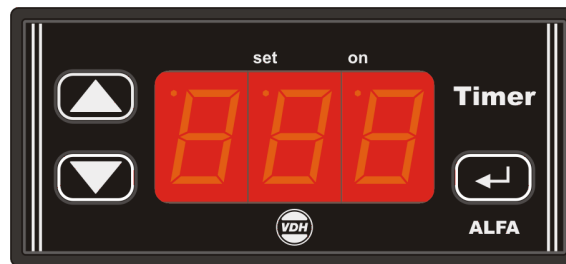


User manual

ALFA 804-ADS and ALFANET 804-ADS

Aqua Dry System Timer-unit



VDH doc. 080178

Version: v1.1

Date: 31-01-2013

Software: 060075 V3.01

File: Do080178.wpd

Range: 0-999

* Operation.

The **ALFA(NET) 804-ADS** is drying timer unit for water containing coatings, the water in these coatings must be evaporated by the ADS-unit (Aqua Dry System) thru a extra drying in between two spraying sessions . The **ALFA(NET) 804-ADS** can evaporate at two different ways;

The first method is drying direct with a drying-time T1 (0..60 minutes) and

The second method is to wait first a delay time T0 (0..30 minutes) and than dry with a drying-time T2 (0..60 minutes).

* Installation.

On the topside of the **ALFA(NET) 804-ADS** can be read how to connect this unit, such as power supply, relay-output, contact-input and network.

After power up the **ALFA(NET) 804-ADS** and the self test is finished the unit displays the set drying time T1 in it's display.

* Control.

The **ALFA(NET) 804-ADS** timer-unit can by controlled by three push bottons on the front. These keys are:

SET [←] - view / change setting.

UP [▲] - starts the timer / increase setting.

DOWN [▼] - stops the timer / decrease setting.

* Viewing the time-settings of the timer.

First press the **SET** key and than press the **UP** and/or **DOWN** keys to show the next timer settings on the display. To indicate which timer setting is shown a LED is blinking as follows;

T0: The delay time is shown in the display as the upper left LED is blinking.

T1: The direct-drying time is shown in the display as the LED 'set' is blinking.

T2: The drying-time after delay is shown in the display as both LED's are blinking.

A few seconds after releasing the keys the timer-unit returns to it's normal operation.

* Changing the time-settings of the timer.

First press the **SET** key and choose one of the time-settings as above with the **UP** and/or **DOWN** keys.

To change the chosen time-setting while displayed, first press the **SET** key again and hold it while pressing the **UP** and/or **DOWN** keys to change it's setting. A few seconds after releasing the keys the timer-unit returns to it's normal operation, with the new setting.



* **Starting, stopping and waiting of the timer.**

Normally the **ALFA(NET) 804-ADS** is started by the external start-keys which are connected in a resistor-circuit to the contact-input of the timer, see the connection diagram.

Working in direct start mode:

If the timer is started by pushing the external direct start key, the LED '**ON**' and the relay output are activated, during the direct-drying time T1. The direct-drying time starts counting down to zero, after ending this time the LED '**ON**' and the relay output deactivate and the display shows the set direct-drying time T1 again. The timer is now ready for the next start.

Working in delay start mode:

If the timer is started by pushing the external delay start key, first the upper left LED is activated to indicate that the delay time T0 is running, meanwhile the display shows the countdown of the delay time. After this delay time the drying time after delay T2 is started, the LED '**ON**' and the relay output are activated, during the drying time T2. The drying time starts counting down to zero, after ending this time the LED '**ON**' and the relay output deactivate and the display shows the set direct-drying time T1 again. The timer is now ready for the next start.

Setting drying time on hold: (P05=0)

During drying time it is possible to set the timer on hold by pushing the **DOWN** key. Depending on the parameter setting of P03 the relay output deactivates (P03=0) or stays activated (P03=1) during hold. To indicate the hold situation the LED '**ON**' flashes and the remaining drying time is frozen. To end this hold situation the **UP** key must be pressed.

But if the **DOWN** key is pressed (for the second time) than the drying time is stopped directly, the display shows for 5 seconds "**000**" and the '**ON**' LED deactivates. The timer is stopped completely, and after the 5 seconds the display shows the set direct-drying time T1 again. The time is now ready for the next start.

