

Project Name:	
Zone:	
Date:	

ACA product data sheet

Humidification load

Calculated load:		Humidifier model:	
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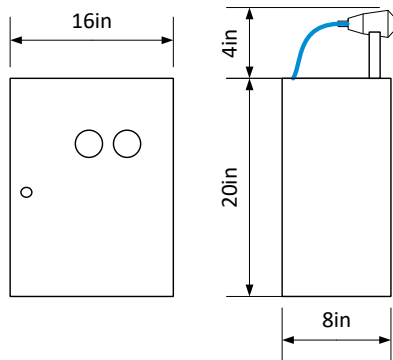
Main & standard features

- Dry fog atomizing with 2 to 4µm water droplets.
- Low energy and low compressed air consumption.
- Low compressed air pressure required (87PSI).
- Original patented nozzle with venturi effect and no moving part.
- Fully modulating humidifier.
- Atomizer with non clogging large orifice and maintenance free.
- Accepts untreated water, or liquid solution such as disinfectant.
- High accuracy +/- 1%RH and high humidity ratio up to 96%RH at low temperature.
- Modbus RTU or BACnet remote communication optional.

Technical data

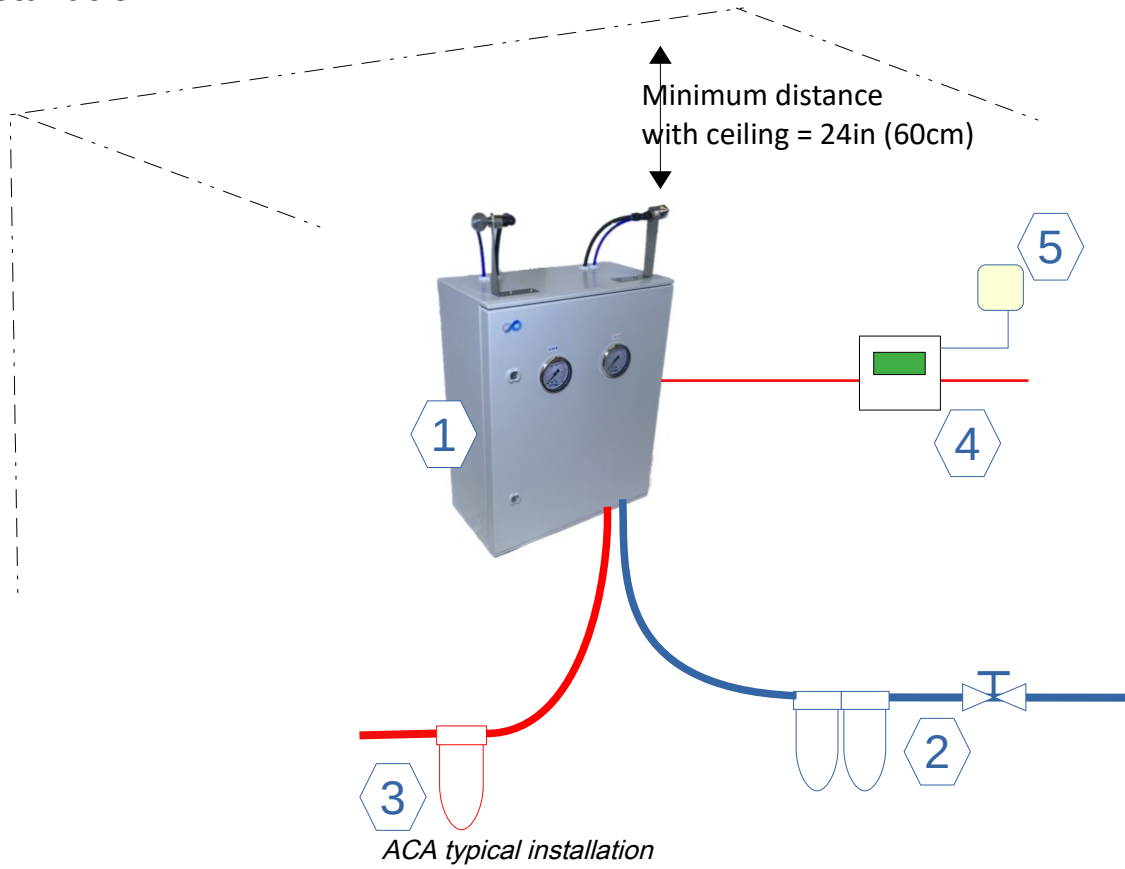
Model	ACA-S2	ACA-S4	ACA-S6	ACA-Dx	
Distribution	In space	In space	In space	In duct	
Capacity	lb/h	26	53	78	13 to 1040
	kg/h	12	24	36	6 to 472
Air pressure	PSI	87 to 116	87 to 116	87 to 116	87 to 116
	kPa	600 to 800	600 to 800	600 to 800	600 to 800
Air Consumption	cfm	4 (at 87PSI)	8 (at 87PSI)	12 (at 87PSI)	2 per atomizer (at 87PSI)
	l/min	120 (at 600kPa)	120 (at 600kPa)	120 (at 600kPa)	120 (at 600kPa)
Water supply TDS	ppm	100 max	100 max	100 max	100 max
Voltage	Vac	100 to 250 (1ph)	100 to 250 (1ph)	100 to 250 (1ph)	100 to 250 (1ph)
Power	W	15	15	15	15 to 200

