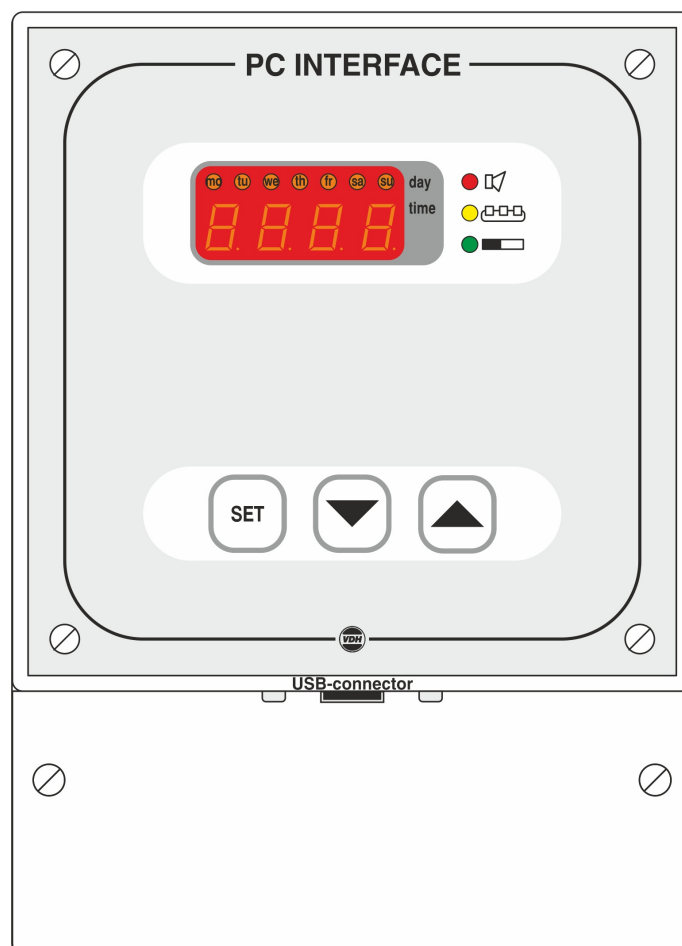


Alfanet PC-interface 2e gen.

RS 485 to RS232 or USB
With or without extra memory

Hardware user manual



Description : Alfanet PC-interface with real-time clock		Doc. Nr.:	021865
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1. Technical specifications

General

Types	: ALFANET PC INTERF.2 RT+MEM ALFANET PC INTERF.2 USB ALFANET PC INTERF.2+ USB EM (2MB) ALFANET PC INTERF.2+ EM (2MB)
Housing	: Grey plastic housing
Material	: Polystyrol 454h KG 2 natur BASF
Dimensions	: 130 x 180 x 80 mm (whd)
Cable inlet	: Thru turnbuckles
Cable connection	: On coded screw terminals behind connection cover
Front	: Polycarbonate
Supply	: 230 Vac; 50/60 Hz (-10/+5%).
Used Power	: 3.8 VA
Operation temperature	: -20/+50°C
Store temperature	: -20/+60°C
Operation rel. humidity	: 10/+90 % RH not condensing

Front

Display	: 4-digit display for clock with 7 day LED's
Keys	: SET key DOWN key UP key
LED's	: Alarm (Red) Network (Yellow) % Percent buffer full (Green)

In- and Outputs

Relays	: RY 1 : Alarm (C/NO/NC 250Vac/10A not inductive) RY 2 : LOG Buffer full (C/NO/NC 250Vac/10A not inductive)
Communication	: RS 485 (9600 Baud) to ALFANET (2xTwisted-pair shielded, min. 0,5mm ²) RS 232 (19200 Baud) or USB for communication to PC (Modem)

Software

PC Software	: V2.0.0 or higher
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2 Functional specifications

The Alfanet PC-Interface 2e gen. is provided with a real-time clock and display. This interface has been developed as an intelligent interface between a Personal Computer (PC) and the RS485 network. The interface takes care of the communication between the PC and the network and is in principle a transparent intermediary for messages from PC to the RS485 network and vice versa.

