

# COMPRESSED AIR & WATER ATOMIZING HUMIDIFIER







ACA dry fog atomizer are supplied with water and compressed air. Atomizer's **patented** acceleration chamber creates an airflow pattern reaching supersonic speeds. The airflow sucks in water from a venturi column. The impact between the supersonic flow of air and the water generates shock waves, which produce the micro-droplets. The "solid con" jet of micro droplets forms a uniform "dry fog" which evaporates quickly into the air.

This atomizer producing a **very fine mist** (2 to  $4\mu m$ ) is the ideal humidification solution for **cold storage** as droplets are not freezing up even at very low temperature such as  $0^{\circ}$ C.

ACA atomizer is robust and can accept untreated water up to 100ppm TDS or RO treated water.

- Dry fog producing 2 to 4µm water droplets.
- Low energy consumption.
- Capacity from 6 to 472kg/h.
- Low compressed air pressure required (600kPa).
- Original patented venturi atomizer.
- Atomizer with non clogging large orifice & maintenance free.
- Accepts untreated water.
- Operate at very low temperature .
- High accuracy +/-1%RH. & high humidity: up to 96%RH.
- Electronic Controller handling 1 or 2 zones or more.

#### **DIRECT IN SPACE ATOMIZING**

In direct in-room configuration the ACA humidifiers consists of the following components:

- Atomizing box with 2 or 4 atomizers easy to install on the wall,
- Electronic controller,
- RH% & temperature sensors,

Direct in-room atomizing is ideal for printing woodworking shop of for cold storage.

#### IN DUCT ATOMIZING

For In-duct configuration the **ACA** atomizer will be pre-installed on ramps at the factory.

- Atomizing ramps, grid and support are made up to the dimension of the duct,
- Droplet separator will be provided.
- A wet duct section should be provided (by others)

In duct atomizing is used for data center, server room .

#### **INNOVATION**

ACA Atomizer's patented venturi design makes it the most robust atomizer on the market, with no moving part or internal spring and a large orifice allowing for:

- · No clogging
- · Maintenance free
- Use of untreated water ( up to 100ppm TDS ).



Most robust and durable atomizer of the industry.



### Best warranty of the industry!

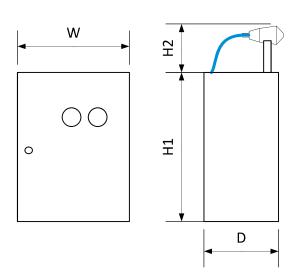
If your humidifier installation has been verified and validated (with a start-up report) by one of our

authorized representatives.

# **TECHNICAL DATA**

Model	ACA-S2	ACA-S4	ACA-S6	ACA-Dx
Capacity (kg/h)	12.0	24.0	36.0	6.0 to 472.0
Air pressure	600 to 800	600 to 800	600 to 800	600 to 800
Air consumption (l/min)	120 @ 600kPa	240 @ 600kPa	360 @ 600kPa	120 @ 600kPa per atomizer
Water pressure (kPa)	275 to 415	275 to 415	275 to 415	275 to 415
Total Dissolved Solids (ppm)	100ppm max	100ppm max	100ppm max	100ppm max
Voltage (Vac)	100 to 250Vac	100 to 250Vac	100 to 250Vac	100 to 250Vac
Power (W)	15	15	15	15 to 200

# **TECHNICAL DRAWINGS**



Model	Dimensions (cm)				Net Weight
	W	H1	H2	D	Net Weight
ACA-S2	40.0	50.0	10.0	20.0	11kg
ACA-S4	40.0	50.0	10.0	20.0	12kg
ACA-S6	40.0	50.0	10.0	20.0	13kg

# Nomenclature

Model	Designation
ACA-S2	ACA in space 2 nozzles
ACA-S4	ACA in space 4 nozzles
ACA-S6	ACA in space 6 nozzles
ACA-Dx	ACA Duct distribution (1 to 80 nozzles)
ACA-NOZZ6	Nozzle only
ACA-OCUx	Control panel (X = 1 or 2 zones)

### **COMPONENTS SUPPLIED**

- Electronic controller for 1 or 2 zones control
- RH% & Temperature sensor.
- Power supply (100 to 250Vac, 1ph, 50/60Hz)
- 2 stages water filters 1µm
  & anti-bacterial silver ions cartridge
- Water & air hoses

### LIST OF OPTIONS

- Modbus remote communication
- BACnet remote control.
- · Stainless steel enclosure