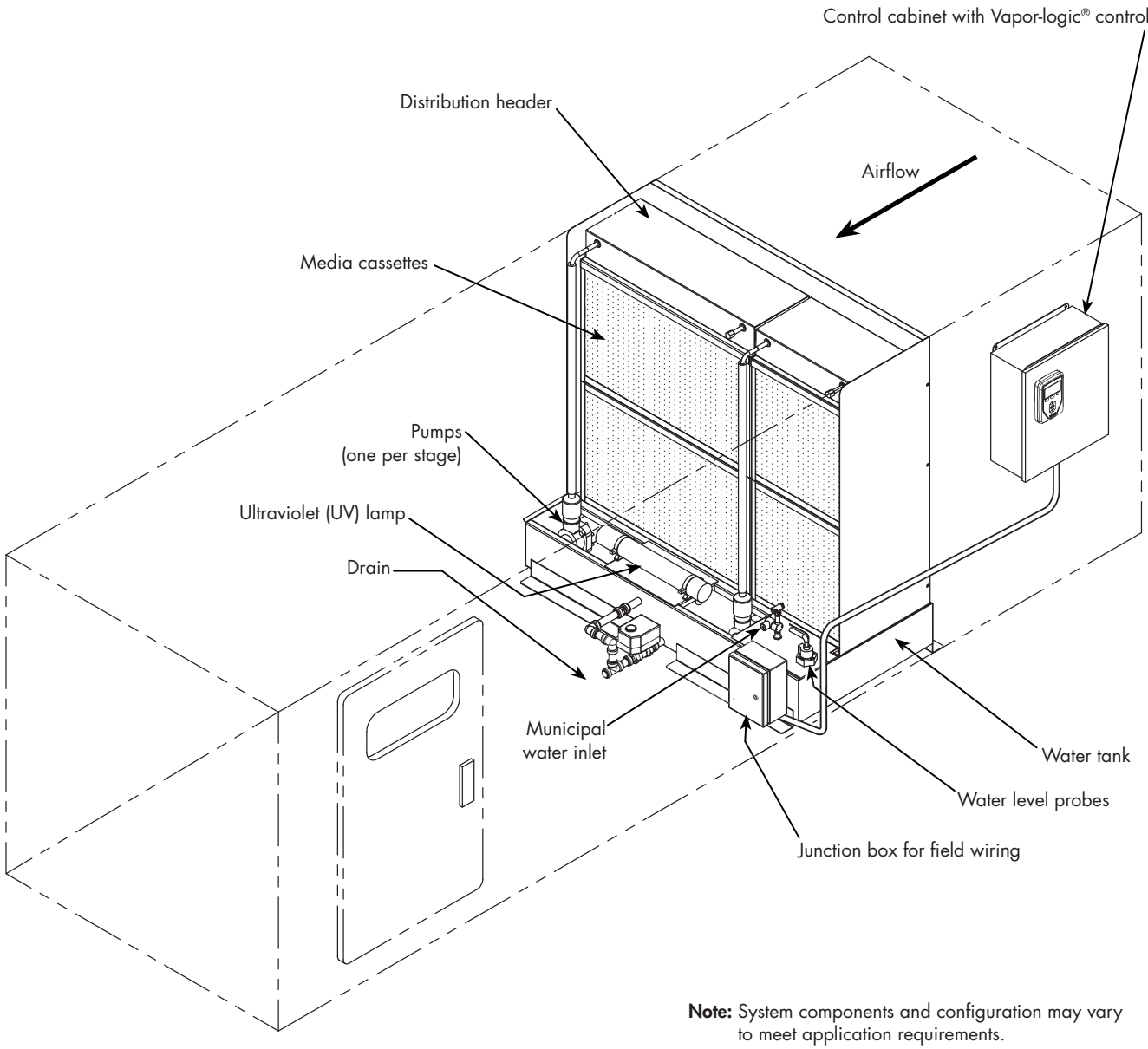
Evaporative cooling and humidification: DriSteem® Wetted Media System

Figure 1-1:
DriSteem Wetted Media System overview



Note: System components and configuration may vary to meet application requirements.

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Figure 2-1:
Wetted Media System cooling efficiency and pressure drop

