

## Cumulus CombiCompact

### Description of the device

The CombiCompact is a high pressure unit with an integrated reverse osmosis unit. The unit has been designed specifically for high pressure humidification. Therefore it has been designed conforming the VDI 6022 and ISSO 55.3. The CombiCompact can work stand alone and it regulates the high pressure unit and the osmosis unit. The installation can be connected to a building management system also, from which the data is sent to a computer where you can adjust and read the functioning of the machine. This unit can be used for humidification directly in the air as well as in air handling units.



### Specifications

	CombiCompact HD60 RO140	CombiCompact HD120 RO140	CombiCompact HD220 RO280	CombiCompact HD280 RO280	CombiCompact HD380 RO280
Max. capacity high pressure pump [l/h]	60	120	220	280	380
Max. capacity reverse osmosis unit [l/h]	140	140	280	280	280
Size in [mm] [height x length x width]	750 / 850 / 350				
Weight [kg]	65	70	75	80	85
Conductivity water [ $\mu$ S/cm]	5-20				
Operating pressure [Bar]	70-100				
Power consumption [kW]	0.8	1.0	1.5	1.8	2.2
Control signal [V - mA]	0-10 - 4-20				
Connectible to AHU	Yes				
Stand alone operation	Yes				
WaterFresh® safety	Yes				
Auto restart by power failure	Yes				
External warning signal	Optional				
Maintenance warning	Yes				
Monitoring at distance	Optional				
Water pressure safety	Yes				
Overload protection	Yes				
Pipe rupture protection	Optional				
Recommended water [dH]	0 - 4				
Water free of solid particles	Yes				
Required dynamic inlet water pressure [ Bar]	1.5				
Temperature min. / max. °C	1 - 40				
Power connection [V]	400				

All specifications, photos and drawings are subject to changes.

## Humidifiers which are connectable to CombiCompact.

Humidifiers	Control units
Flex humidifiers	JetControl
UFO HD 6 Saturnus	JetControl
UFO HD 6 Axial	JetControl
UFO Apollo (4-8 nozzles)	JetControl
Lances for air handling units	LanceControl

## Declaration of Legionella Conformity

Cumulus® provides a certificate for the Declaration of Legionella Conformity safety for its own installations. In this document Cumulus® declares that the delivered installations and products are produced and installed in line with the latest insights on Legionella prevention.

### Cumulus® according to VDI 6022 hygiene standard

Cumulus® is manufacturer / supplier of various cold water humidification systems and associated water treatment plants. These systems are specifically designed and manufactured for the Dutch market and fully comply with the Dutch regulations regarding the Health & Safety rules and Legionella prevention. Cumulus® systems further comply to the demanding German VDI 6022 hygiene standard. The systems are therefore certified by TÜV Nord.



## ISSO 55.3 Publication

To prevent contamination with Legionella bacteria, the Dutch Institute for the Installation sector (ISSO), has established technical guidelines for cooling towers, humidifiers and other systems that can bring water as aerosols into the air.

The ISSO 55.3 publication provides specific information for design, installation and management of water treatment for adiabatic humidification. In this publication you will find several tables that will make the selection for the choice of a humidification system easier.

Adiabatic humidification systems should be checked periodically on bacteria growth. We would like to draw your attention specifically on Table 5.03, where the frequency of sampling is mentioned.

Because of our special design (osmosis water, periodic flushing, optimised control) only one water analysis per year is sufficient.



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