Dimensions & weight



Model	Capacity	Dimensions			Weight	
		W	H	D	Net	Oper.
ACA-S2	26lb/h	16in	24in	8in	24lb	24lb
ACA-S4	53lb/h	16in	24in	8in	26lb	26lb
ACA-S6	78lb/h	16in	24in	8in	26lb	26lb

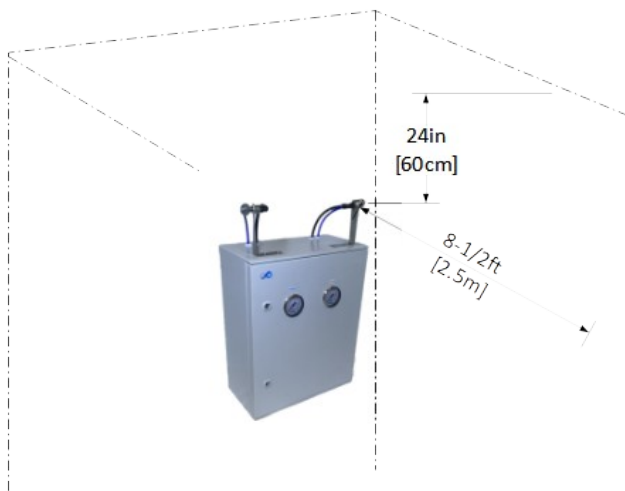
Typical installation



Typical installation steps :

1. Positioning & mounting of ACA in space humidifier
2. Water supply installation
3. Compressed air installation
4. ACA controller installation
5. RH% control installation

Clearances



minimum clearances

Front	Left	Right
8-1/2ft	0in	0in

Top (ceiling)	Bottom (Floor)
24in	0in

Water supply & drain

Inlet pressure		Water temperature		Water connection
Min: 40PSI [280kPa]	Max: 60PSI [600kPa]	Min:37°F [3°C]	Max:68°F [20°C]	Supplied with S/S braided hose with 3/8 female comp
Water conductivity	Water supply TDS	Water PH	Chloride content	
0.1 to 156µS/cm	0.02 to 100ppm	6.5 to 7.5	0 to 50ppm max	

ACA does not require drain connection

It is a good practice to install a 3 way valve on water supply line to be able to purge water supply line to avoid stagnant water in lines.

Compressed air

Compressed air supply pressure: 87 to 120PSI [6 to 8.2bar]

ACA distribution panel is equipped with one to three compressed air inlet(s) depending on total qty of nozzle.

Each compressed air inlet is a quick coupling M type 1/2 connection.

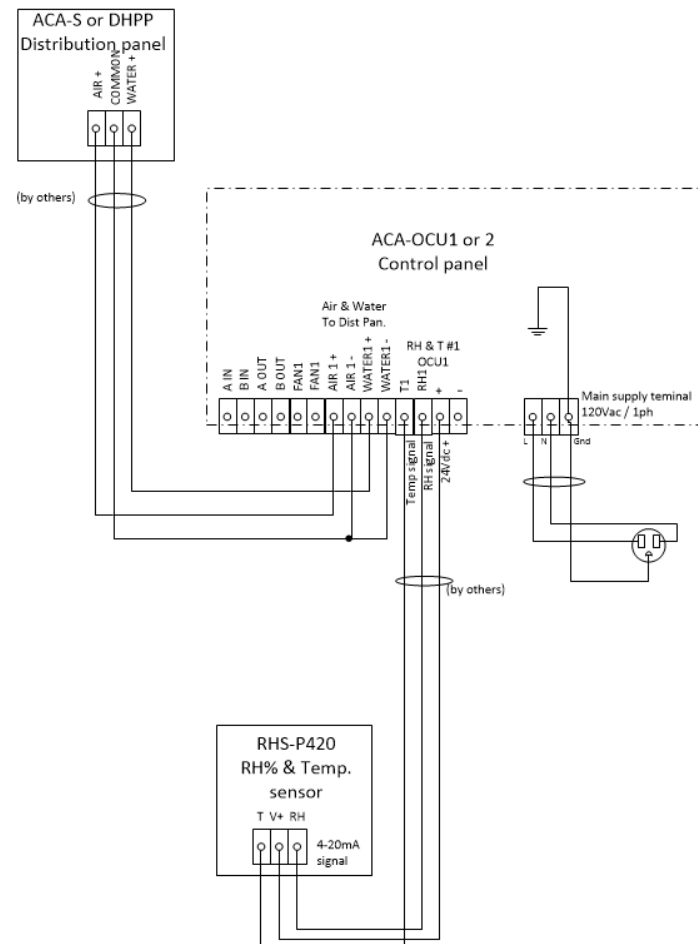
Compressed air supply line should be sized according to total cfm of ACA atomizing humidifier, operating pressure, air velocity (should not exceed 30ft/min) and distance between air compressor and ACA atomizing humidifier.

Air supply should be clean, dry and free from oil.

In case dirt or oil is contained in air supply, an air filter and oil separator should be installed. Any oil collector should be connected to an oil drain.

To prevent bacterial growth, compressed air piping should be non-corrosive and any jointing material should be inorganic.

Control connections



Admissible control signals

Proportional RH% sensor, RH% (or temp.): 4-20mA

Optional Modbus or BACnet signal :

Modbus RTU or BACnet MS/TP through RS485 terminal