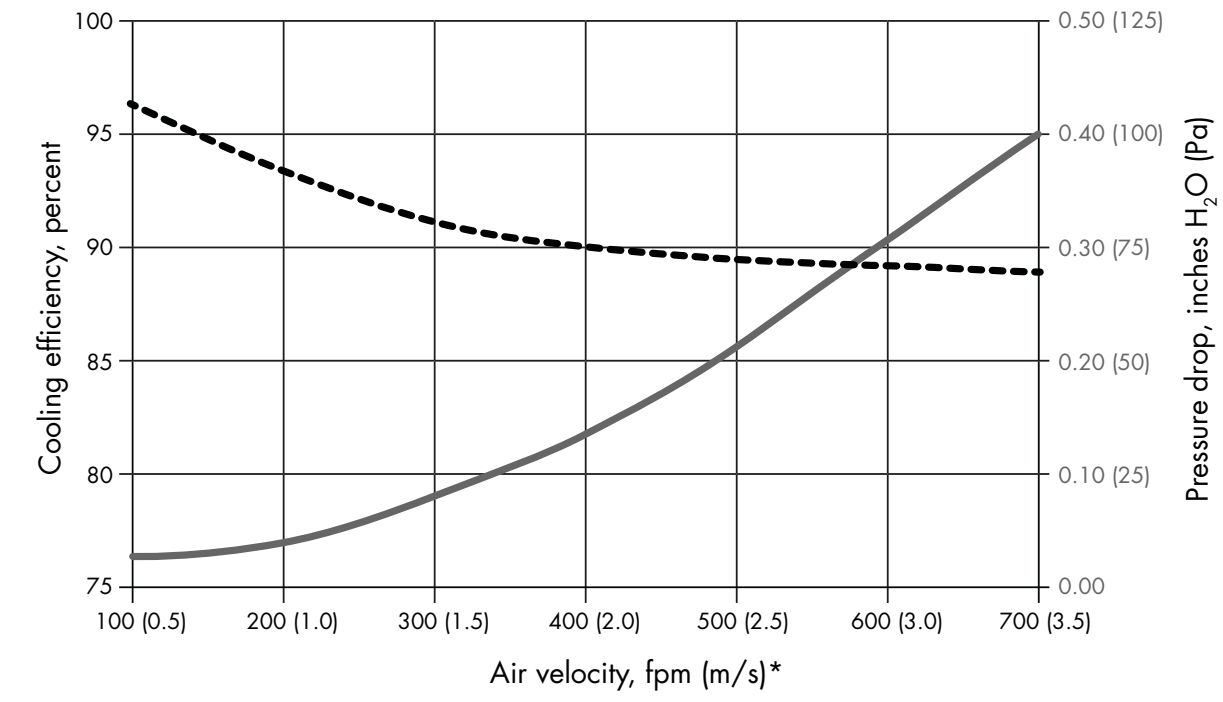

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Figure 2-2:
Wetted media thickness

