7	10	yes
					208	11	15	N/A
					240	10	15	N/A
					400	6	10	yes
					480	5	10	yes
					600	4	10	yes
006	18	8	6.0	1	208	35	45	N/A
					230	31	40	N/A
					240	30	40	N/A
					277	26	35	N/A
					400	18	25	yes
					480	15	20	yes
				3	600	12	15	yes
					208	20	25	N/A
					240	17	25	N/A
					400	10	13	yes
					480	9	15	yes
					600	7	10	yes
010	30	14	10.0	3	208	33	45	N/A
					240	29	40	N/A
					400	17	25	N/A
					480	14	20	yes
					600	12	15	yes
					208	55	70	yes
017	50	22	16.5	3	240	48	60	yes
					400	29	40	yes
					480	24	35	yes
					600	19	25	yes
					400	43	63	yes
					480	36	50	yes
025	75	34	25.0	3	600	29	40	yes
					400	58	80	yes
					480	48	70	yes
033	100	45	33.3	3	600	39	50	yes
					400	72	100	yes
					480	60	80	yes
042	125	57	41.7	3	600	48	70	yes
					400	80	100	yes
					480	69	90	yes
048	143	65	47.8	3	600	55	70	yes
					400	2 x 43	2 x 63	yes
					480	2 x 36	2 x 50	yes
050*	150	68	50.0	3	600	2 x 29	2 x 40	yes
					400	2 x 58	2 x 80	yes
					480	2 x 48	2 x 70	yes
067*	198	90	66.7	3	600	2 x 39	2 x 50	yes
					400	2 x 72	2 x 100	yes
					480	2 x 60	2 x 80	yes
083*	250	113	83.3	3	600	2 x 48	2 x 70	yes
					400	2 x 80	2 x 100	yes
					480	2 x 69	2 x 90	yes
096*	287	130	95.7	3	600	2 x 55	2 x 70	yes

(1) For units with outdoor enclosure:
 • If unit is a model XTP002 - XTP-048 without heater package, add 1 amp to "Maximum Line Current".
 • If unit is a model XTP002 - XTP-048 with heater package, add 5 amps to "Maximum Line Current".
 * These models have two steam cylinders and require independent service connections.
 ** For part numbers refer to DriSteam parts website.

Outdoor enclosure: Dimensions

FIGURE 6-1: OUTDOOR ENCLOSURE DIMENSIONS



OM-8147

Table 6-1:
Outdoor enclosure dimensions

	Description	002 through 048	
		inches	mm
A	Enclosure width (including lift brackets)	34.2	869
B	Enclosure height (including lift brackets)	42.8	1087
C	Enclosure depth	18.5	470
D	Enclosure top to steam outlet center	2.5	64
E	Enclosure left wall to steam outlet center	10.6	269
F	Enclosure bottom edge to drain knockout center (back wall) (including lift brackets)	2.9	74
G	Enclosure left wall to drain knockout center (back wall)	10.6	269
H	Enclosure bottom edge to water fill knockout center (back wall) (including lift brackets)	2.9	74
J	Enclosure left wall to water fill knockout center (back wall)	15.6	396
K	Enclosure back wall to drain knockout center (bottom)	7.7	196
L	Enclosure left wall to drain knockout center (bottom)	10.6	269
M	Enclosure back wall to water fill knockout center (bottom)	11.0	279
N	Enclosure left wall to water fill knockout center (bottom)	15.6	396



