

CONDAIR CP3

Electrode boiler steam humidifier Reliable and economic steam humidification





Electrode plugs

Easy to remove

Steam cylinder

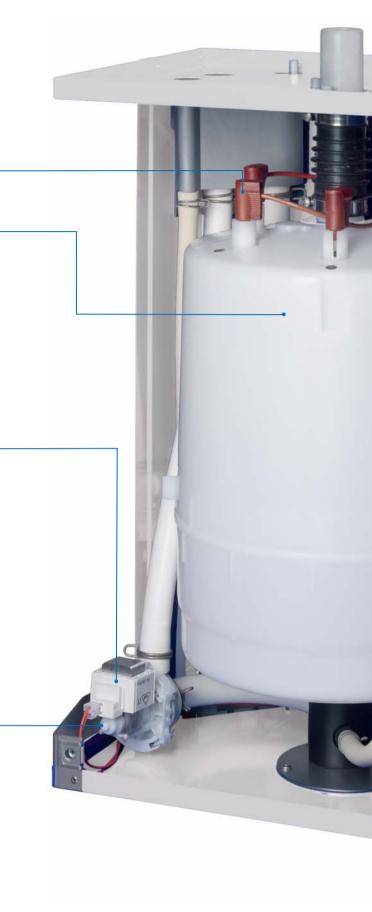
Cleanable or disposable options with zinc coated steel elements for long life and reliable operation. Condair CP3 steam cylinders can last up to three times longer than other electrode boilers due to the humidifier's advanced scale management features.

Conductivity monitoring

Mineral levels in the water are proactively monitored by current sensors and precise drains are performed to maintain an optimum water mineral level. This reduces scale build-up in the steam cylinder, prolongs the cylinders operational lifetime, minimises necessary maintenance and reduces spares costs.

Pumped drain

Increases the amount of scale removed from the system to prolong cylinder life and reduce maintenance.



Electrode boiler steam humidifier

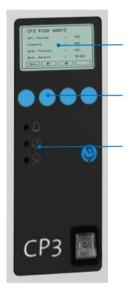


Casing

Powder coated steel as standard with stainless steel option.

BMS connection

Optional *e-E*MKS card for remote BMS operation.



Large, clear LCD display

Easy to operate keypad

LED operational indicators

Hinged control panel

For easy access to electronics.

The Condair CP3 electrode boiler steam humidifier is an economic yet dependable solution for steam humidification.

It is easy to install, simple to use and provides accurate and responsive humidity control. Innovative features, such as water conductivity monitoring and staged electrode use, maximise the lifetime of the steam cylinder and

extend the operational periods between service requirements. When servicing is needed, the Condair CP3's design makes it easy to drain, remove and replace the disposable steam cylinder, keeping downtime to a minimum.



The Condair CP3 automatically calculates the conductivity of the water in the boiling cylinder to provide accurate humidity control.

Intelligent water quality and level control

Water conductivity management

An electrode boiler humidifier operates by passing electrical current through water to heat it. As the water evaporates, its mineral content becomes more concentrated. This increased level of conductivity affects the level of steam production.

To maintain an accurate output, the concentration of minerals in the water is automatically reduced through drainage and replacement with fresh water.

Steel electrodes with "lattice" design

The robust zinc coated steel elements provide a long operational life. Their special lattice structure offers the greatest possible surface area for optimal transfer of current to the water.

Staged electrode use to prolong life

Only the lower sections of the electrodes are initially submerged and used to create steam. During operation the parts of the electrodes submerged in the water become encrusted with

scale. As their conductivity reduces the water level is automatically raised to submerge fresh unused electrodes.

This staged approach to water level control inside the cylinder prolongs the life of the electrodes and helps maintain their effectiveness in providing accurate humidity control.





Cleanable or disposable steam cylinders

The steam cylinders are at the heart of Condair CP3 system. During the evaporation process minerals will accumulate in the steam cylinder that after, prolonged use, will need to be removed.

Depending on your level of desired maintenance, the Condair CP3 offers two options:



Cleanable steam cylinders that can be emptied of scale and reused many times



Disposable steam cylinders to reduce maintenance time and keep the system operating



Easy-to-use with optional connection to BMS

Control panel

Operating the Condair CP3 is child's play. The multiple line LCD display indicates all operating parameters, service requirements and fault diagnostics. Control input is via the integrated keypad. The user-friendly software reliably guides you through the menu, even if you infrequently use the unit.

A CP3 card stores all commissioning settings and allows for easy recommissioning as well as commissioning of several units to the same configuration.

BMS connectivity

The humidifier has an option to be operated from a BMS and accepts Modbus Standard, BACnet or LonWorks protocols.





Steam distribution is the key to success

Steam distribution must be tailored to the requirements of each project. Whether high or low steam outputs, close humidity control or short duct sections, for every application there is an ideal solution.



Condair steam distribution lances for normal humidification requirements



Condair OptiSorp steam distribution system for short evaporation distance



Condair fan unit for direct room steam humidification

Standard version

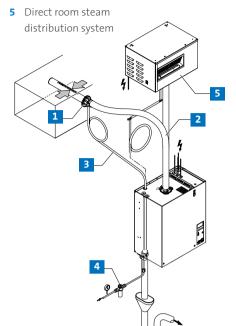
- Disposable steam cylinder
- Internal PI humidity controller
- Control panel with touch pad keyboard and 5-line LCD display
- Self-diagnostic system
- Hours run timer

Options

- All-weather protective housing
- Steam distribution system Condair OptiSorp
- Pressure equalization to 10,000 Pa
- e-ENKS. (BACnet / LonWorks) for BMS connection
- Humidity sensors and humidistats

Accesssories

- 1 Steam distribution
- 2 Steam hose
- 3 Condensate hose
- 4 Water filter isolation valve



Specifications







Condair CP3		5	8	15	20	30	45	52	60	70	80	90
Heating voltage		Maximum steam output in kg/h										
400Vac / 3Ph / 5060 Hz	kg/h	5	8	15	20	30	45	52	60	70	80	90
230Vac / 3Ph / 5060 Hz	kg/h	5	8									
Dimensions (WxHxD)	mm	1x 456x620x280			1x 559x667x350			2x 559x667x350				
Control voltage		230Vac/ 1 Ph / 5060 Hz										
Operating weight (per unit)	kg	1x 26			1x 65		2x 65					
Conformity		CE, GOST, VDE										