

User Manual ALFA 29 and ALFANET 29

Dehumidify/Humidify Hygrostat



VDH doc: 070703

Version: v1.0

Date: 04-07-2007

Software: 061196_ALFA 19/29/39

File: Do070703.wpd

Range: 0/100 %RH per 1 %RH

* **Function.**

The **ALFA(NET) 29** is a digital hygrostat for panel and wall mounting. The function from the hygrostat can be programmed for dehumidify or humidify.

The **ALFANET 29** has a RS 485 network connection so it can be read out and adjusted on the Alfanel.

* **Installation.**

On the topside of the **ALFA(NET) 29** is shown how the sensor, power supply and relay have to be connected.

After connecting the **ALFA(NET) 29** to the power supply, a self-test function is started. As this test is finished, the measured relative humidity appears in the display.

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

* **Control.**

The **ALFA(NET) 29** hygrostat can be controlled by three push buttons on the front. These keys are:

SET - view / change the setpoint.

UP - increase the setpoint.

DOWN - decrease the setpoint.



* **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 setpoint disappears and the measured value is shown again in the display.

* **Changing setpoint.**

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

* **Setting internal parameters.**

Next to the adjustment of the setpoint, some internal settings are possible like differential, sensor-offset, setpoint range and the function dehumidify or humidify. 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) 29** changes to it's normal operation mode.

* **Parameters ALFA(NET) 29.**

Parameter	Description Parameter	Range	Standard Value
01	Switching differential	1..15 %RH	3
02	Minimum setpoint	0..100 %RH	0
03	Maximum setpoint	0..100 %RH	100
04	Offset RH-sensor	-15..+15 %RH	0
10	Startup delay after power failure	0..99 Minutes	0
15	Function dehumidify or humidify	0 = Dehumidify 1 = Humidify	0
16	Switch on delay relays 1)	0..99	0
17	Switch off delay relays 1)	0..99	0
18	Parameter 16/17 in sec. or min.	0 = Seconds 1 = Minutes	0
19	Minimum on-time relays	0..99 Minutes	0
20	Minimum off-time relays	0..99 Minutes	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) During delay time the LED 'on' is flashing.



* **Adjustment sensor.**

The sensor can be adjusted by using the Sensor Offset (parameter 04). Indicates the **ALFA(NET) 29** e.g. 2 %RH too much, the Sensor Offset has to be decreased with 2 %RH.

* **Error messages.**

In the display of the **ALFA(NET) 29** the following error messages can appear:

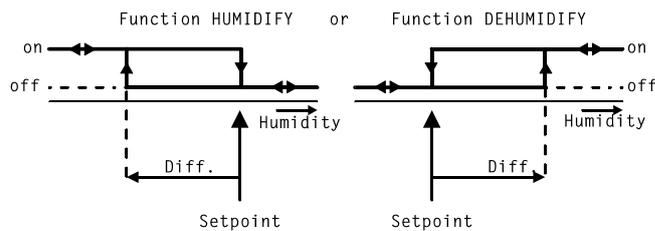
- EE** - Settings are lost. Solution:
 - Reprogram the settings.

* **Technical details.**

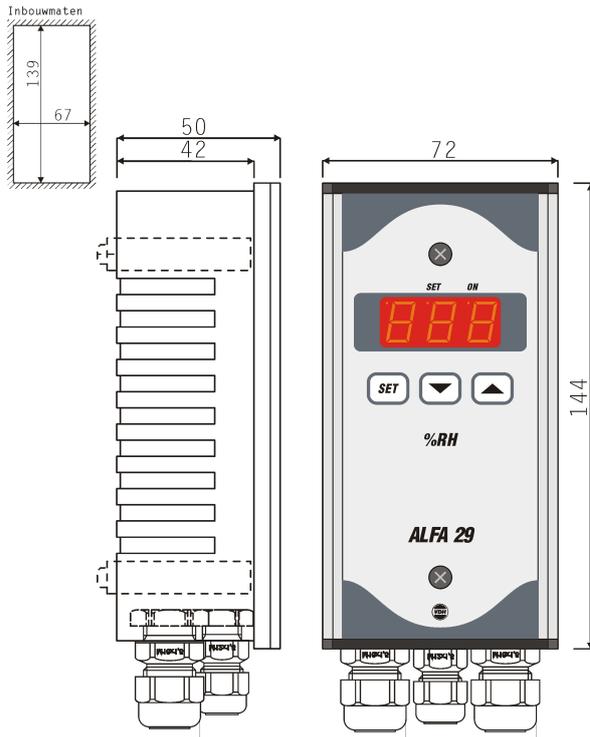
Model	: ALFA 29 Dehum./Hum. Hygrostat ALFANET 29 Dehum./Hum. Hygrostat with Network
Range	: 0/100 %RH, readout per 1 %RH
Supply	: 230 Vac 50/60Hz
Relay	: SPDT 250V/16A(C-NO), 8A(C-NC) (cos phi=1)
Control	: by push buttons on the front.
Communication	: RS485-Network (2x twisted pair shielded, min. 0,5mm ²)
Front	: Polycarbonate
Sensor	: RH95-2, LC95-2 or RH970 (3-wire: V+, Signal, 0V)
Dimensions	: 144 x 72 x 50mm (hwd)
Panel hole	: 139 x 67mm (hw) at panel mounting

