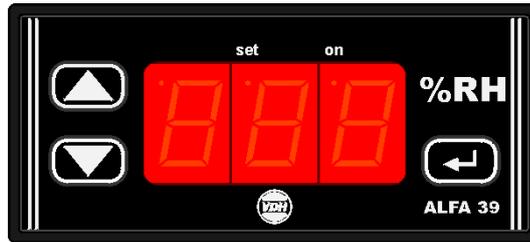


# User manual ALFA(NET) 39 Hygrostat.



VDH doc. 071747  
Software: ALFA39

Version: v1.0  
File: Do071747.WPD

Date: 22-06-2007  
Range: 0/+100%RH per 1°C

## \* Function.

The **ALFA(NET) 39** is a digital hygrostat for panel mounting. The function from the hygrostat can be programmed for humidify or dehumidify.

The **ALFANET 39** has a RS 485 network connection so it can be read out and adjusted on the Alfanet.

## \* Installation.

On the topside of the **ALFA(NET) 39** is shown how the sensor, power supply and relay have to be connected.

After connecting the **ALFA(NET) 39** to the power supply, a self-test function is started. As this test is finished the measured humidity appears in the display.

When the relay is activated, the led 'on' will light-up in the display.

## \* Control.

The **ALFA(NET) 39** hygrostat can be controlled by three push buttons on the front. These keys are:

**SET** - view / change the set point.

**UP** - increase the set point.

**DOWN** - decrease the set point.

## \* Viewing setpoint.

By pushing the **SET** key the setpoint appears in the display. The led 'set' starts blinking. A few seconds after releasing the **SET** key the set point disappears and the measured humidity is shown in the display.

## \* Changing setpoint.

Push the **SET** key and the set point appears in the display. Release the at **SET** key. Now push the **SET** key again and together with the **UP** or **DOWN** keys the set point can be changed. A few seconds after releasing the keys the measured humidity shows again in the display.



\* **Setting internal parameters.**

Next to the adjustment of the setpoint, some internal settings are possible like differential, sensor-offset, set point range and the function humidify or dehumidify. By pushing the **DOWN** key more than 10 seconds, you enter the 'internal programming menu'. In the left display the upper and lower segment are blinking. Over the **UP** and **DOWN** keys the required parameter can be selected (see table for the parameters).

If the required parameter is selected, the value can be read-out by pushing the **SET** key. Pushing the **UP** or **DOWN** keys together with the **SET** key allows you to change the value of this parameter.

If after 20 seconds no key is pushed, the **ALFA(NET) 39** changes to it's normal operation mode.

\* **Adjustment sensor.**

The sensor can be adjusted by using the Sensor Offset (parameter 04). Indicates the **ALFA(NET) 39** e.g. 2% too much, the Sensor Offset has to be decreased with 2%.

\* **Error messages.**

In the display of the **ALFA(NET) 39** the following error messages can appear:

- EE-** Settings are lost. Solution:  
- Reprogram the settings.

\* **Technical details.**

Model : ALFA(NET) 39 Humidify/dehumidify Hygrostat  
Range : 0/+100%RH, readout per 1%RH  
Supply : 230 Vac (or 24Vdc or 12Vdc)  
Relay : SPDT 250V/16A(C-NO), 8A(C-NC) (cos phi=1)  
Communication : RS 485 Network (2xtwisted pair shielded) only at ALFANET model.  
Control : by pushbuttons on the front.  
Front : Polycarbonate IP65  
Sensor : 0-1Vdc (0-100%RH) from RH95-2, LC95-2 or RH970  
Be aware! Humidity sensors should be external supplied with  
Sizes : 90 x 53 x 58mm (hwd)  
Panel hole : 46 x 53mm (hw)

- Provided with memory protection during power failure.
- Connection with screw terminals on the back side.
- Special version on request available.

