fisair
air humidity control

Diphusair VxV

Heat Exchange humidification system using boiler steam

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Characteristics

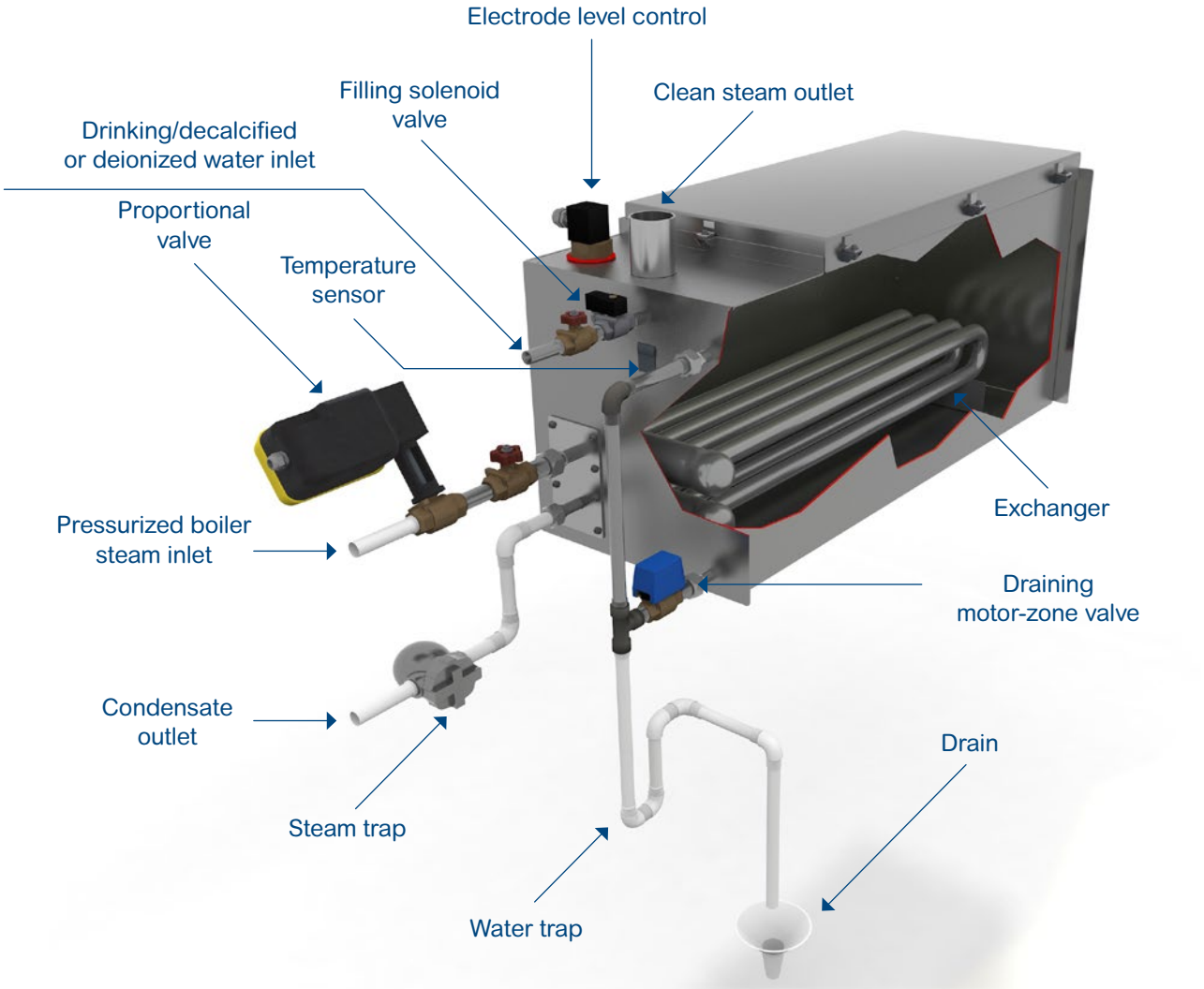
(*) For deionized water, the filling valve is a float valve, there is no solenoid filling valve, the draining valve is manual and the level control is by means of a buoy detector.

VxV series DIPHUSAIR air humidifiers work using a heat exchanger composed of copper pipes. Boiler steam circulates through the pipes to provide the heat required to generate clean steam from drinking/decalcified or deionized water. The heat transmission process works by conduction and convection in nucleate boiling phase.

