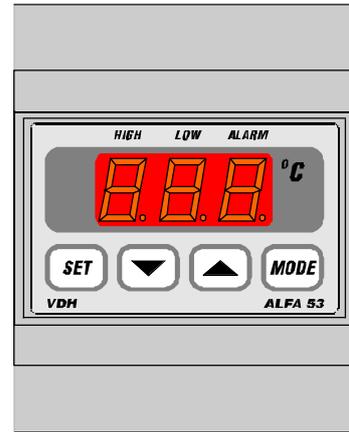


# User manual

## ALFANET 53

### Alarm thermostat.

(With and without buzzer)



VDH doc. 080334

Versie: v1.0

Datum: 06-03-2008

Software: ALFA(NET)53

File: Do080334.WPD

Bereik: -50/+50,0°C

#### \* Installation.

On the connection diagram of the **ALFANET 53** is shown how the sensors, power supply and relays has to be connected. After connecting the **ALFANET 53** to the power supply, a self test function is started. As this test is finished, the measured temperature will appear on the display.

#### \* Control.

The **ALFANET 53** thermostat can be controlled by four pushbuttons on the front These keys are:

- SET** - view / change set point and reset the alarm
- ▲ (UP)** - increase the set point.
- ▼ (DOWN)** - decrease the set point.
- MODE** - relays status key.

#### \* Viewing setpoints.

Viewing **Maximum alarm** set point:

By pushing the **SET** key simultaneously with the **UP** key, the adjusted maximum alarm set point will be shown.

Viewing **Minimum alarm** set point:

By pushing the **SET** key simultaneously with the **DOWN** key, the adjusted maximum alarm set point will be shown.

A few seconds after releasing the **SET** key the set point disappears and the measured temperature will be visible again.

#### \* Changing the set points.

Push the **SET** key simultaneously with the **UP** or **DOWN** key till the maximum alarm set point or the minimum alarm set point appears. Release the **SET** key.

Push the **SET** key again and now the set point can be changed with the **UP** or **DOWN** key. A few seconds after releasing the keys measured temperature will be visible again.

#### \* Status of the Relays.

By pushing the **MODE** key the display shows the status of the relays. Each digit shows the status of one relay output, showing 0=off and 1=on. The code 110 means relay 1 and 2 are on and relay 3 is off.



\* **Setting internal parameters.**

Next to the adjustment of the set point, internal settings can be made like differential, sensor offset, set point range and the functions of the thermostat.

Push the **DOWN** key for more than 10 seconds, to 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** key to change the value of this parameter.

If 20 seconds no key is pushed, the **ALFANET 53** changes to the normal operation mode.

\* **Adjustment sensor.**

The sensor can be adjusted by using the Sensor Offset parameter 05. Indicates a Sensor e.g. 2°C too much, the according Sensor Offset has to be decreased with 2°C.

\* **Error messages.**

On the display of the **ALFANET 53** the following error messages can appear:

- LO** - Minimum alarm Thermostat.
- HI** - Maximum alarm Thermostat.
- E1** - Sensor failure.
- EE** - Settings are lost.

Solution EEE:

- Reprogram the settings.

**-L-** - In case of sensor short-circuit the display alternates between error-code **E..** and **-L-**, as indication for a short-circuit sensor.

**-H-** - In case of open-circuit sensor the display alternates between error-code **E..** and **-H-**, as indication for a open circuit sensor.

**Reset Alarm.** When an error-messages appears it can be reset by pushing the **SET** key. The function of this key depends on parameter P42.

\* **Technical data.**

Type	: ALFANET 53 Alarm thermostat (Rail)
Range	: -50/+50,0°C, above -10°C read-out in 0,1°C
Supply	: 230Vac 50/60Hz (-5/+10%)
Read-out	: 3-digit 7-segments display
Relays	: Ry1= SPST(NO) 250V/8A(cos φ=1) of 250V/5A (cos φ=0.4) Ry2= SPST(NO) 250V/8A (cos φ=1) of 250V/5A (cos φ=0.4) Ry3= SPDT(NO/NC) 250V/8A (cos φ=1) of 250V/5A (cos φ=0.4) Relays have one common (C).
Control	: by push buttons on the front.
Front	: Polycarbonate
Sensor	: SM 811/2m (PTC 1000Ω/25°C).
Dimensions	: 90 x 71 x 58mm (hwd)
Panel cut out	: 46 x 71mm (HW) at panel mount
Accuracy	: ± 0,5% of the range.

- Provided with memory protection during power failure.
- Connections with screw terminals on the back side.
- Equipped with sensor failure detection.
- Special versions on request available.



\* **Parameters ALFANET 53**

Parameter	Description Parameter	Range	Default
01	Function Relay 1 0 = Non 1 = Minimum Control alarm 2 = Maximum Control alarm 3 = Minimum Fail safe alarm 4 = Maximum Fail safe alarm 5 = Minimum Fail safe alarm + Sensor failure 6 = Maximum Fail safe alarm + Sensor failure 7 = Sensor failure	0..7	1
02	Function Relay 2	0..7	2
03	Function Relay 3	0..7	0
05	Offset temperature sensor	-15.0..+15.0°C	0.0
10	Switching differential Relay 1	0.1..15.0°C	0.5
11	Switching offset Relay 1	-15..+15°C	0.0
12	Switching differential Relay 2	0.1..15.0°C	0.5
13	Switching offset Relay 2	-15..+15°C	0.0
14	Switching differential Relay 3	0.1..15.0°C	0.5
15	Switching offset Relay 3	-15..+15°C	0.0
20	Minimum adjustable set point	-50.0..+50.0°C	-50
21	Maximum adjustable set point	-50.0..+50.0°C	+50
30	Time delay minimum alarm	0..99 Minutes	0
31	Time delay maximum alarm	0..99 Minutes	0
32	Reset alarm relay after recovering alarm	0= No 1= Yes	0
33	Reset alarm relais after manual reset	0= No 1= Yes	0
40	Control delay after power failure	0..99 Minutes	0
90	Network number	1..255	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	-

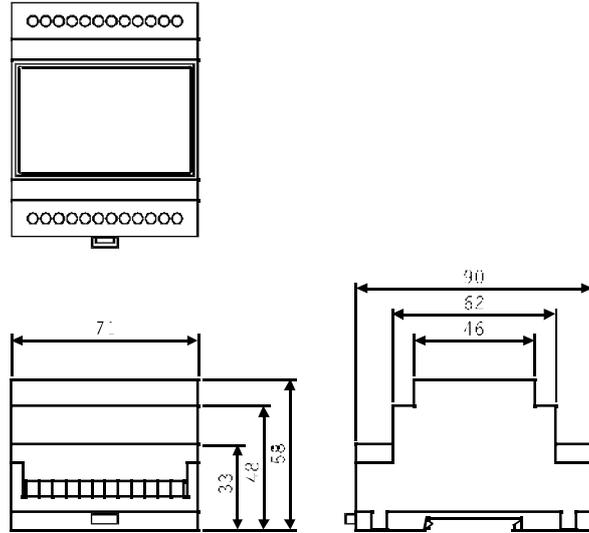
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\* **Dimensions.**



\* **Connections.**

