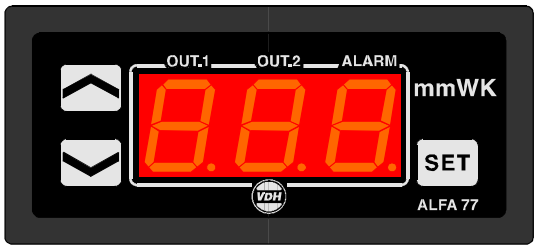
User manual
ALFANET 77 mmWK
Pressostat



VDH doc. 080646 **Versie: v1.0** **Date: 19-05-2008**
Software: ALFA(NET) 77mmWK **File: Do080646.WPD** **Range: -99/+999 mmWK**

* Description.

The **ALFANET 77** is a Pressostat with three relays functions and the possibility to control the differential pressure. The **ALFANET 77 mmWK** read out and controlled on the PC.

* Installation.

On the connection diagram from the **ALFANET 77 mmWK** is shown how the pressure sensor, supply and the relays should be connected.

* Control.

The **ALFANET 77 mmWK** Pressostat can be controlled by four pushbuttons on the front. These buttons are:

SET - viewing and changing the adjusted value.
UP - raise the adjusted value.
DOWN - lower the adjusted value.
mmWK - hidden key under the mmWK text.

* Viewing and/or changing the set point.

By pushing the **SET** key, the adjusted set point will be visible. The most right dot starts also flashing, indicating that the set point is shown. Release the **SET** key. By pushing the **SET** key again the set point can be changed with the **UP** or **DOWN** keys (keep the **SET** key pushed). A few seconds afters releasing the keys, the measured value appears again on the display.

* Relays status.

Push the **mmWK** key. The three digits are indicating the status from the relays, hereby 0=off and 1=on. The code 110 means that relay 1(out.1) and relay 2 (out.2) are on and relay 3(out.3) is off.

* Adjusting internal parameters.

Besides the adjusting of the set point there are a few internal adjustments possible.
By pushing the **DOWN** key for more than 10 seconds the 'interne programming menu' will be entered. The upper and lower segment from the most left digit starts flashing. Now the required parameter can be selected with the **UP** and **DOWN** keys (see the table for the parameters).
When the required parameter has been selected, it can be read out by pushing the **SET** key. It can be changed with the **UP** en **DOWN** keys.
If no key is pushed for 20 seconds, the **ALFANET 77 mmWK** will return to it's normal operating mode.

* Adjusting pressure sensor.

The pressure sensor can be adjusted with the offset pressure sensor (parameter 05).
Indicates the sensor from the **ALFANET 77 mmWK** f.i. 2 mmWK to much, than the offset pressure sensor should eb lowered with 2 mmWK.

* Error codes.

On the display from the **ALFANET 77 mmWK** can appear the following error codes:

LO- Minimum alarm.
HI - Maximum alarm.
EE- Adjustments are lost.
Solution EE: - Reprogram the adjustments.

* Working Alarm.

If an error code or alarm occurs, the buzzer (if present) will go on and an error code appears on the display. The **ALFANET 77 mmWK** remembers the error code (parameter P36 default on 0), even if the error is solved. The error code can be reset with the **SET** key (if parameter P37 is 1). If the error is not solved when the **SET** key (=reset alarm) is pushed, than the display shows the error code and the pressure alternating. When the error is solved the error code disappears and the pressure is shown again.
The alarm relay can be programmed with parameter P35 (default on fail safe) as a control alarm. This means that the relay will be energized if an alarm occurs. If the alarm relay is programmed as a fail safe relay, than the relay is normally energized and will be de-energized if an alarm occurs.
It also possible to make a choice between a relative and an absolute alarm. A relative alarm is connected to the set point.

* Technical data.

Type	: ALFANET 77mmWK Pressostat	
Range	: -99/+999 mmWK, read out per 1 mmWK or per 0,1 mmWK (Adjustable through the parameters)	
Supply	: 12 Vac/16,5Vdc	(-5/+10%)
Display	: 3-digit 7-segments display	
Relays	: The three relays have one common;	
	Ry-1 Out.1	SPST (NO) 250V/8A (cos φ=1)
	Ry-2 Out.2	SPST (NO) 250V/8A (cos φ=1)
	Ry-3 Out.3 (Alarm)	SPDT (NO,NC) 250V/8A (cos φ=1)
Communication	: RS 485	(2x twisted pair shielded cable min. 0,75mm^2)
Control	: through pushbuttons on the front.	
Front	: Polycarbonate IP65	
Pressure sensor	: PX25-2	(Supply 12Vdc, Signal input 4-20mA).
Dimensions	: 35 x 77 x 71,5mm	(hwd)
Panel cut out	: 29 x 70mm	(hw)
Accuracy	: ± 0,5 % from the range.	

