



## humiSteam

UE\*

humiSteam is suitable for civil environments, offices, hospitals, industrial facilities, and steam baths. humiSteam is suitable for both installation in the room, using the steam blower, and for installation in the air duct, using the new range of linear steam distributors. humiSteam works on mains water with a conductivity between 75 and 1250  $\mu\text{s}/\text{cm}$ , and its control software automatically adjusts operation according to the characteristics of the water, so as to optimise operating life without maintenance.

The new range of humiSteam humidifiers is divided into two lines that mainly differ due to the type of control:

- humiSteam Xplus (X), suitable for all types of applications that require independent control with humidity probe, range from 1.5 to 130 kg/h;
  - humiSteam basic (Y), ideal for applications in which the humidity is controlled by an external device, such as a BMS or a humidistat, with a range from 1.5 to 65 kg/h.
- The new range is completed by the "Wellness" model for steam baths, which features the same control electronics as the new Xplus (X) model.

CAREL decided to upgrade this important product for a number of reasons:

- **ease of use:** the familiarity with the operation of consumer electronics has made us all more demanding performance as regards the user interface. Both new models of humiSteam feature a large LCD

with graphic symbols and up to 8 rows of text in the Xplus (X), with more complex functions, and complete and clear graphics on the Basic model, simple and intuitive yet highly attractive. The position of the user terminal can be adjusted and is now more ergonomic;

- **reliability:** for the new humiSteam CAREL has developed power connections that mean no tools are required when changing the cylinder: no more overheating due to less accurate maintenance. In addition, all models, are fitted with a drain pump to ensure more reliable operation, independently of the characteristics of the water;
- **performance:** years of experience and feedback have allowed the control software to be refined. The new algorithm makes the humidifier much faster to start and respond to variations in humidity demand, thus extending the range of possible applications. All while maintaining the same hygiene and safety features (for example, the antifoam system) and indeed adding specific functions for operation on "problematical" water;
- **completeness of the range and the functions:** both new models, humiSteam Xplus (X) and humiSteam basic (Y), offer the Modbus® RS485 connection as standard, while the Xplus high-end controller (deriving from the CAREL pCO family programmable controllers) includes a series of optional communication protocols and several advanced functions, such the

possibility to program operation and set points according to daily and weekly time bands, the event history (recording events and alarms with the date and time) and the possibility of remote diagnostics via a GSM connection. Furthermore, a new 18 kg/h model is also available.

### Advantages

- AFS system (Anti Foaming System): detects foam to prevent the release of droplets together with the steam;
- large cylinders with galvanised electrodes and anti-scale filter on the bottom, for longer maintenance-free operation. Openable and fireproof cylinders are also available;
- steam production with continuous modulation from 20% to the max. flow-rate (from 10% for the models with two cylinders);
- built-in conductivity sensor and control software to optimise energy efficiency and operating life, with constant performance over the life of the cylinder;
- choice between controllers: "basic" (Y) (proportional or ON/OFF from external controller); "Xplus" (X) (modulating with built-in controller based on pCO technology); "W" (similar to the "Xplus" (X) controller, however designed for steam baths);
- model "Xplus" (X) manages a second "limit" probe to reduce production and prevent any condensate forming in the air duct.