The interface can also store messages and log data in its internal buffer when the PC is not available for communication with the interface or in case the PC is turned off.

Of all the messages coming from cool panels there are two messages to activate the relays on the interface;

- 1) an alarm message to active relay 1
- 2) a log-buffer full message to active relay 2

The communication program for the PC requires MS Windows®.

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2.1 Installation

On the connection diagram of the Alfanet PC-Interface is shown how the RS485, RS232 or USB, supply and relays must be connected.

After connecting the Alfanet PC-Interface to the power supply, a self-test function is started, after this the current time is shown in the display.

2.2 Control

The Alfanet PC-Interface can be controlled by three pushbuttons. These buttons are:

- SET** - view / change value of setting.
- changing between real time and % log buffer full on the display
- UP** - increase value of setting / readout UTC-time.
- DOWN** - decrease value of setting.

2.3 Setting internal parameters

For setting the clock, summer/winter time and the log-interval there are several internal parameters available.

To enter the internal parameter menu the **DOWN** key must be pressed for more than 10 seconds. 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. Push the **UP** or **DOWN** key to change the value of this parameter.

If 20 seconds no key is pushed, the Alfanet PC-Interface changes to the normal operation mode and the changes are stored.

Parameters ALFANET PC-INTERFACE.

PARA-METER	DESCRIPTION PARAMETER	RANGE	DEFAULT
P 01	Setting clock (See explanation)	hh:mm yyyy/mm/dd	-
P 10	Summer/winter time automatic	0=no, 1=yes	1
P 11	Month start summertime	1...12 (Jan..Dec)	3
P 12	Day start summertime	0...6 (Mo..Su)	6
P 13	Week start summertime	1...5 (1e, 2e, 3e, 4e, last)	5
P 14	Time start summertime	0...23 (hour)	2
P 15	Month start wintertime	1...12 (Jan..Dec)	10
P 16	Day start wintertime	0...6 (Mo..Su)	6
P 17	Week start wintertime	1...5 (1e, 2e, 3e, 4e, last)	5
P 18	Time start wintertime	0...23 (hour)	3
P 19	UTC (Universal Time Coordinated) offset	-720...+720 Minutes	+60
P 20	Log time in UTC	0=no, 1=yes	0
P 30	Function Alarm relay 0 = control alarm 1 = fail save alarm 2= pulse	0...2	0
P 31	Function relay 2 0 = log buffer full 1 = external alarm NO 2 = external alarm NC 3 = external alarm pulse	0...3	0
P 32	Detection lost controller	0 = no, 1 = yes	0
P 50	Setting log interval	See explanation	
P 90	Software version	-	-
P 91	Serial number	-	-
P 92	Production date	-	-

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Explanation P01 setting clock:

After selecting parameter P 01 the clock can be set by pushing the SET key. The procedure is as follows;

- At first the **hours** are set (0..23) with the UP and/or DOWN key.
- Press the SET key to confirm the value.
- Next the **minutes** are set (0..59) with the UP and/or DOWN key.
- Press the SET key to confirm the value.
- Next the **year** is set (0..9999) with the UP and/or DOWN key.
- Press the SET key to confirm the value.
- Next the **month** is set (1..12 = Jan..Dec) with the UP and/or DOWN key.
- Press the SET key to confirm the value.
- At last the **day** is set (0..6 = Mo .. Su) with the UP and/or DOWN key.
- And close the procedure by confirming the value with the SET key.

Explanation P32 detection lost controller:

If this parameter = 1, the interface will generate an alarm when the communication with one of the controllers is lost. The interface will try to get connection with the lost controller for 5 minutes. If this fails, the alarm led and the relay will be activated. The alarm can be reset with the SET key.