The special machining of the heating coil, from a copper pipe in compliance with standard EN1057:2007, makes this the most effective kind of exchanger, and also prevents the contamination and contact of the drinking water with the boiler steam. The outer nickel-plating of the exchanger further increases the already noteworthy corrosion resistance of the copper (Cu).

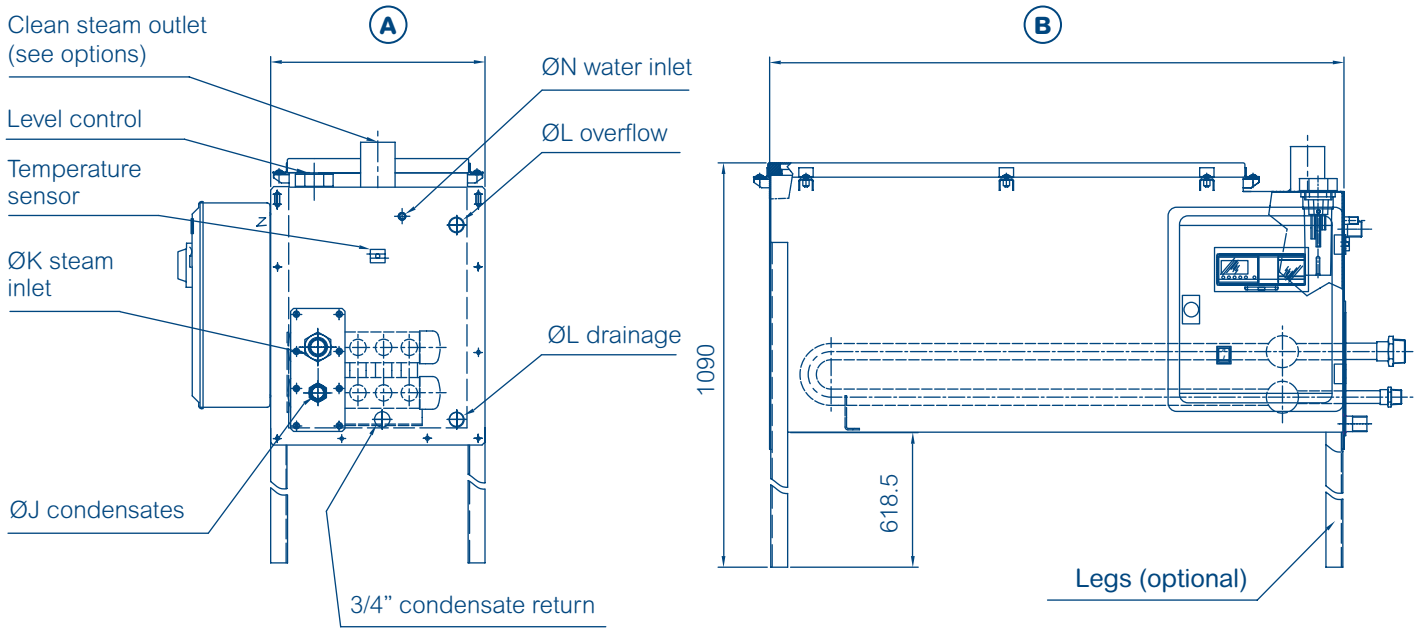
A specific DIPHUSAIR-VxV humidifier is chosen for each application to ensure the desired humidity level is obtained easily, reliably and permanently, and for very reasonable operating costs.

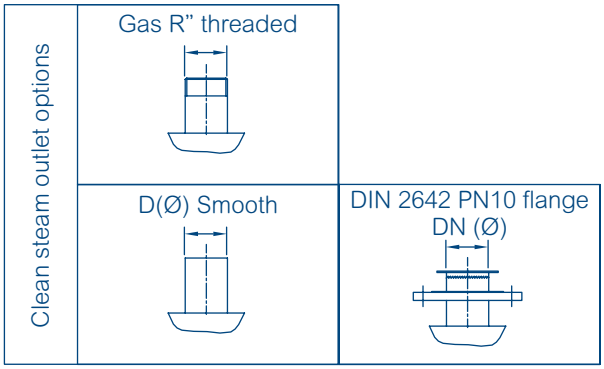
VxV for drinking/decalcified water (*)