Outdoor enclosure: Clearances and mounting dimensions

FIGURE 7-1: OUTDOOR ENCLOSURE CLEARANCES

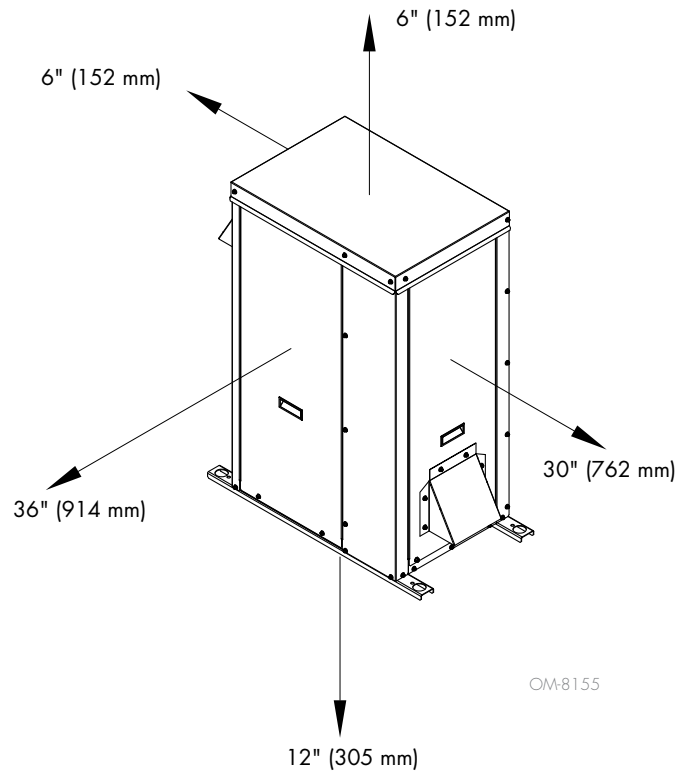
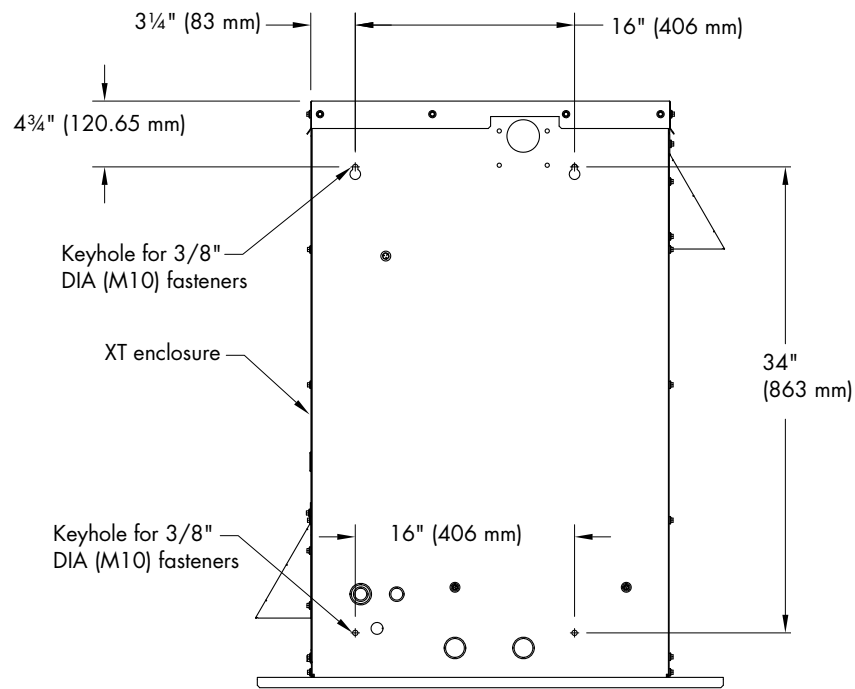