Explanation P50 setting log interval:

Normally the log intervals are set using the program on the PC. It is also possible to set the log interval per network number without the PC. Press the SET key once after selecting parameter P50 to set the log intervals as follows;

- The display shows 'n 1', where the number behind the 'n' is network number 1.
By pressing the SET key again the log interval time is shown on the display. Value '0000' means off. The shown value can be changed by pressing the SET key simultaneously with the UP or DOWN key. After releasing the keys the display shows 'n 1' again.
- To select an other network number use the UP and/or DOWN keys, f.i. 'n 2'.
To change or readout the log interval time of this network number use the same procedure as above.

At this way all log interval times of the network can be changed.

As for several seconds no key is pressed the PC-Interface returns back to it's normal operation.

3 Program

3.1 Installation

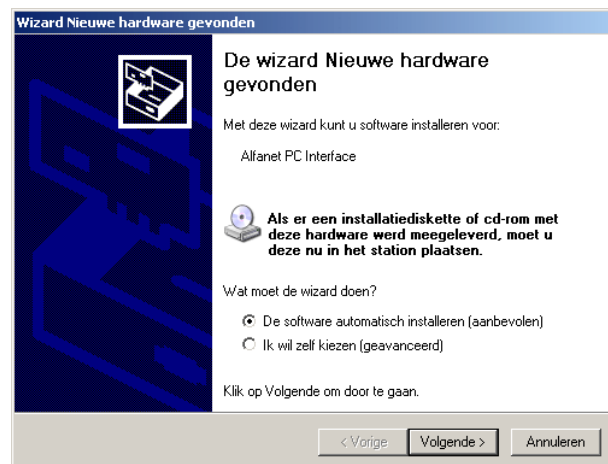
3.1.1 RS 232 interface

Place the CD-ROM with the PC-Software in the CD-player. The installation-procedure will start automatically. Follow the instructions during the installation.

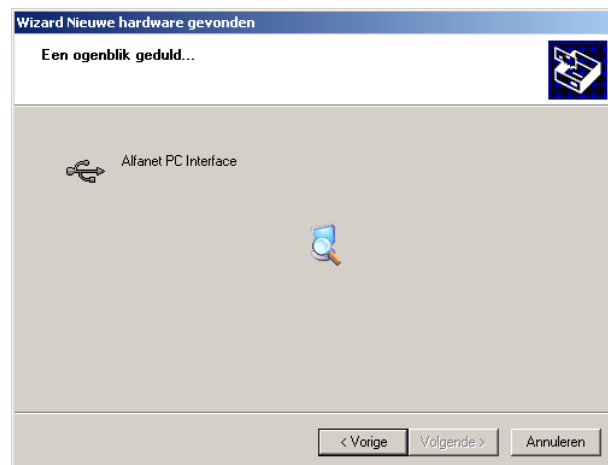
3.1.2 USB interface

Connect the USB interface to the PC before the software is been installed. As soon as the interface is connected to the PC, Windows will give a message that it has detected new hardware.

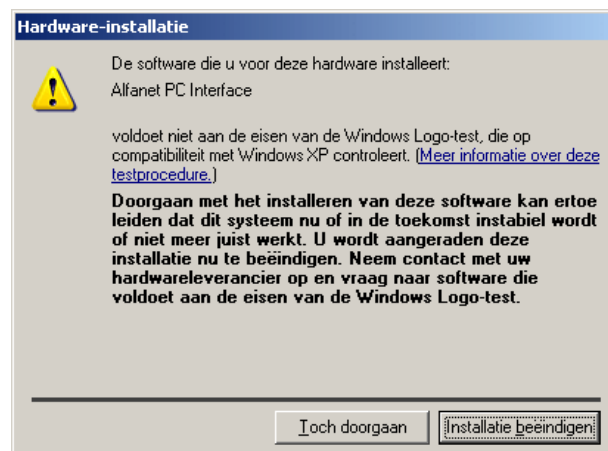
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Put the CD-ROM into the CD-player and click on “Next”.
The next screen will appear.



After that, the next screen will appear



Click on “Continue Anyway”. The software is, instead of the message, Windows approved.
The drivers will now be installed. After the drivers have been installed, the next screen will appear. The installation is completed.

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Now you can install the Alfanet program. You have to enter the CD-ROM into the CD-player or you go to the directory "Setup" on the CD-ROM. In these directory there is a file "setup.exe". If you double click in the file, the installation of the Alfanet program will start.

