

### Description of keys and display



- increase or decrease input values
- switch between analog channel 0 and 1
- select programs



- select setpoint for analog channel 0 = temperature
- return to other menu levels
- select min./ max. temperature limits



- select setpoint for analog channel 1 = humidity
- select programs
- create programs with EDIT



- start system
- stop system
- store programs



- Digital switching channels

In the upper display appear:

- actual value analog channel 0
- actual/setpoint value analog channel 0 in fixed-value and automatic mode
- test program number
- setpoint value when analog channels 0 and 1 are entered

In the lower display appear:

- system status OFF
- actual / setpoint value analog channel 1 in fixed-value / automatic mode
- test program line (L \_ \_ \_ \_)
- cursor position in relation to function line
- Clear (ErASE)

The function line comprises:

t (min)

Input of time when creating programs with EDIT

T (°C)

Input of setpoint for analog channel 0 = temperature

P 2

Input of setpoint for analog channel 1 = humidity

LOOP

Loop input when creating programs with EDIT

WAIT

Input for wait function (fixed setting of tolerance band  $\pm 1$  K)

## Putting into operation

### 1. Main switch ON

Initialization of the controller takes place. OFF appears in the lower display. The system is ready for operation





### 2. Operating modes:

Note: A key symbol signifies that the respective key must be pressed.

#### 2.1 Manual fixed-value operation

(For details see chapter 3.3.1)

Entering temperature values

Select analog channel 0 = temperature with . Cursor lights up over . Enter desired temperature value with  

#### NOTE



If no key is pressed within 10 seconds, the display returns to OFF.

Press  again to select the analog channel. Activate the digital switching channels (if assigned) with **1234**. The green LED lights up.

#### Entering temperature limits

The value to be entered must be 5 K above/below the temperature setpoint value.

Continue with **■**,  
LL = min. temperature limit appears in the upper display.

Set minimum temperature limit with **+■-**.

Continue with **■**,  
LH = max. temperature limit appears in the upper display.

Set maximum temperature limit with **+■-**.

#### Entering humidity value on climatic test systems

Press **■** until analog channel 1 = humidity appears. Cursor over **P 2** lights up. Set desired humidity value with keys **+■-**.

#### Starting the system

Press **S** = Start.

The display alternates between the actual value and the setpoint value (F = fixed value).

#### Switching off the system

Press **S** = stop.

## 2.2 Automatic operation

(For details see chapter 3.3.2)

Programs can be created with EDIT. Existing programs can be called up and activated as follows:

Key	Description / Effect
<b>■</b>	until P _ _ _ appears in the upper display
<b>+■-</b>	select number P _ _ _ of the desired program
<b>S</b>	start program System starts, after termination of the program it stops. In the lower display appears OFF, the system is ready for further programs.

## 2.3 Creating programs

(For details see chapter 3.4)

Enter temperature limits as described under 2.1

Key	Description / Effect
■	until E _ _ _ appears in the upper display. Look for free program number with <b>+-</b> . A free program location is indicated by an empty lower display.
■	Line L _ _ _ 0 appears, you can now create the first program line, e.g. for the first temperature value. Activate digital switching channels with <b>1234</b> .
■	Cursor at <b>t(min)</b> . Set time with <b>+-</b>
■	Cursor at <b>T(°C)</b> . Select CH (channel) with <b>+-</b> . 0 = temperature, 1 = humidity
■	Cursor at <b>T(°C)</b> . Set temperature value for channel 0 with <b>+-</b> .
■	Cursor at <b>LOOP</b> . Set number of loops with <b>+-</b> .
■	Cursor at <b>WAIT</b> . Set wait function with <b>+-</b> . 0 = OFF, 1 = ON
■	Line L _ _ _ 1 appears. You can now create the second program line, e.g. for the first humidity value. The values of the previously processed program line are automatically displayed and must only be changed.
■	Cursor at <b>t(min)</b> . Set time with <b>+-</b>
■	Cursor at <b>T(°C)</b> . Select CH (channel) with <b>+-</b> , 1 = humidity
■	Cursor at <b>P2</b> . Set humidity value for channel 1 with <b>+-</b>
When the last program line has been entered store the program by pressing <b>S</b>	
■	Return to program number P _ _ _
<b>S</b>	start system. After approx. 5 sec. the following values are displayed alternatingly: in the upper display: program number, temperature setpoint, actual temperature value in the lower display : actual line, humidity setpoint, actual humidity value

## 2.4 Clear programs

Key	Description / Effect
■	until E _ _ _ appears in the upper display Select program to be cleared with <b>+-</b> (e.g. E _ _ _3)
■	line number L _ _ _0 appears
■	Cursor at <b>t(min)</b> , adjust time to -21 with <b>-</b> . ErASE and the programm number to be cleared appear alternatingly in the lower display. Continue with <b>-</b> . The program is cleared on reaching -51.