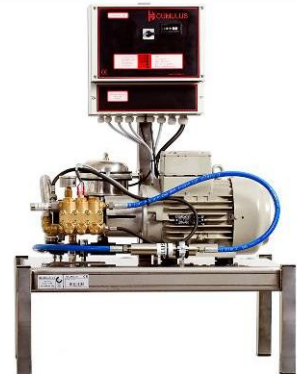


### Description of the device

The High Pressure Booster Min is a high pressure humidification unit without reverse osmosis unit. The unit has its own control unit, therefore it can operate stand alone. If required, the unit can also be connected to a Building Management System to control it.

The entire system has been designed to meet the highest hygiene norms like the VDI 6022 and has been approved as such by the German TÜV Nord. The unique WaterFresh® safety has been integrated as well. Of course all the safety precautions like an overload protection are included. It is possible to connect two booster units together (the so called dual booster) to increase the capacity.



### Specifications

	120	220	280	380
Part number	11563	11564	11565	11566
Max. capacity HP pump [l/h]	120	220	280	380
Size [in mm] (height x length x width)	950 / 690 / 500			
Weight [kg]	65	70	75	80
Conductivity water [ $\mu$ S/cm]	5-20			
Operating pressure [Bar]	70-100			
Power connection [Vac]	400			
Power consumption [kW]	0.7	1.3	1.6	1.7
Control signal [V / mA]	0-10 / 4-20			
Connectable to AHU	Yes			
Stand alone operation	Yes			
Maximum amount of zones [pc]	12			
WaterFresh® safety	Yes			
Auto restart at 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			
Inlet dynamic water pressure [Bar]	1.5			
Temperature min. / max. [°C]	1-40			
Cascade control for multiple units	Optional			

All specifications, photos and drawings are subject to changes.

### Specifications

	480	680	780	930
Part number	11567	11914	11915	11916
Max. capacity HP pump [l/h]	480	680	780	930
Size [in mm] (height x length x width)	950 / 690 / 500			
Weight [kg]	85	90	95	100
Conductivity water [µS/cm]	5-20			
Operating pressure [Bar]	70-100			
Power connection [Vac]	400			
Power consumption [kW]	1.8	2.2	4	5.5
Control signal [V / mA]	0-10 / 4-20			
Connectable to AHU	Yes			
Stand alone operation	Yes			
Maximum amount of zones	12			
WaterFresh <sup>®</sup> safety	Yes			
Auto restart at 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			
Inlet dynamic water pressure [Bar]	1.5			
Temperature min. / max. [°C]	1-40			
Cascade control for multiple units	Optional			

### Remark:

The high pressure pump of the unit can be filled with regular oil as well as food grade oil.

All specifications, photos and drawings are subject to changes.

### Cumulus humidifiers and control units which can be connected

Humidifiers	Control units
Flex	JetControl
UFO HP Saturnus Radial	JetControl
UFO HP Saturnus Axial	JetControl
UFO Apollo (4-6-8 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.