FIGURE 7-1: OUTDOOR ENCLOSURE



Outdoor enclosure: XT outdoor enclosure voltage and weights

Table 8-1: Voltages and Weights

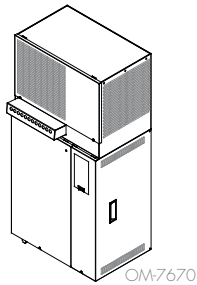
Model	Phase	Voltage	Weight Configuration					
			Dry		Shipping		Operating	
			(lbs)	(kg)	(lbs)	(kg)	(lbs)	(kg)
XTPO02A1	1	120	155.0	70.5	201.0	91.4	160.4	72.9
XTPO02B1	1	208	168.0	76.4	214.0	97.3	173.4	78.8
XTPO02D1		230	155.0	70.5	201.0	91.4	160.4	72.9
XTPO02E1		240	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03B1	1	208	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03D1		230	155.0	70.5	201.0	91.4	160.4	72.9
XTPO03E1		240	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03F1		277	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03H2		400	155.0	70.5	201.0	91.4	160.4	72.9
XTPO03L1		480	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03P1		600	167.6	76.2	213.6	97.1	173.0	78.6
XTPO03B3	3	208	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03E3		240	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03H3		400	155.0	70.5	201.0	91.4	160.4	72.9
XTPO03L3		480	168.0	76.4	214.0	97.3	173.4	78.8
XTPO03P3		600	167.6	76.2	213.6	97.1	173.0	78.6
XTPO06B1	1	208	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06D1		230	155.7	70.8	201.7	91.7	168.2	76.5
XTPO06E1		240	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06F1		277	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06H2		400	155.7	70.8	201.7	91.7	168.2	76.5
XTPO06L1		480	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06P1		600	168.3	76.5	214.3	97.4	180.8	82.2
XTPO06B3		1	208	168.7	76.7	214.7	97.6	181.2
XTPO06E3	3	240	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06H3		400	155.7	70.8	201.7	91.7	168.2	76.5
XTPO06L3		480	168.7	76.7	214.7	97.6	181.2	82.4
XTPO06P3		600	168.3	76.5	214.3	97.4	180.8	82.2
XTPO10B3	3	208	170.0	77.3	216.0	98.2	197.5	89.8
XTPO10E3		240	170.0	77.3	216.0	98.2	197.5	89.8
XTPO10H3		400	157.0	71.4	203.0	92.3	184.5	83.9
XTPO10L3		480	170.0	77.3	216.0	98.2	197.5	89.8
XTPO10P3		600	169.6	77.1	215.6	98.0	197.1	89.6
XTPO17B3	3	208	170.0	77.3	216.0	98.2	197.5	89.8
XTPO17E3		240	170.0	77.3	216.0	98.2	197.5	89.8
XTPO17H3		400	157.0	71.4	203.0	92.3	184.5	83.9
XTPO17L3		480	170.0	77.3	216.0	98.2	197.5	89.8
XTPO17P3		600	169.6	77.1	215.6	98.0	197.1	89.6
XTPO25H3		3	400	159.8	72.6	205.8	93.5	207.8
XTPO25L3	480		172.8	78.5	218.8	99.5	220.8	100.3
XTPO25P3	600		172.4	78.4	218.4	99.3	220.4	100.2
XTPO33H3	3	400	161.4	73.4	207.4	94.3	209.4	95.2
XTPO33L3		480	174.4	79.3	220.4	100.2	222.4	101.1
XTPO33P3		600	174.0	79.1	220.0	100.0	222.0	100.9
XTPO42H3	3	400	161.4	73.4	207.4	94.3	209.4	95.2
XTPO42L3		480	174.4	79.3	220.4	100.2	222.4	101.1
XTPO42P3		600	174.0	79.1	220.0	100.0	222.0	100.9
XTPO48H3	3	400	161.4	73.4	207.4	94.3	209.4	95.2
XTPO48L3		480	174.4	79.3	220.4	100.2	222.4	101.1
XTPO48P3		600	174.0	79.1	220.0	100.0	222.0	100.9

XT steam blower

FIGURE 9-1: TOP- AND REMOTE-MOUNTED XT STEAM BLOWER

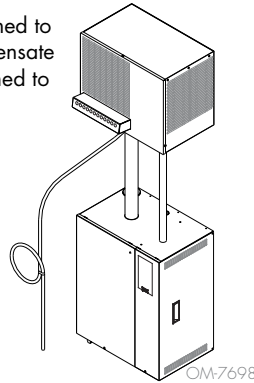
Mounted on top of humidifier

Condensate returned to steam cylinder fill hose

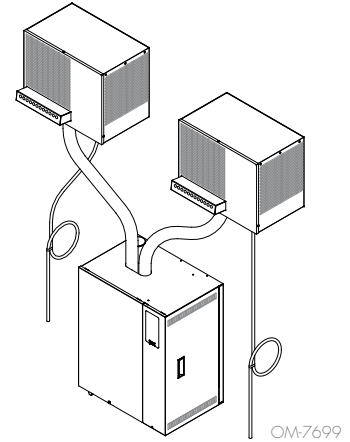


Mounted remotely from humidifier

Condensate returned to open drain (condensate can also be returned to humidifier fill cup)



One XTP humidifier with two XT steam blowers



XT steam blowers

XT steam blowers, designed to disperse steam directly into large open spaces, are particularly useful in finished spaces and rooms where there are no air-handling ducts.

There are two XT steam blower models:

- SDU-006, for capacities up to 20 lbs/hr (9.1 kg/h), can be directly mounted on Models XTP 002 through 006.
- SDU-017, for capacities up to 50 lbs/hr (22.7 kg/h), can be directly mounted on Models XTP 010 and 017.
- XT Series humidifiers can be configured to operate with one or two steam blowers. Multiple SDU-017 are used remotely with Model XTP 025 or 033. See Table 10-2.