If the computer can not find the drivers, the next screen will appear.



Click on "OK"



On this screen you choose "Browse"

Now you have to enter the path for the drivers. Goto the CD-ROM player. Next you go to the directory "driver".

Click on "OK". The drivers will be installed.

3.2

Control

See PC-software manual which is also available on the CD-ROM, as well as the manuals of the ALFANET controllers.

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4 Operation of relay outputs

The PC-Interface has two relays. All contacts are available from both relays at screw terminals.

Relay 1

The function from this relay can be adjusted with parameter P30.

A control alarm means that the relay will be energized when an alarm occurs.

A fail safe alarm means that the relay is energized in normal operation and when an alarm occurs it will be not energized if one of the connected panels on the network has sent an alarm message.

Pulse means that the relay will be energized for 3 seconds if there is an alarm.

Relay 2

The function from this relay can be adjusted with parameter P31.

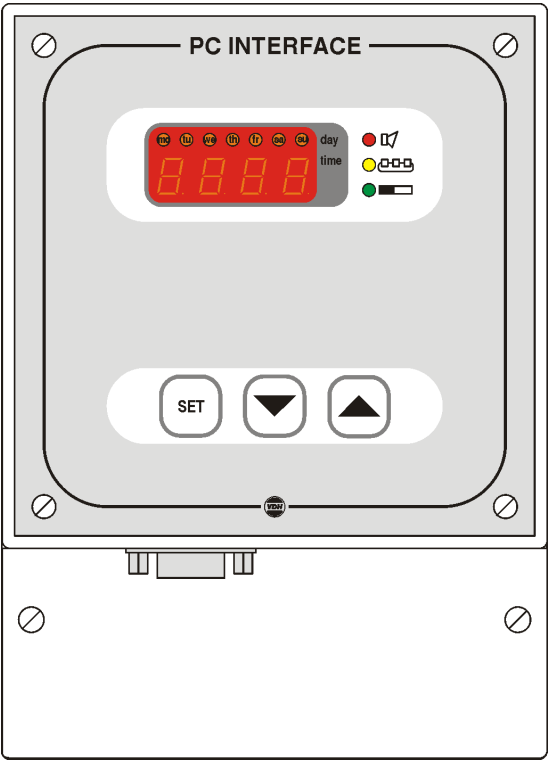
If the relay will be used as Log-buffer-full relay, the relay will be energized as one of the connected panels on the network has sent an buffer-full message. It also will be deactivate if the memory from the interface is full for 90%.

The function "external alarm" is for future purposes and is not active in this moment.

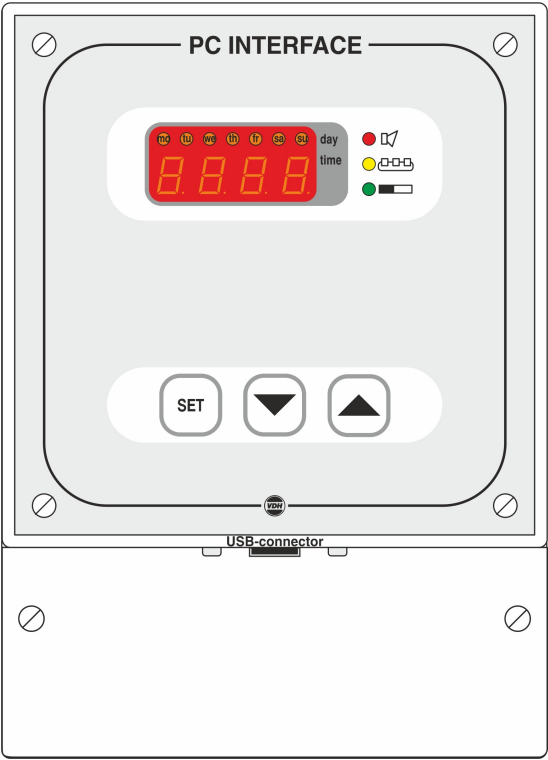
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5 Front view