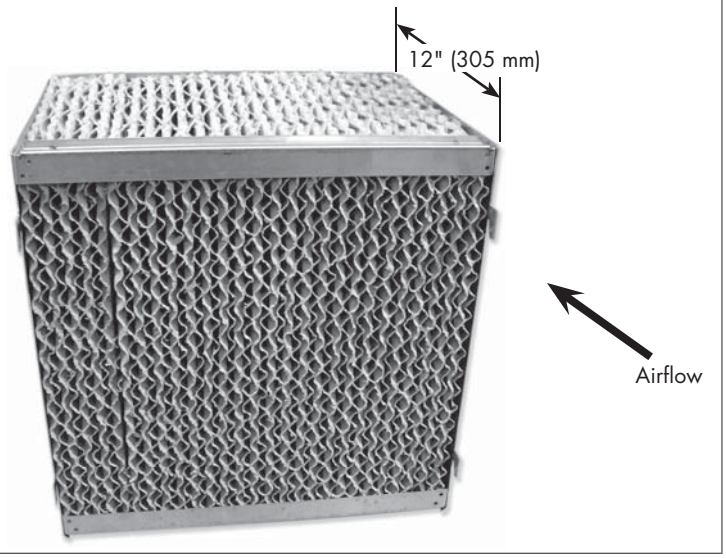

Figure 3-1:
Dimensions and minimum recommended clearance

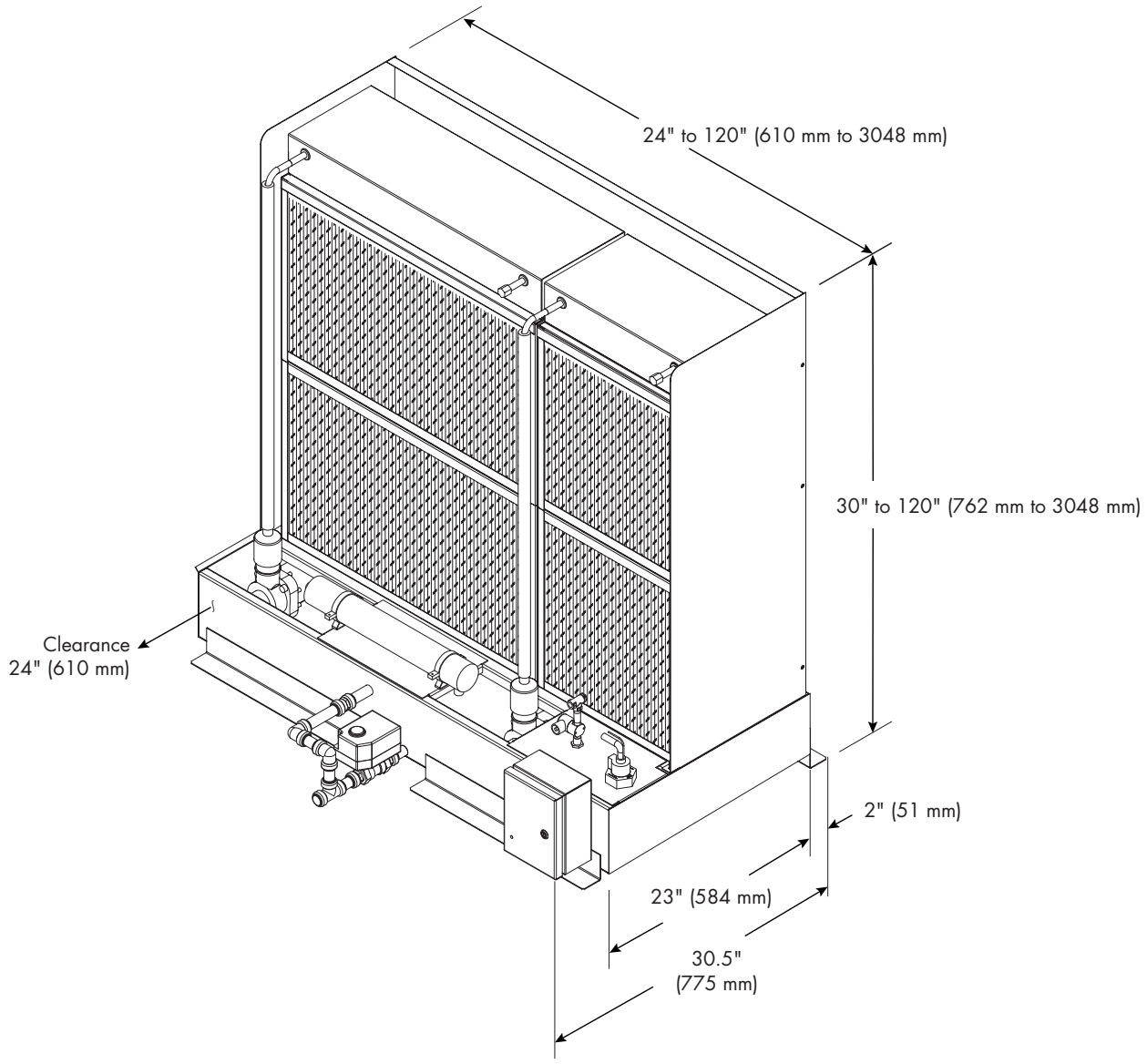

Table 4-1:
Wetted Media System specifications

Item	Specification
System capacity	Varies with application. See graph on page 15 for system efficiencies and to calculate system capacity.
System voltage/phase/Amp draw	120 Volts, 1 phase: 1 stage: 3.0 Amps 2 stages: 4.2 Amps 3 stages: 5.5 Amps
Fuse size*	120 Volts,1 phase: 15 Amps
Height	30" – 120" (762 mm – 3048 mm)
Width	24" – 120" (610 mm – 3048 mm)
Depth	23" (584 mm)
Operating weight***	System operating weight = tank operating weight + media operating weight Pounds = 65 lbs/ft of width + 20 lbs/ft^2 Kilograms = 98 kg/m of width + 30 kg/m^2
Shipping weight***	System shipping weight = tank shipping weight + media shipping weight Pounds = 30 lbs/ft of width + 10 lbs/ft^2 Kilograms = 45 kg/m of width + 15 kg/m^2
Supply water pressure	25 to 80 psi (170 to 550) kPa
Supply water connection, diameter	3/8" to 3/4", (DN10 to DN20) depending on flow rate
Drain connection, diameter	1" (DN25), copper
Recommended inlet water flow rate	3x system capacity or 11 gpm (42 L/m) max.
Air velocity, maximum recommended	700 fpm (3.5 m/s) through wetted media without mist eliminator. (Contact DriSteem for air velocities above 700 fpm.)
Water quality requirements	System recycle rate depends on water quality. Contact DriSteem for more information.

* Cataloged amperages assume one pump per stage. Some large systems may require additional pumps depending on operating conditions. Contact DriSteem for system amperages.

** Wiring and branch circuit protection (Type RK1, J, or T fusing) to be provided by installer in accordance with National Electrical Code (NEC) requirements or (in Europe) IEC 60364 requirements.

*** **System weight calculation examples**

Operating weight in *pounds* for a 6-ft-high x 8-ft-wide Wetted Media System):
= (65 lbs/ft) x (8 ft wide) + (20 lbs/ft^2) x (8 ft wide) x (6 ft high – 1 ft tank height)
= 520 lbs + 800 lbs = 1320 lbs

Operating weight in *kilograms* for a 2-meter-high x 3-meter-wide Wetted Media System):
= (98 kg/m) x (2 m wide) + (30 kg/m^2) x (3 m wide) x (2 m high – 0.3 m tank height)
= 196 kg + 153 kg = 349 kg