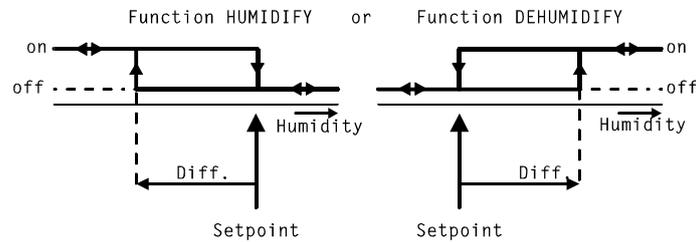


\* **Parameters ALFA(NET) 39.**

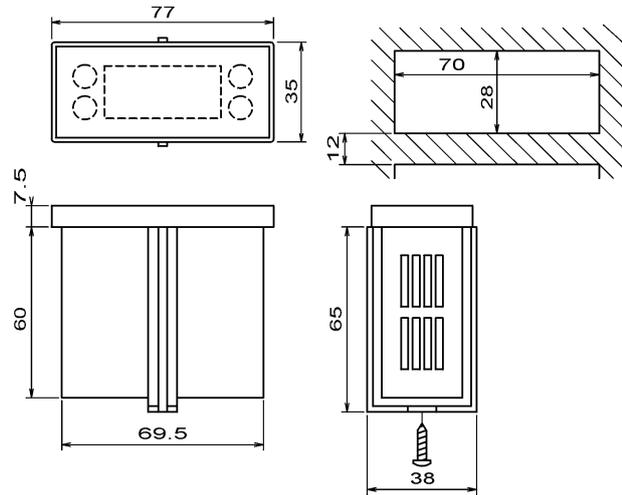
PARAMETER	DESCRIPTION PARAMETER	RANGE	STANDARD VALUE
01	Switching differential	1..15 %RH	3
02	Minimum set point	0..100 %RH	0
03	Maximum set point	0..100 %RH	100
04	Offset humidity sensor	-15..+15 %RH	0
10	Startup delay after power failure	0..99 min.	0
15	Function dehumidify or humidify	0 = dehumidify 1 = humidify	0
16	Switch on delay relay 1)	0..99	0
17	Switch off delay relay 1)	0..99	0
18	Parameter 16/17 in sec. or min.	0 = sec. 1 = min.	0
19	Minimum on-time relay	0..99 min.	0
20	Minimum off-time relay	0..99 min.	0
90	Network number	1..250	1
95	Software version	0..255	-
96	Production year	00..99	-
97	Production week	1..52	-
98	Serial number (x1000)	0..255	-
99	Serial number (units)	0..999	-

1) If delay is active, the led will flash

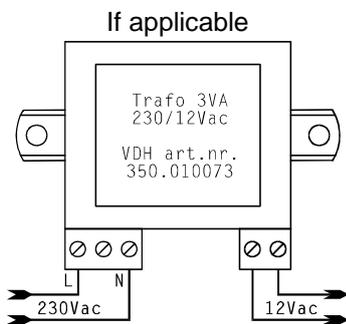
\* **Function Diagram.**



**\* Dimensions.**

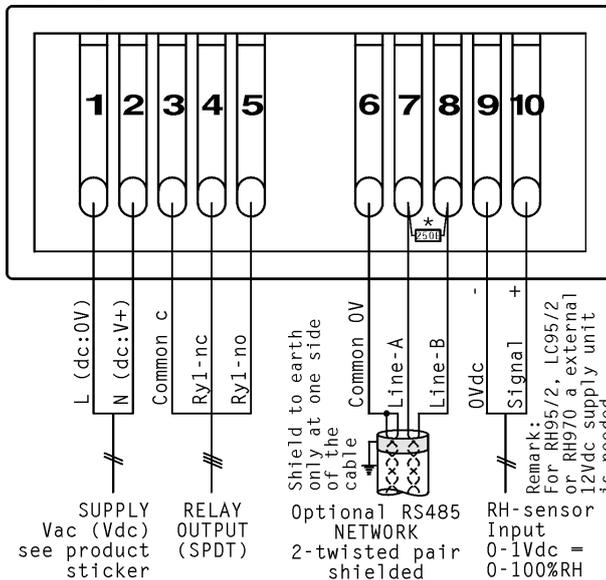


**\* Connection diagram.**

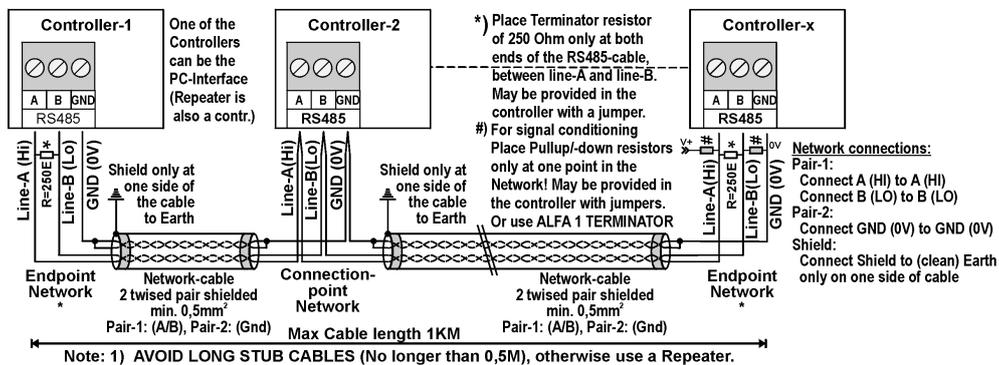


**ALFA(NET) 39-series**

**\*)REMARK:** To terminate RS485-Network Connect a 250 Ohm resistor between Line-A and Line-B at both cable-ends



**RS 485 NETWORK CONNECTIONS 2-twisted pair shielded cable:**



**\* Address.**

VDH Products BV  
 Produktieweg 1  
 9301 ZS Roden  
 The Netherlands

Tel: +31 (0)50 - 30 28 900  
 Fax: +31 (0)50 - 30 28 980  
 Email: info@vdhproducts.nl  
 Internet: www.vdhproducts.nl