* Front view Alfanet PC- Interface with RS 232, drawing 020266



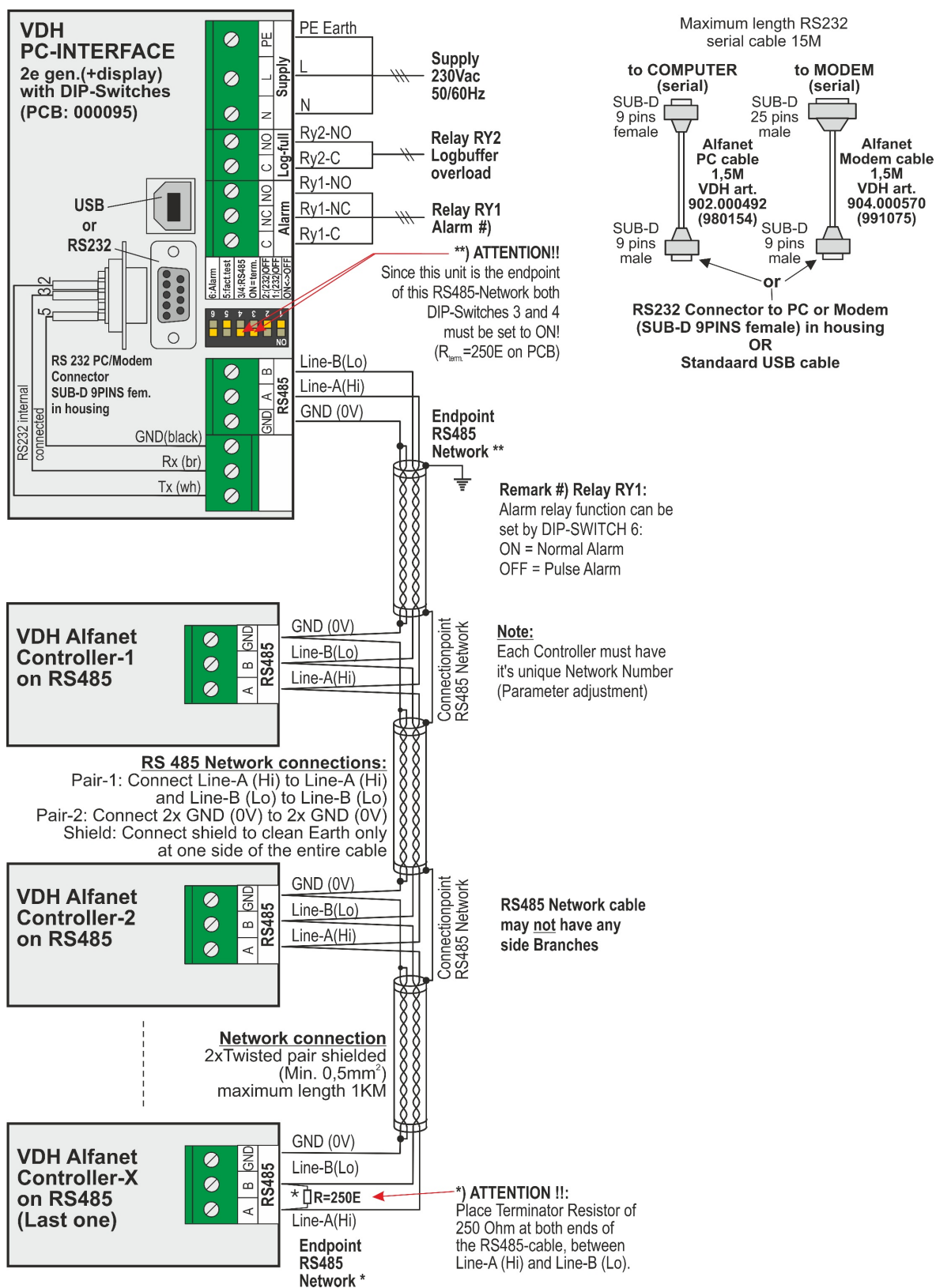
* Frontview Alfanet PC-Interface with USB, drawing 050670



