

INTERFACE UNIT 252 × 178 × 76 mm

SENSOR

# It's in the air ...

# ... quality does indeed make a difference!



References
Waterworks
Dry air storage
Crawl spaces
etc.

# DCC

# DEHUMIDIFIER CONTROL CENTER

#### Description

The DCC controller is developed as a multi function, microprocessor based controller for our CR & CRP/CRT range of dehumidifiers. The controller consists of 3 main components: An Interface Unit, a Control Panel with display and a sensor. Up to 3 sensors can be connected, also wireless sensors. The sensors can be used as room sensors or for duct mounting.

## The concept

Using the DCC controller, you have an excellent tool for controlling the dehumidifier and the dehumidification process. All dehumidifier data can be displayed on the Control Panel, and due to the easy menu structure in the Control Panel you can easily interact with the dehumidifier.

The design and the concept of this external monitoring and control system is unique, and combined with a Cotes dehumidifier, it ensures a highly reliable dehumidification process.

#### The interface unit

The interface unit contains an electronic circuit board with a micro processor and all terminals for electric connections for the dehumidifier, sensor(s) and the Control Panel.

DC-output signals 0-10 V and 4-20mA and three relay outputs are available. The relay outputs are used for controlling a dehumidifier, a humidifier and external alarm. The interface unit will normally be placed close to, or on the dehumidifier.

## The control panel

The control panel is supplied with a LCD display with 2 lines and 16 characters per line, and 4 keys for easy scrolling through menus and programming of setpoints.

The display shows temperatures, operation status and alarms from the dehumidifier and temperature, %RH and dew point from the sensor.

On the control panel, set points for dew point and %RH for dehumidifier and for alarm is programmed. The control panel is connected to the interface unit via an RS485 connection, and can be placed up to 500 meters away.

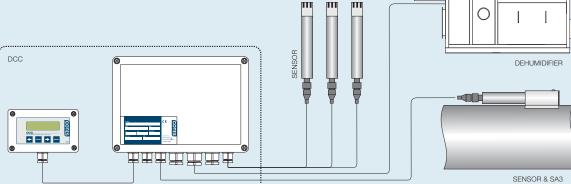
#### The Sensor

The sensor measures temperature and %RH. It is based on the CMOS technology and performs high stability and accuracy. The dew point control is based on the measured temperature and %RH.

- 3 × NTC inputs. NTC temperature sensors can be placed on different places in the dehumidifier for dehumidifier operation information (option).
- 1 x 4-20mA. for evtl. control of dehumidifier from external control system.
- 1 x 0-10 V. for evtl. control of dehumidifier from external control system.
- 3 × sensor input. For connection of up to 3 × sensor
- 1 × RH receiver (option). For signal from wireless sensors.
- 5 × digital inputs. For digital alarms from dehumidifier, ie. thermostats, overload relays, and optional filter guard or rotor guard.
- 230 V AC input (L1, N, PE). Power supply for DCC.

## Outputs

- $2 \times 0$ -10 V output. for modulating capacity control.
- 2 × 4-20mA output. for modulating capacity control.
- Terminals/plug for the remote panel
- 3 × relay outputs. For dehumidifier and external alarm, evtl. external start/stop of dehumidifier
- RS232 & RS485 outputs.



#### Further features

- Real Time clock and Lithium battery backup
- EEprom for data & logging. From the display the following information can be displayed:
- Settings for %RH
- Dew point set point and corresponding alarms
- Temperature
- %RH
- Dew point measured at the sensor(s)
- Thermostats
- Overload relays
- Operation status (dehumidifier on or off)
- Max & min values for conditions at the sensor(s)
- Filter guard(s)
- Rotor guard.
- Temperatures at the optional installed NTC sensors in the dehumidifier.



Dry Air Makers



Distributor