Setting delay time on hold: (P05=0)

During delay time it is also possible to set the timer on hold by pushing the **DOWN** key. To indicate the hold situation the upper left LED flashes and the remaining delay time is frozen.

To end this hold situation the **UP** key must be pressed.

But if the **DOWN** key is pressed (for the second time) than the delayed drying time is stopped directly, the display shows for 5 seconds "**000**" and the upper left LED deactivates. The timer is stopped completely, and after the 5 seconds the display shows the set direct-drying time T1 again. The time is now ready for the next start.

Starting with UP key

With parameter P06 can be set the UP button can be used during normal operation for a direct or delayed start.

* **Setting internal parameters.**

By pushing the **DOWN** key for more then 10 seconds, you enter the 'internal programming menu'. In the left display the upper and lower segments are blinking. With the **UP** and **DOWN** keys the required parameter can be selected (see parameter table).

If the required parameter is selected, the value can be read-out by pushing the **SET** key. By pushing simultaneously the **SET** key and the **UP** or **DOWN** key the parameter value can be changed.

If no key is pushed for 20 seconds, the **ALFA(NET) 804-ADS** will return to it's normal operation and the changes are saved.



* **Internal parameters.**

Parameter	Description Parameter	Range	Default value
01	Time unit: 0 = minutes 1 = seconds	0..1	0
02	External contact input mode: 0 = Not active 1 = Only start at closed input (pulse contact) 2 = Start and hold at closed input (pulse contact) 3 = Start and stop at closed input (pulse contact)	0..3	1
03	Hold mode: 0 = Relay deactivates during hold (T1 or T2) 1 = Relay stays activated during hold (T1 or T2)	0..1	0
04	Display function: 0 = Display shows set drying time after drying time 1 = Display extinguishes after drying time 2 = Display stays at zero after drying time	0..2	0
05	Down key mode: 0 = Pressing DOWN key while drying time is running switches to hold (Press DOWN key once again stops timer) 1 = Pressing DOWN key while drying time is running stops the timer (direct to zero).	0..1	0
06	Up key mode: 0 = <u>Direct</u> start with UP key possible 1 = Start with UP key <u>not</u> possible (Only external start possible) 2 = <u>Delay</u> start with UP key possible	0..2	1
90	Network number	1..250	-
95	Software version	-	-
96	Production year	00..99	-
97	Production week	1..52	-
98	Serial number (x 1000)	0..250	-
99	Serial number (units)	0..9991	-

Remark: In case that the timer-unit is set on minutes (P01= 0), the display shows the last minute of the current rest time in seconds. To indicate this, the lower segment of the first digit is lit and the other digits show the time in seconds.

* **Error messages.**

In the display of the **ALFA(NET) 804-ADS** the following error message can appear:

EE - Settings are lost.

Solution: Reprogram the settings.

* **Technical details.**

Type : ALFA 804-ADS (Aqua Dry System) Timer-unit or
ALFANET 804-ADS Timer-unit with network

Range : T1 = Direct-drying-time 0-60 minutes (or seconds)
T0 = Delay-time 0-30 minutes (or seconds)
T2 = Drying-time after delay 0-60 minutes (or seconds)

Supply : 230 Vac / 1,2VA 50/60Hz (or else see product sticker)

Relay : SPDT 250V/16A(C-NO), 8A(C-NC) (cos phi=1)

Contact inputs : Two start keys in a serial resistor circuit on contact-input (see connections)

Communication : RS 485-network, only at Alfamet (2xTwisted-pair shielded cable; A,B,Gnd)

Control : Thru push buttons on front

Front : Polycarbonate IP65

Dimensions : 35 x 77 x 71,5mm (hwd)

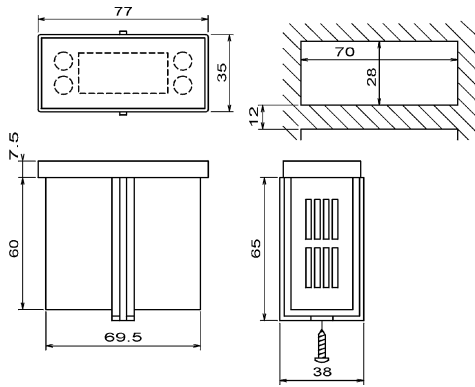
Panel cutout : 28 x 70mm (hw)

- Provided with memory protection during power failure.
- Connection with screw terminals on the backside.
- Equipped with self test function.



