

Integrated solutions for small and medium hydronic systems

Technology & Evolution

# Integrated solutions for small and medium hydronic systems

µe-dronic is the typical solution for small-medium installations (residential, light commercial, offices) where the chiller/HP units can be controlled by a parametric  $\mu C^2$  SE controller.

μAΜ

Up to 10 master fan coils (each with max 5 slaves) can be connected together via an RS485 network, managed by a user-friendly area manager.

Using the new µArea controller located in the room, fitted with built-in temperature and humidity probe, µAM synergically coordinates the hydronic system as follows: by setting a common reference set point, operating time bands, and monitoring the system alarms, µAM ensures synchronised management of the fan coil and implements energy-saving strategies according to the load measured and the room temperature and humidity

µC<sup>2</sup>SE RS485 tLAN chiller uC<sup>2</sup>





Main Board

I/O board for controlling the fan speed and the local zone network. Fitted for connection to a valve board, serial board and IR receiver.

#### Valve Board

Board that manages the hot and cold water valves, as well as other functions, such as enabling the boilers, chillers and heat pumps.

IR remote control fitted with LCD and 13 buttons for local programming.



#### **R** receiver

Receiver board for the IR remote control.

RS485 board

Microprocessor RS485 serial board for CAREL or Modbus® network.

COP improvement due to higher evaporating pressure

or zone



#### COP improvement due to lower condensing pressure





### µAM: µArea Manager

The new µAM controller coordinates small-medium hydronic systems by communication between the µC<sup>2</sup>SE controller on the unit and the e-droFAN controllers of the fan coils. Using a common reference set point and time bands, µAM monitors the climatic conditions in the individual zones and optimises the operation of the chiller/HP and/or boiler, with advantages in terms of comfort and energy costs.



#### µC<sup>2</sup>SE: The evolution

The innovative  $\mu C^2SE$  controllers manages the water temperature in chillers and HPs for heating, cooling and dehumidification, and activates alternative sources of heating (e.g. boilers) depending on the real conditions in the individual rooms, in both 2-pipe and 4-pipe systems.

LCD user interface with icons and 8 buttons for local or zone control.

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