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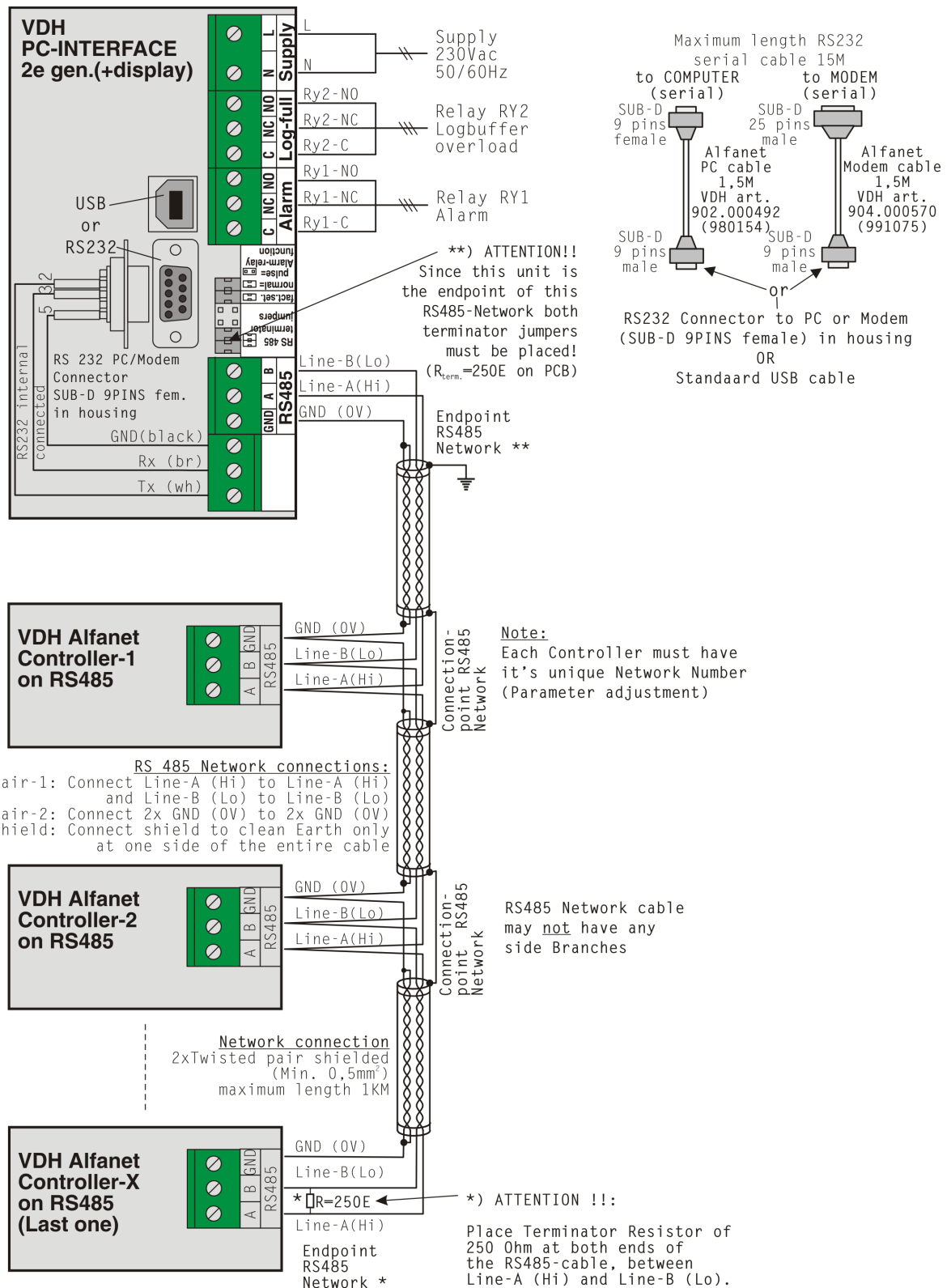
6 Connections