XT steam blower

FIGURE 10-1: XT STEAM BLOWER DIMENSIONS

SDU-006E shown

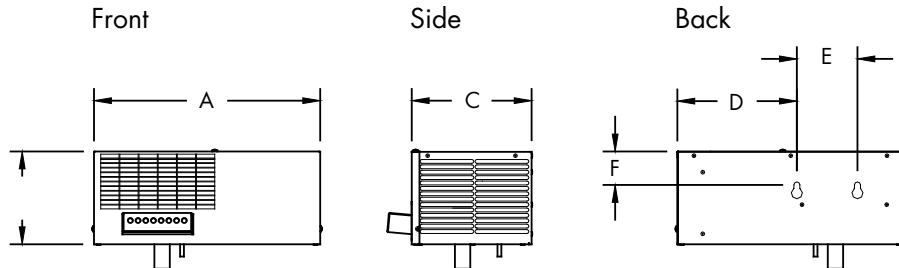


Table 10-1:
XT steam blower dimensions

Dimension	SDU-006E		SDU-017E	
	inches	mm	inches	mm
A	14.7	373	17.9	455
B	6.0	152	13.8	350
C	7.8	198	11.0	279
D	3.0	76	3.6	91
E	3.9	99	7.1	180
F	2.7	69	4.2	107

Table 10-2:
Single or multiple XT steam blowers for XT Series humidifiers*

Model	SDU-006 per kit	SDU-017 per kit
XTP		
002	1	—
003	1	—
006	1	—
010	—	1
017	—	1
025	—	2
033	—	2
042 through 096	n/a	n/a

* XT steam blowers are sold as kits to match the associated XT Series humidifier. The number of XT steam blowers per kit are shown in this table.

Table 10-3:
XT steam blower specifications

Model	Maximum capacity		Shipping weight		Operating weight		Volume airflow		Current draw at 115V (50/60 Hz)	Input power	Noise
	lbs/hr	kg/h	lbs	kg	lbs	kg	cfm	m ³ /min			
SDU-006E	20	9.1	14.0	6.4	11.0	5.0	106	3.0	0.16 A	17 W	49 dBA
SDU-017E	50	22.7	29.0	13.2	24.0	10.9	665	18.8	0.23 A	23 W	53 dBA

- Notes:
- XT steam blowers ship separately from XT Series humidifiers.
 - Noise measurements taken 6.5' (2 m) in front of XT steam blower cabinet.



XT steam blower rise, spread, throw

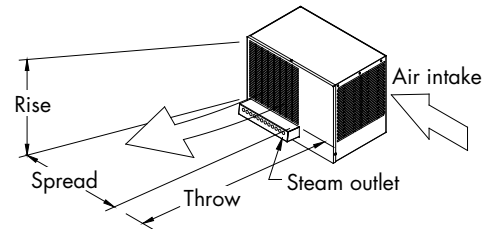
On a call for humidity, the controller closes the contactors to energize the humidifier electrodes and the XT steam blower. When the call for humidity is satisfied, the controller opens the humidifier contactor, which stops the steam blower.

As steam is discharged from the XT steam blower, it quickly cools and turns to a visible fog that is lighter than air. As this fog is carried away from the XT steam blower by the airstream, it tends to rise toward the ceiling. If the fog contacts solid surfaces (columns, beams, ceiling, pipes, etc.) before it disappears, it can condense and drip. The greater the space relative humidity, the further the fog will rise, spread, and throw.

Table 11-1 lists the maximum rise, spread, and throw non-wetting distances for XT Series humidifiers with XT steam blowers. Surfaces cooler than ambient temperature, or objects located within this minimum dimension, can cause condensation and dripping. To avoid steam impingement on surrounding areas, observe the minimum non-wetting distances in the table.

XT steam blowers are field wired to the XT Series humidifier blower terminals. A wiring diagram is included with the XT steam blower.