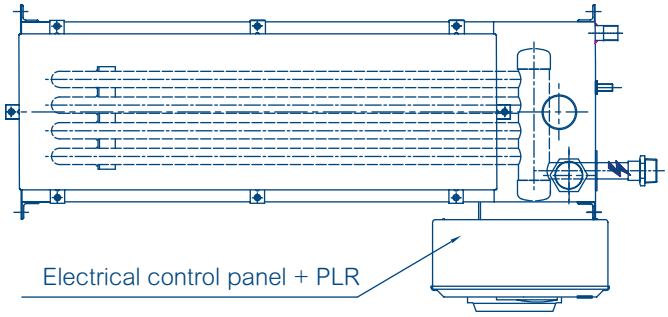


External dimensions and components of the humidifier

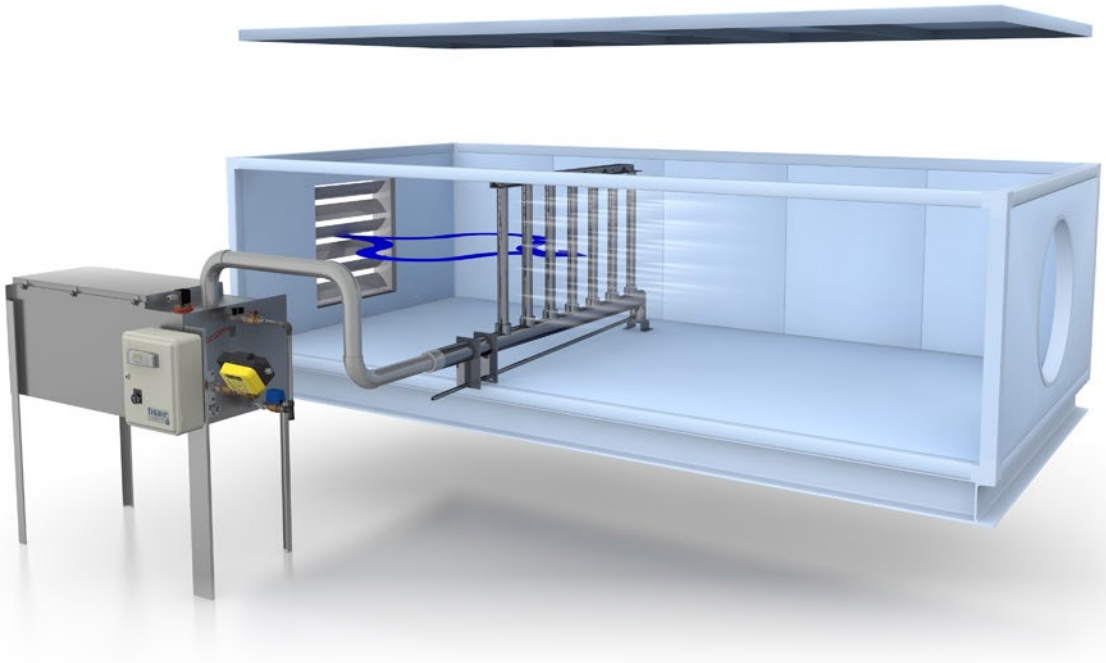
Diphusair VxV







Name	Boiler steam	Condensates	A mm	B mm	ØL OUTLET Overflow/ draining	ØN INLET Network water	APPROX. WEIGHT (Empty/Operational) Kg
	ØK INLET	ØJ OUTLET					
VxV-060	3/4 "BSP	3/4 "BSP	375	603	3/4 "BSP	1/4 "BSP	40/80
VxV-120	1-1/4 "BSP	3/4 "BSP	375	1003			57/155
VxV-240	1-1/4 "BSP	1-1/4 "BSP	490	1003			65/160



Diphusair VxV connection with Diphusair MT1 steam disperser in the AHU

Diphusair VxV steam humidifier technical data

Model		VxV-60	VxV-120	VxV-240
Clean steam pressure	[kPa]	<4		
Total electrical power	[W]	75		
Electricity connection		230V / I+N / 50Hz		
Maximum steam pressure (gauge)	kPa (G)	150		
Maximum boiler water temperature	[ºC]	127,4		
Maximum chassis temperature	[ºC]	98		

(*) For other operating conditions, request the corresponding capacity.

The manufacturer reserves the right to change specifications without prior notification.

Capacities of Diphusair VxV steam humidifiers

Generation of steam (kg/h)		VxV-60	VxV-120	VxV-240
Boiler steam pressure (kPa) [gauge] (*)	50 kPa (G)	15	32	64
	75 kPa (G)	26	53	107
	100 kPa (G)	38	78	158
	125 kPa (G)	51	103	209
	150 kPa (G)	60	120	240

(*) The use of steam pressures >150 kPa(G) is not recommended because this would destabilize the behaviour of the exchanger.