- Special versions are available upon request.

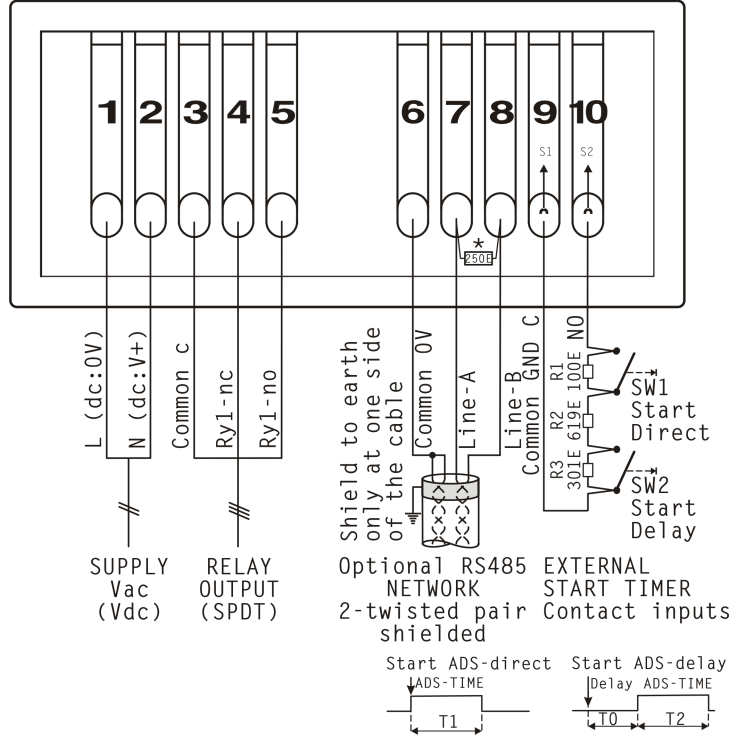
*** Dimensions.**



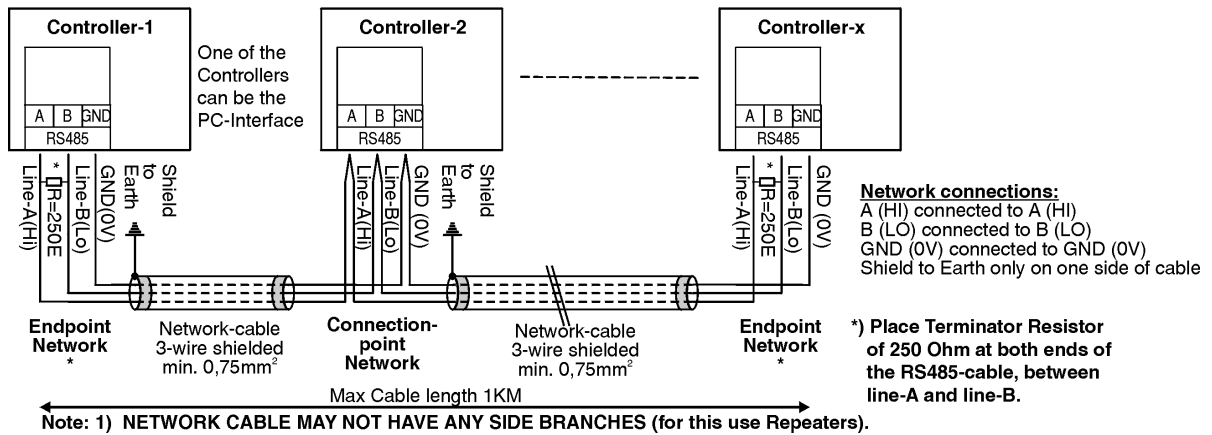
*** Connections.**

**ALFA(Net)
80X-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 3-wired shielded:



*** Adress.**

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