* Connection diagram Alfanet PC-Interface drawing 150474w0



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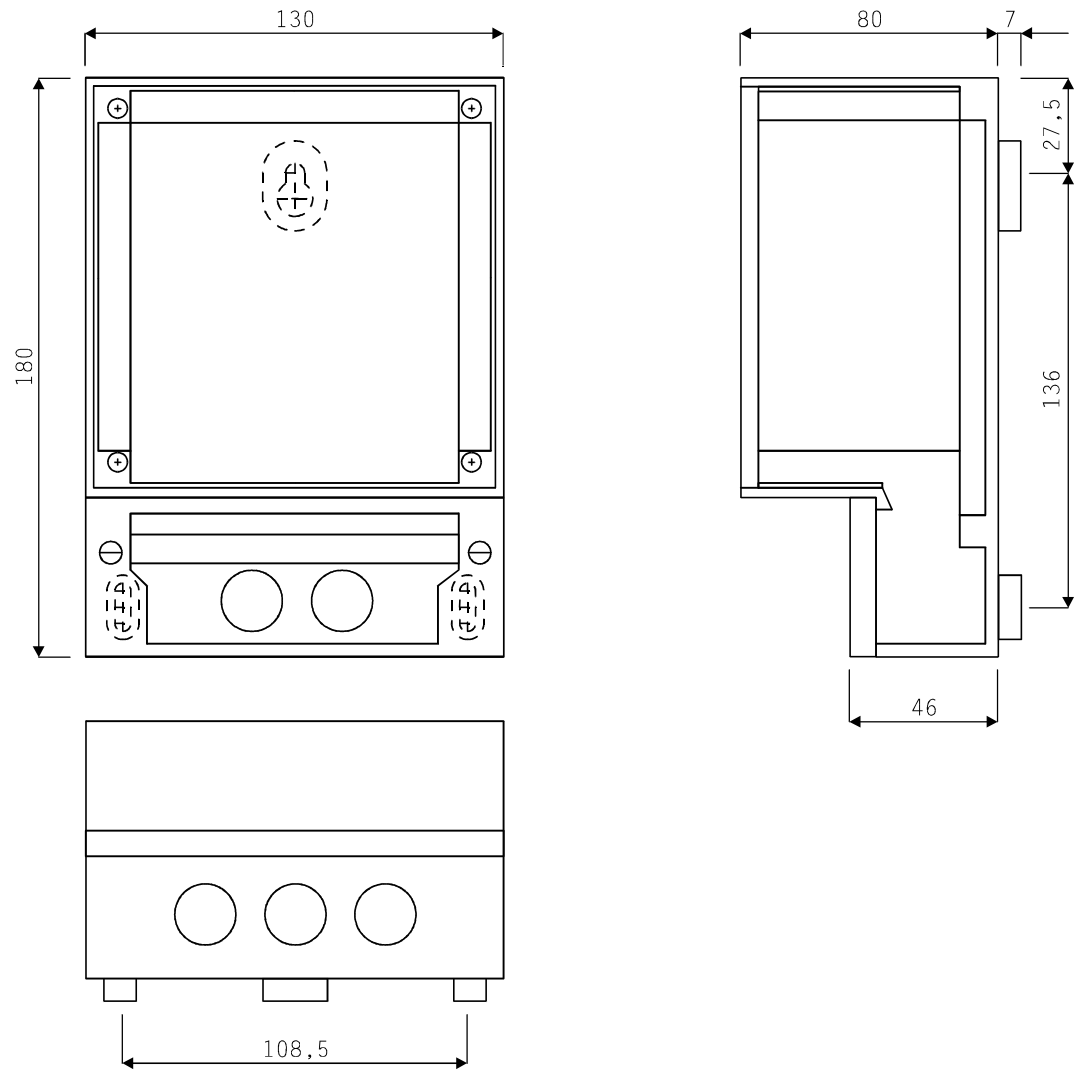
* Connection diagram Alfanet PC-Interface drawing 020976w5



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7 Dimensions

* Dimensions Alfanet PC-Interface



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