FIGURE 11-1: XT STEAM BLOWER RISE, SPREAD, THROW



OM-7686

**Table 11-1:
XT steam blower minimum non-wetting distances**

Model	Nominal steam capacity		30% RH @ 70 °F (21 °C)						40% RH @ 70 °F (21 °C)						50% RH @ 70 °F (21 °C)						60% RH @ 70 °F (21 °C)					
			Rise		Spread		Throw		Rise		Spread		Throw		Rise		Spread		Throw		Rise		Spread		Throw	
XTP	lbs/hr	kg/h	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
002	5	2	0.7	0.2	0.9	0.3	1.9	0.6	0.8	0.2	1.2	0.4	2.1	0.6	1.1	0.3	1.5	0.5	2.5	0.8	1.5	0.5	1.5	0.5	3.2	1.0
003	10	5	1.4	0.4	1.9	0.6	3.8	1.2	1.7	0.5	2.4	0.7	4.3	1.3	2.3	0.7	3.0	0.9	5.0	1.5	3.0	0.9	3.0	0.9	6.5	2.0
006	20	8	2.5	0.8	2.8	0.9	6.5	2.0	3.0	0.9	3.3	1.0	7.4	2.3	3.8	1.2	4.0	1.2	8.5	2.6	4.0	1.2	4.0	1.2	10.0	3.0
010	30	14	3.1	0.9	3.0	0.9	7.5	2.3	3.6	1.1	3.4	1.0	8.7	2.7	4.3	1.3	4.0	1.2	9.5	2.9	4.2	1.3	3.5	1.1	11.0	3.4
017	50	22	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3
025*	75	34	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3
033*	100	45	3.3	1.0	3.1	0.9	9.6	2.9	3.8	1.2	3.5	1.1	10.7	3.3	4.4	1.3	4.0	1.2	12.0	3.7	4.8	1.5	4.7	1.4	14.0	4.3

Rise: Minimum non-wetting height above the steam outlet of the XT steam blower
 Spread: Minimum non-wetting width from the steam outlet of the XT steam blower
 Throw: Minimum non-wetting horizontal distance from the steam outlet of the XT steam blower
 * These XT Series humidifier models use two XT steam blowers.



Interconnecting steam hose and tubing

Table 12-1:
Insulated 1½" (DN40) steam tubing maximum lengths for Models XTP 002 through 017

Model	Maximum developed length*	
	ft	m
XTP		
002	13	4.0
003	25	7.6
006	50	15.2
010**	50	15.2
017**	50	15.2

Notes:

- For larger XT Series humidifier models, see Table 12-2.
- Values in this table are based on condensate flowing with steam (steam tubing pitched toward dispersion device).
- * Maximum developed lengths are based on 5% steam loss in tubing. Developed length equals measured length plus 50% of measured length to account for fittings.
- ** Values in this table are based on duct static pressure of 2" wc (498 Pa). If maximum developed length is more than 20' (6 m) or duct static pressure exceeds 2" wc (498 Pa), a fill cup extension kit (Figure 4-2) is required.

CONDENSATE CONTROL AND COLLECTION

Controlling condensate flow and collection in an XT Series humidifier system is critical to performance. To maximize humidifier performance:

- See Tables 12-1 and Table 12-2.
- Follow all installation recommendations for your specific humidifier and dispersion assembly in the *XT Series Installation, Operation, and Maintenance Manual (IOM)*, available at www.dristeem.com.

Table 12-2:
Maximum steam carrying capacity and length of interconnecting steam hose and tubing for Models XXTP 025 through XTP096

Model	DriSteem steam hose*						Copper or stainless steel tubing (Insulate tubing to minimize loss of capacity and efficiency.)					
	Hose I.D.		Maximum capacity per cylinder [†]		Maximum length ^{††}		Tube size		Maximum capacity per cylinder [†]		Maximum developed length ^{†††}	
XTP	inches	DN	lbs/hr	kg/h	ft	m	inches	DN	lbs/hr	kg/h	ft	m
025, 050**	1½	40	75	34.0	10	3	1½	40	75	34.0	100	30
033, 067**	2	50	100	45.4	10	3	2	50	100	45.4	100	30
042, 083**	2	50	125	56.7	10	3	2	50	125	56.7	100	30
048, 096**	2	50	143	65.0	10	3	2	50	143	65.0	100	30

Notes:

- See Table 12-1 for XT Series humidifiers with lower capacities using 1½" steam tubing.
- Values in this table are based on XT Series humidifiers with fill cup extensions, and condensate flowing in direction of steam (steam hose or tubing pitched toward dispersion device).
- * When using steam hose, use DriSteem steam hose for best results. Field-supplied hose may have shorter life and may cause foaming in cylinder, resulting in condensate discharge at dispersion assembly. Do not use steam hose for outdoor applications.
- ** These models have two steam cylinders.
- [†] For Models XTP 050 through XTP096, capacities listed are maximum steam carrying capacity per tube attached to each cylinder, with separate steam tubing from each cylinder to connection on dispersion device. See the XT Series IOM (available at www.dristeem.com).
- ^{††} DriSteem recommends 10' (3 m) maximum steam hose length pitched at 2"/ft (15%). Steam hose can sag if not supported for its full length. Sagging leads to collecting condensate and system pressure issues. Tubing is less prone to sagging and can allow for 1/8"/ft (1%) pitch minimum and longer runs.
- ^{†††} Developed length equals measured length plus 50% of measured length to account for fittings.