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

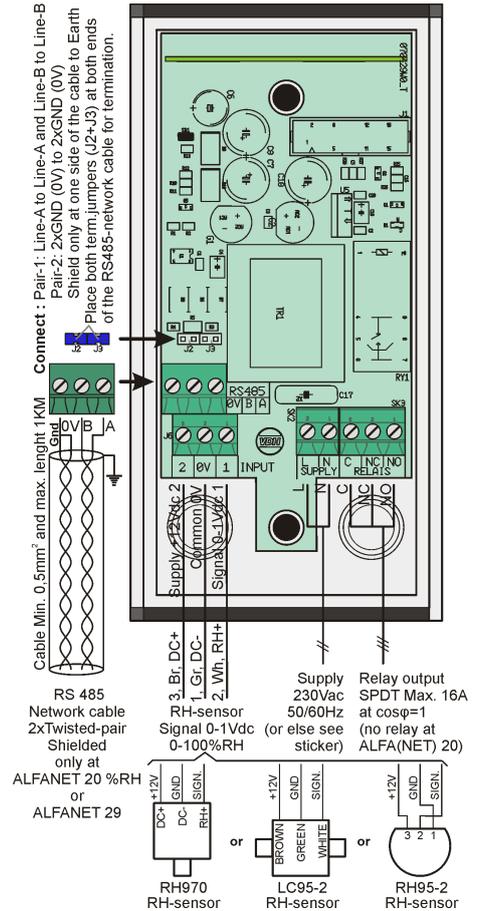
* **Function Diagram.**



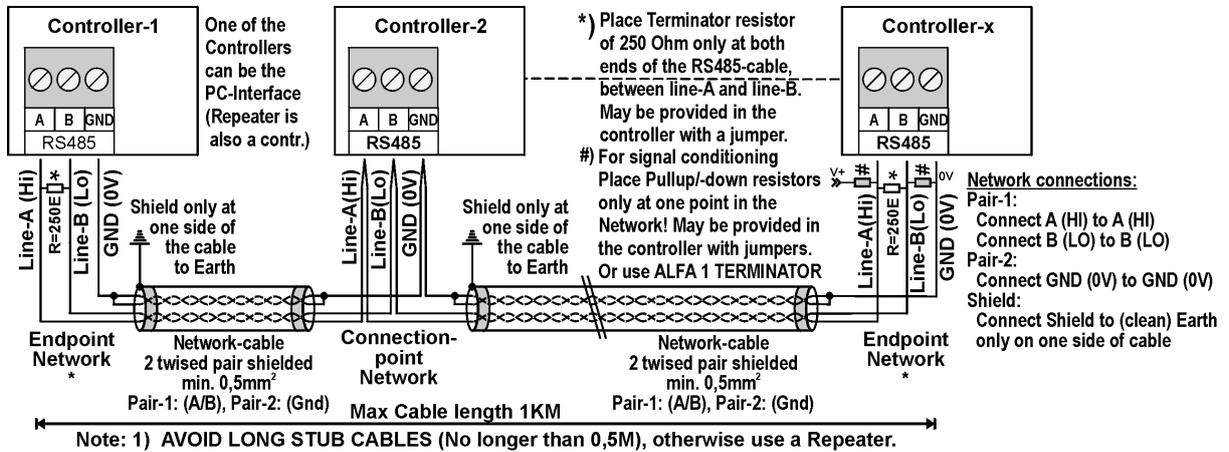
*** Dimensions.**



*** Connections.**



RS 485 NETWORK CONNECTIONS 2-twisted pair shielded cable:



*** Adresse.**

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 Produktieweg 1
 9301 ZS Roden
 Nederland

Tel: +31 (0)50 - 30 28 900
 Fax: +31 (0)50 - 30 28 980
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