

Dr.Celsius

CLIMATE - COMPUTER



- Simple, Smooth Access to All Functions - Easy Use
- Controls Temperature with Great Accuracy Due to Unique Pid Controlling-technique
- Maximum Airflow and the Inlet/outlet Opening May Be Controlled by Outdoor Temperature
- Useful Alarm Settings. Minor Alarm Events May Be Softened. Unwanted Alarms Caused by High Outside Temperature May Be Avoided
- Built-in Data Logger, Data May Be Transferred to a PC
- Communication Port for Remote Control by a PC, Optionally Through Telephone

Easy to Operate

- * A combination of two selector control knobs makes easy access to all functions
- * Day one set values can be stored and recalled in a simple operation.
- * Data concerning how you want the controller to act - the total scenario - can be stored and recalled in one operation.

Unique controlling technique

The controller master that difficult task it is to control both temperature and humidity without the one corrupting the other.

This unique PID-controlling technique has been developed, due to creativity, tests and many years of field operation. The temperature and humidity are nursed with an intelligent mixture of heating, fresh air and - if you want - humidification.

Long range of controlling facilities

- * Set values for temperature and humidity can be changed automatically - smoothly through a period.
- * The inlet/outlet opening ratio may be depending on outdoor temperature. The cooler the more upwards and time to mix properly.
- * The maximum airflow may be limited - little by little - as outdoor air gets cooler.
- * On/off output controlled by ventilation rate and/or humidity (eg controlling heat exchanger unit).
- * A timer may be set to switch at a certain rate and duration. Can be made dependent of the outdoor temperature (eg controlling water spraying devices).
- * Control-signal for central heating and electric heating. Can control 2 heat-sources in sequence.
- * The humidity can also be controlled without the presence of a heat source, by means of lowering the temperature - how much lower is set by user.

Alarms with priority

Soft alarms may be set for high and low humidity and low temperature, making only beeps from the unit. The alarm relay will then be activated only in case of high temperature and sensor/ controller malfunction.

Reliable

- * The humidity is measured by means of a wet and dry temperature sensor, which are calibrated once and for all.
- * All inputs and outputs are protected against transients and electromagnetic interference according to the EMC Directive.

In Case of Power Failure

Time/date and all data stored in memory are backed up by on-board battery.

- * Easy setup for back-up during power failure. Works on 12 VDC.

Data logging

Dr.Pascal stores all measurements, alarms and any altering of values. The last 4-10 days are always retrievable. It has a facility for browsing the data via the display. There is also an easy way to make a search on high and low values. (Eg when did the last alarm event occur?)

Communication

Useful possibilities through communication on a network:

- * One unit may be set-up to measure outdoor temperature and then broadcast the value to the others.

Using a PC:

- * Transfer the logged data, convert these to graphics. Any irregularities will be clearly displayed.
- * Great survey over a number of units, with the possibility of making all necessary operations by remote control.

An optional SPEECH-PROCESSOR expands the possibilities:

- * Automatic alarm calls informs in clear speech.
- * From a telephone you can perform remote control. All operations are confirmed in clear speech

