



It's in the air ...

... quality does indeed make a difference!



References Waterworks Dry air storage Crawl spaces

DA20

ELECTRONIC MOISTURE CONTROLLER

Features

- Supply voltage 230 V AC/50Hz
- 2 × 0-10 V output to indenpendently control humidifier/dehumidifier
- 0 10 V input from transmitter 0-100 %RH
- 2 × relay 16A/230 V
- Buzzer for signal / alarm
- Real Time Clock with Li battery backup
- · Logs max. and min. values reached
- Operating temperature range -5°°
- P54 rated and CE approved
- Nine button keypad and 4 digit LED display
- 2 signal LED's
- 2 × PG13 and 3 × PG9 connections
- EMC 89/336/EEC LVD 73/23/EEC
- EN 50081-1. EN 50082-2

Description

The DA20 is a sturdy and accurate hygrostat for measuring %RH, temperature and dew point and controlling a dehumidifier or a humidifier. The DA20 controls the dehumidifier by measuring the moisture in the air around the transmitter and comparing the measured %RH and/or calculated dewpoint with a user defined setpoint. The DA20 is easily programmable via the user friendly keypad.

The DA20 has a relay output for start and stop of a dehumidifier. The DA20 is also used in conjunction with external control equipment using a analog 0-10V signal which corresponds to the actual measured %RH (0-10 V = 0-100 %RH)

The DA20 has furthermore a PI regulator with setpoint and programmable proportionalband and integraltime. The DA20 controls the dehumidification processes above a user defined setpoint. The status of current operation is indicated by two green LED's.

The DA20 stores all settings up to 10 years, and monitors and counts powerfailures and can due to it's IP54 rated box be used in most enviroments.

The minimum and maximum %RH optained is stored internally and can be shown anytime by pressing either the "MIN" or the "MAX" button. The value can be reset by pressing the "MIN" or the "MAX" button for 5 seconds.



Programming

Key	Function	Display	Comments
	Adjust keys. One push per increment (Runs when holding)		Beeps on keypress
SET POINT DEW POINT	Adjusts the dewpoint setpoint	-5°C - +25°C	10 °C default
SET POINT %RH	Adjusts the %RH setpoint	10 %RH - 90 %RH	50 %RH default
DEW	Hysteresis in %RH or °C (dewpoint) below setpoint. Depending of displaymode	DP LOW switchpoint = DP setpoint - LOW %RH LOW switchpoint = %RH setpoint - LOW	DP LOW switchpoint = 0,5 °C default %RH LOW switchpoint = 3 % default
%RH	Hysteresis in %RH or °C (dewpoint) above setpoint. Depending of displaymode	DP HIGH switchpoint = DP setpoint + HIGH %RH HIGH switchpoint = %RH setpoint + HIGH	DP HIGH switchpoint = 0,5 °C default %RH HIGH switchpoint = 3 % default
SET POINT ALARM	Setting of alarm for dewpoint and %RH Depending of displaymode	On dewpoint alarm display shows "ALdP" On %RH alarm display shows "ALrH"	DP alarm = 30 °C default %RH alarm = 80 %RH default
ALARIM °C	P band for regulator (Sets both 0-10 V outputs)	1 % to 50 %RH in 1 %RH increments	0 %RH default (0 = no P band) NOTE: If P Band and I Time = 0 the 0-10 V analog output will follow the transmitter
DISPLAY	I time for regulator (Sets both 0-10 V outputs)	1-50 Sec. In 1 sec. increments	0 sec. default (0 = no I time) NOTE: If P Band and I Time = 0 the 0-10 V analog output will follow the transmitter
MIN	Show the min. value of dewpoint, %RH and temperature reached Depending of displaymode	Dewpoint range = -30 °C - +70 °C Temperature range = -30 °C - +70 °C %RH range = 0 %RH - 100 %RH	Values are stored on powerup. Values can be reset by pressing the "MIN" key for 5 sec.
MAX	Show the max. value of dewpoint, %RH and temperature reached Depending of displaymode	Dewpoint range = -30 °C - +70 °C Temperature range = -30 °C - +70 °C %RH range = 0 %RH - 100 %RH	Values are stored on powerup. Values can be reset by pressing the "MAX" key for 5 sec.
DISPLAY DEW POINT	Displays measured dewpoint	-30 °C - +70 °C, every 5 sec. Display shows "dP"	
DISPLAY ALARM °C	Displays measured temperature	-30 °C - +70 °C, every 5 sec. Display shows "°C"	
DISPLAY %RH	Displays measured %RH	0 %RH - 100 %RH, every 5 sec. Display shows "rH"	
	Pressing "Arrow down" while power up places DA20 in Dehum mode		
	Pressing "Arrow up" while power up places DA20 in Hum mode		

DA20 ELECTRONIC HUMIDITY CONTROLLER





