

# User Manual ALFA 20 and ALFANET 20

## Thermometer



VDH doc: 070697

Versie: v1.1

Datum: 03-10-2008

Software: .....\_ALFA 10/20/30

File: Do070697.wp8

Range: See Sticker

### \* Function.

The **ALFA(NET) 20** is a digital thermostat for panel mounting.

The **ALFANET 20** has a RS 485 network connection so it can be read out and adjusted on the Alfabet.

### \* Installation.

On the topside of the **ALFA(NET) 20** is shown how the sensor, power supply and network have to be connected.

After connecting the **ALFA(NET) 20** to the power supply, a self-test function is started. As this test is finished, the measured temperature appears in the display. When the relay is activated, the led 'on' will light-up in the display.

### \* Control.

The **ALFA(NET) 20** Thermostat can be controlled by three hidden push buttons on the front.

These keys are:

**SET** - view / change the setpoint.

**DOWN** - decrease the setpoint.

**UP** - increase 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 temperature is shown 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 temperature shows again in the display.

\* **Setting internal parameters.**

Next to the adjustment of the setpoint, some internal settings are possible like sensor-offset and network number.

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) 20** changes to it's normal operation mode.

\* **Parameters ALFA(NET) 20.**

Parameter	Description Parameter	Range	Standard Value
04	Offset temperature sensor	-15..+15°C	0
90	Network number (Only ALFANET)	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	-



\* **Adjustment sensor.**

The sensor can be adjusted by using the Sensor Offset (parameter 04).  
Indicates the **ALFA(NET) 20** e.g. 2°C too much, the Sensor Offset has to be decreased with 2°C.

\* **Error messages.**

In the display of the **ALFA(NET) 20** the following error messages can appear:

- Er** - Sensor broken. Solution:
- Check if the sensor is connected correctly.
  - Check the sensor (1000Ω at 25°C).
  - Replace the sensor.
- EE** - Settings are lost. Solution:
- Reprogram the settings.

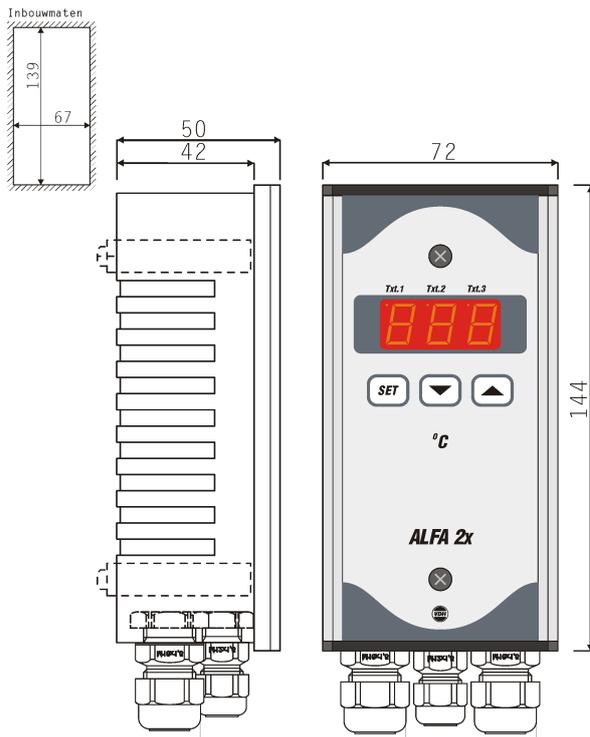
\* **Technical details.**

Model	: ALFA 20 Thermometer ALFANET 20 Thermometer with Network
Range	: -50/+50°C, readout per 1°C (or else see Sticker)
Supply	: 230Vac / 2,5VA 50/60Hz (or else see Sticker)
Control	: by hidden push buttons on the front.
Communication	: RS485-Network (2x twisted pair shielded, min. 0,5mm <sup>2</sup> )
Front	: Polycarbonate
Sensor	: SM 811/2m (1000Ω at 25°C)
Dimensions	: 144 x 72 x 50mm (hbd)
Panel hole	: 139 x 67mm (hb) cutout in front

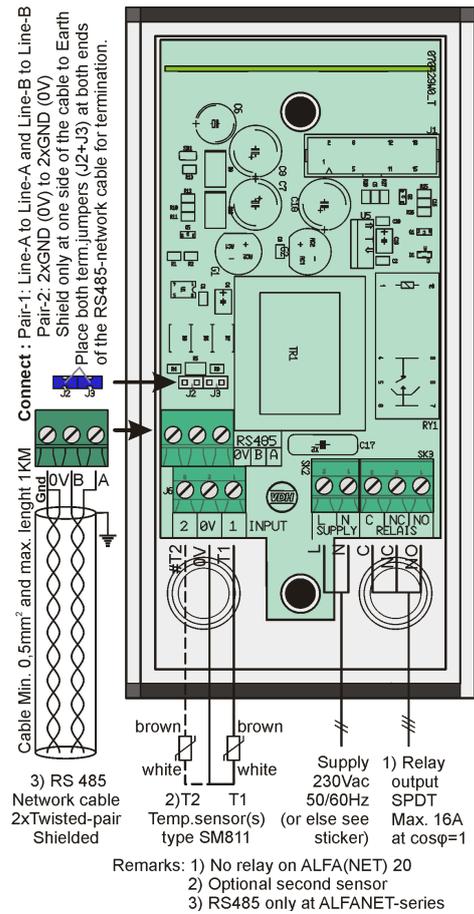
- Provided with memory protection during power failure.
- Connection with screw terminals on the back side.
- Equipped with self test function and sensor failure detection.
- Special version on request available.



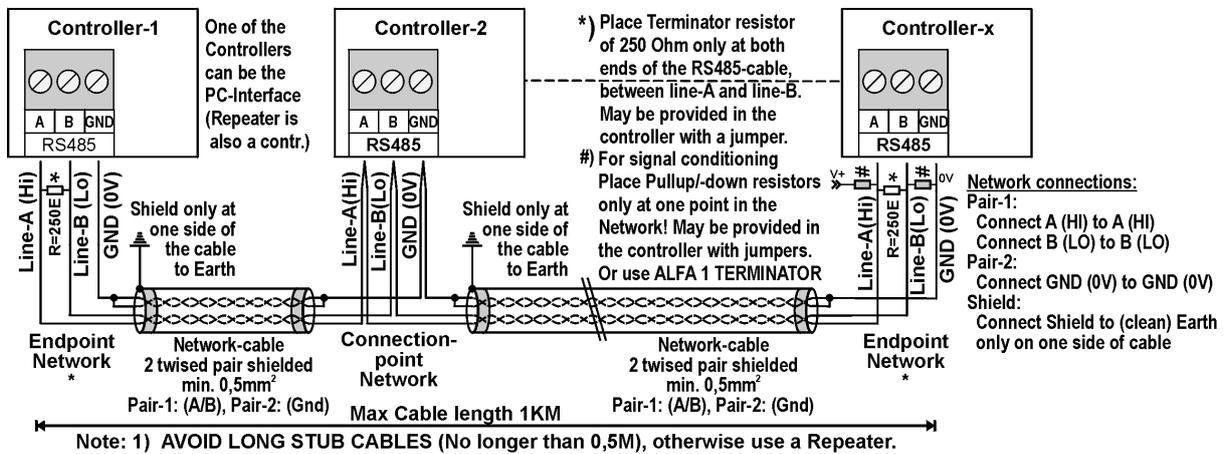
**\* Dimensions.**



**\* Connections.**



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



**\* Adresse.**

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