- Provided with memory protection during power failure.
- Special models available upon request

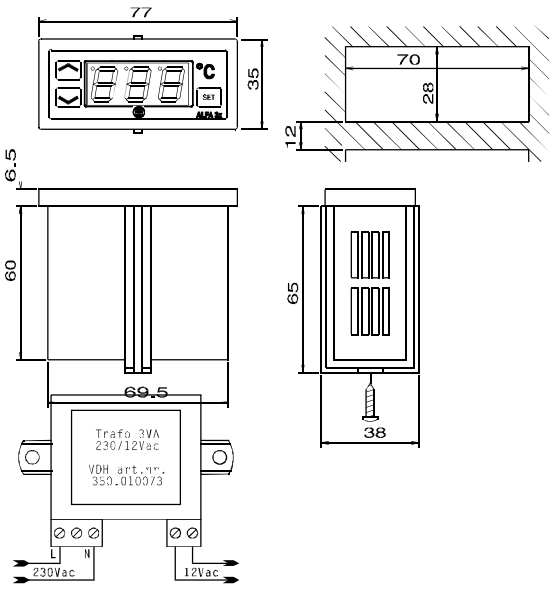
* Parameters ALFANET 77mmWK.

Par.	Description	Range	Default
01	Function relay 1	1..3	1
02	Function relay 2	1..3	2
03	Function relay 3 1= Raise the pressure 2= Lower the pressure 3= Alarm	1..3	3
05	Offset pressure sensor	-20..+20 mmWK	0
06	Value pressure sensor at 4mA input	-99..+999 mmWK	0
07	Value pressure sensor at 20mA input	-99..+999 mmWK	25,4
08	Decimal point choice: 0=1 Per whole units 1=0,1 Per tenth units	0..1	1
10	Switching differential relay 1	1.0..150.0 mmWk	5
11	Offset relay 1	-150.0..+150.0 mmWk	0
12	Switching differential relay 2	1.0..150.0 mmWK	5
13	Offset relay 2	-150.0..+150.0 mmWK	0
14	Switching differential relay 3	1.0..150.0 mmWK	5
15	Offset relay 3	-150.0..+150.0 mmWK	0
20	Minimum adjustable set point	-99..999 mmWK	0
21	Maximum adjustable set point	-99..999 mmWK	25,4
30	Type alarm; 0=No Alarm 1=Absolute 2=Relative	0..2	1
31	Minimum alarm set point	-99..+999 mmWK	0
32	Maximum alarm set point	-99..+999 mmWK	25,4
33	Time delay minimum alarm	0..99 Minuten	0
34	Time delay maximum alarm	0..99 Minuten	0
35	Relay function alarm relay	0=Fail safe alarm 1=Control alarm	0
36	Reset alarm relay when alarm	0=No, 1=Yes	0
37	recovers Reset alarm relay at manual reset	0=No, 1=Yes	0
40	Control delay after power failure	0..99 Minuten	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	-

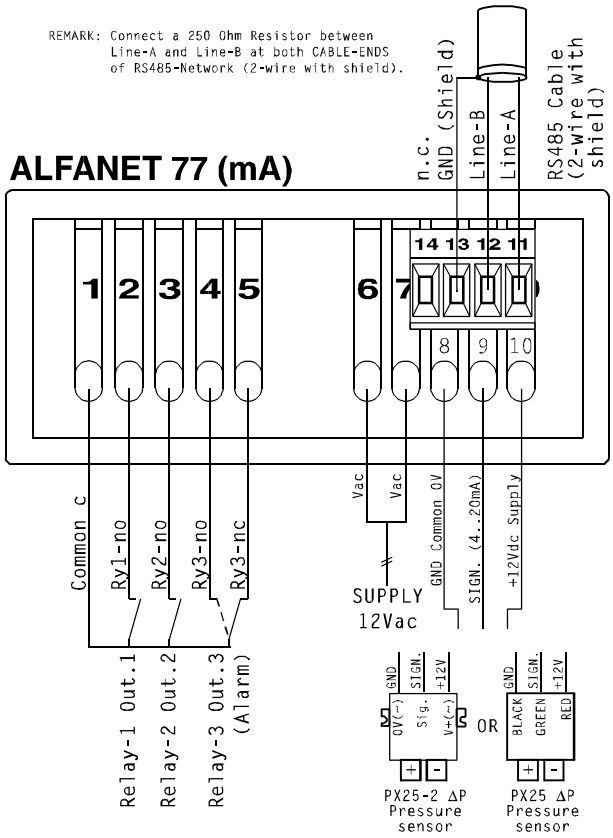
Calculation examples for pressure ranges:

0-1 inchWK	= 0-25,4 mmWK0-1 PSI = 0-731 mmWK
0-2 inchWK	= 0-50,8 mmWK
0-5 inchWK	= 0-127 mmWK
0-10 inchWK	= 0-254 mmWK

* Dimensions.



* Connections.



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