# WILAmed Equipment for Professionals



## **Active humidification redefined**

The humidifier AIRcon combines modern technology and innovative design in a high performance unit. Mechanically ventilated patients are provided with optimally conditioned respiratory gas. The humidifier AIRcon fulfills medical requirements as well as economic market expectations.

With the humidifier AIRcon, a new overall concept for all patient groups and many respiratory therapies is available. Due to its innovative functions and the optimized accessories, the humidifier AIRcon is perfectly adapted for clinical and extra-clinical use.



P/N	Description
100.900	Humidifier AIRcon, 230V
100.910	temperature probe
100.929	heating wire adapter (i+e)*
100.930	country-specific power cord

Our breathing tube systems (single and double limb) are applicable to neonates, children and adults. We offer configuration for clinical and extra-clinical use for all common ventilators.

\* i = inspiratory, e = expiratory

#### **Accessories and Mounting**

P/N	Description
100.942	heating wire adapter (i)*
500.300	autofill humidifier chamber C200AF AIRcon
550.226	bracket (diameter 25 mm) for standard rail (30 mm x 10 mm)
550.301	pole clamp bracket for columns (25 mm x 45 mm)
550.220	mounting kit for standard rail
550.227	ventilator cart



## **Everything from one source**

AlRcon provides a complete respiratory humidification system in combination with its specially designed humidifier chambers and breathing tube systems. It is suitable for mechanically ventilated patients requiring individual therapy with high performance and safety.



- and extra-clinical use ○ less maintenance,
- no hidden costs
- manufacturing "Made in Germany"

ready for immediate use
 extended accessory range



#### **Technical information**

- Dimensions: H 170 mm x W 145 mm x D 200 mm
- Weight: approx. 2.8 kg without chamber
- Classification: Device (protection class according to IEC 60601)
- Class II
- Type BF applied parts
   Degree of protection by be
- Degree of protection by housing IP22

#### **Electrical data**

- Operating voltage: 220 V~ 240 V~
- Line frequency: 50 Hz / 60 Hz
- Power consumption: 290 VA max
- Heater plate: 170 W
- Respiratory tube: heater wires of inspiratory and expiratory tubes each 22 V~, 30 W

#### **Operation data**

- Heating time less than 30 min, typically 10–15 min
- Recommended flowrate 1 to 80 L/min
- Moisture content > 33 mg/L in the range of 1 to 80 L/min at chamber temperature > 33°C
- Maximum operating pressure 200 mbar, unless the instruction for use of the humidifier chamber being used specify lower maximum pressures <sup>(1)</sup>
- Gas leakage of humidifier system at maximum
- operating pressure smaller than 1 mL/minute (1)
- Pressure drop across the humidifier system is typically smaller than 0.3 mbar per m of respiratory tube (22 mm tubing system, humidifier chamber with atomizer) <sup>(1)</sup>
- Internal compliance of humidifier system is typically lower than 5 ml.kPa 1 per m of respiratory tube <sup>(1)</sup>
- Continuous noise is lower than 50 dBa (1m)
- Maximum water volume of 500 mL available for vaporization <sup>(2)</sup>

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- The humidifier efficiency decreases when the ventilation device is delivering respiratory gas at higher tempera-ture! The temperature of the respiratory gas in the humidifier chamber should be at least 5 °C cooler than the water temperature set in the chamber.
- Operation:
  - Temperature: from +18 °C to +35 °C (30 °C for NIV operation)
     Air pressure: from 70 kPa to 110 kPa
  - Relative humidity: between 15 % and 95 %, noncondensing **Transport/storage:**
  - Temperature: from -5 °C to +60 °C
  - Pressure: from 50 kPa to 120 kPa
  - Relative humidity: between 15 % and 95 %, noncondensing

#### Temperature settings (Modes)

- IV (invasive operation) chamber 37 °C, close to patient 39 °C
- NIV (noninvasive operation) chamber 31 °C, close to patient 34 °C
   FREE (freely selectable temperatures by the user)
- chamber: 30°C 42,5 °C; close to patient: 28 °C 40,5 °C
   Expiratory side heat output can be increased (5 increments) in all
- Expiratory side heat output can be increased (5 increments) in all modes

#### Measurement Range

- data shown on TFT display
- Tolerance for temperature measurement +/- 2 °C
- 8 °C to 50 °C (near-patient)
- 5 °C to 80 °C (at chamber)
- (1) depending on humidifier chamber and tubing system being used
  (2) depending on humidifier chamber being used; 180 ml for self-filling humidifier chamber AIRcon C200AF