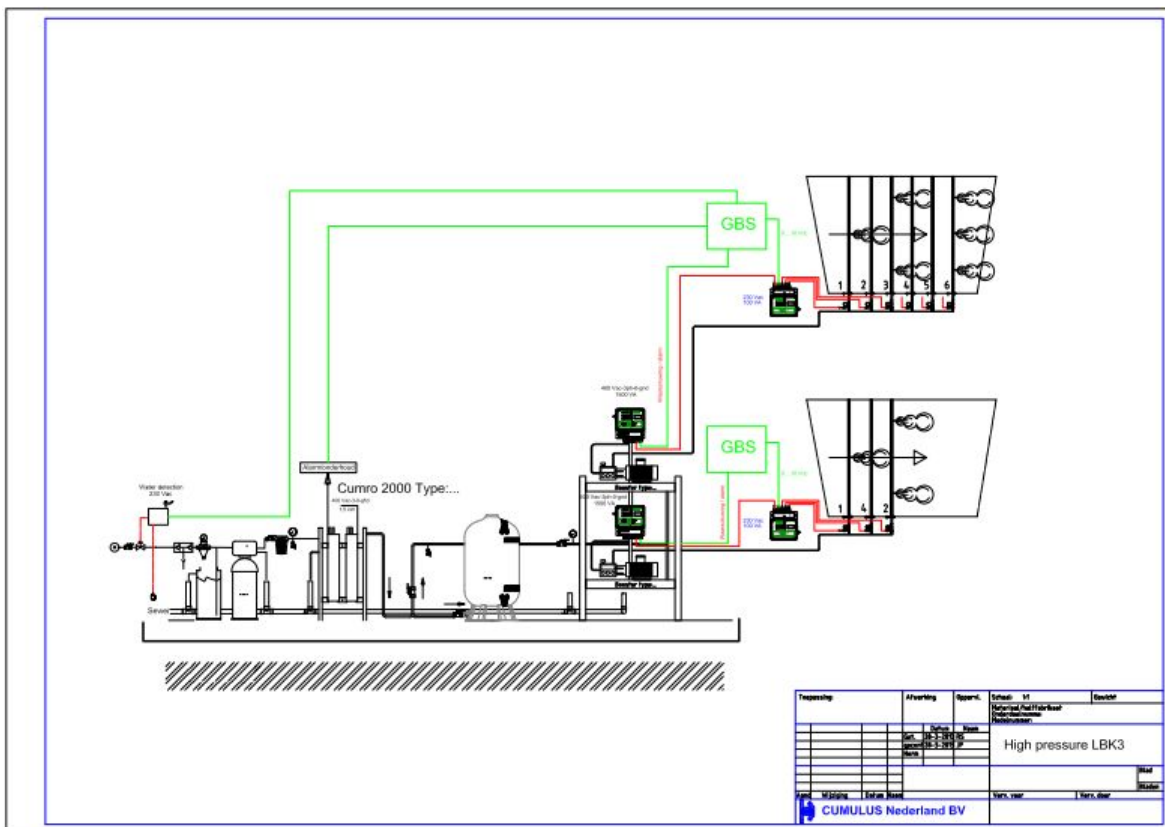
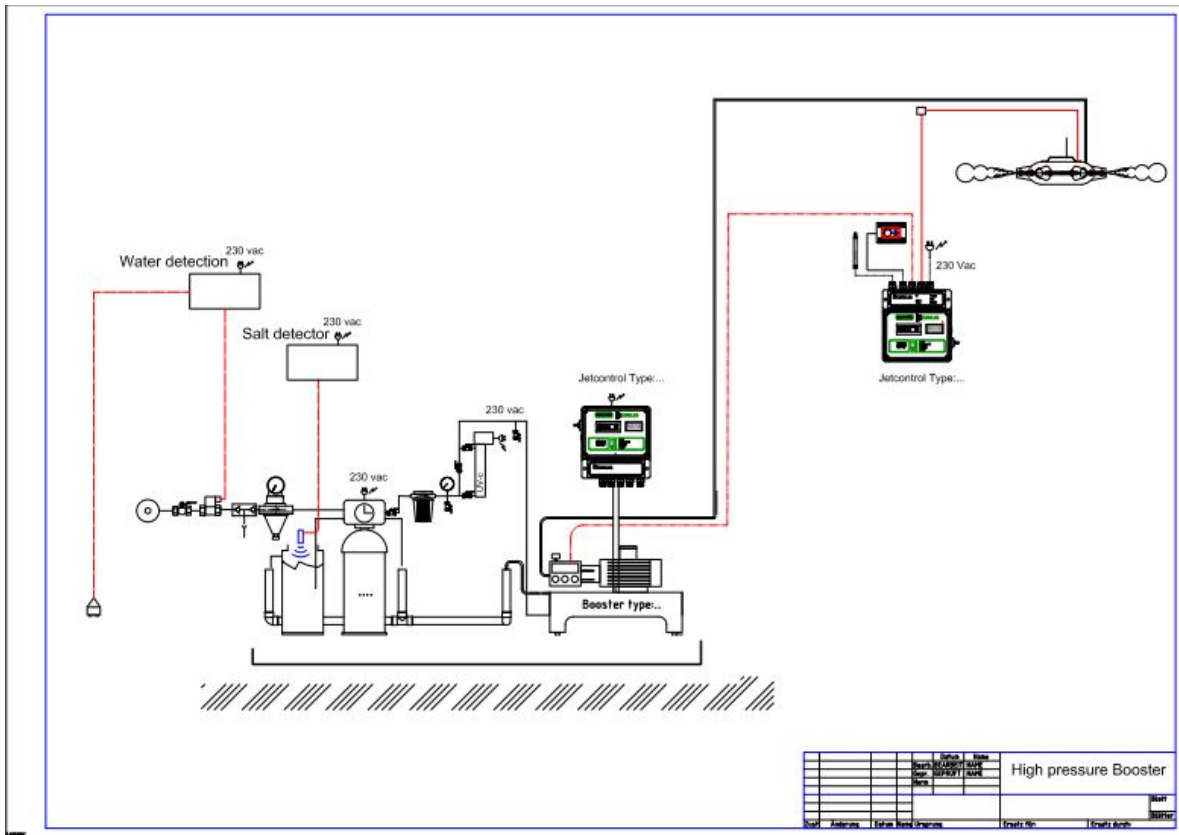
Adiabatic humidification systems should be checked periodically on bacteria growth. We would like to draw your attention specifically on Table 5.03, where the frequency of sampling is mentioned.

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



All specifications, photos and drawings are subject to changes.

## Process diagrams



All specifications, photos and drawings are subject to changes.