OekoSolve

Datasheet | 0S-Display for high voltage module for electrostatic precipitators

The display can be used to show and set operating parameters of the high voltage module. The display is connected to the RS485 / Modbus interface of the high-voltage module. The high-voltage module supplies the display with the necessary 24V.

The display can be connected to existing and new systems.

Electrical Connections:
The display is connected to the HV module via a 4-wire cable.

Pin + and – :   24V
Pin A and B: Modbus / RS485

Input voltage: 24 V (from HV module)
Max. power consumption: 3 W
Max. distance to HV module: 30 m

Cable Specification:

Use either a twisted paired or twisted quad paired (star quad) cable.

- E.g. standard telecommunication cable U72, F-YAY, J-YY, J-2Y(ST)-Y, A-2Y(L)2Y
- Minimal wire gauge = 0.25mm^2 (e.g. U72 1x4x0.6)
- A and B signal must be connected to the same twisted wire pair

Operation:
It is operated by the 3 buttons on the display.
As soon as the high-voltage module is supplied with power, the display switches on automatically.

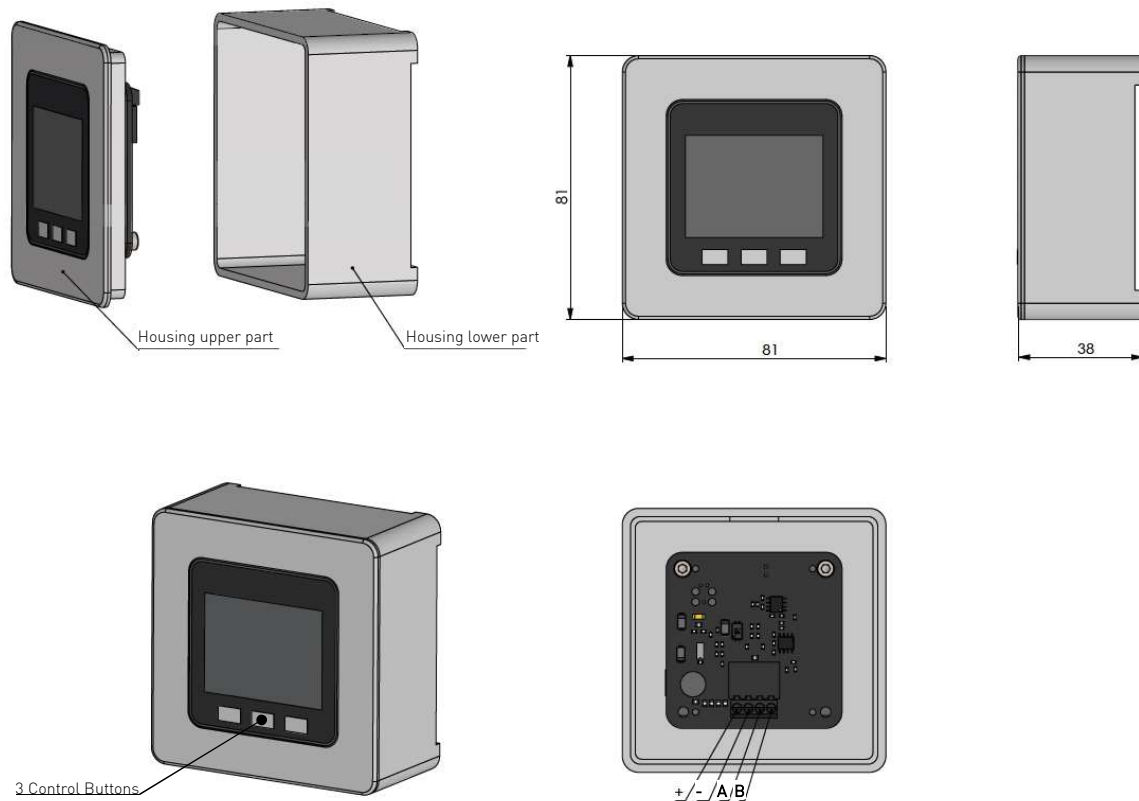The following operating values can be monitored and set:
- Temperatures
- HV voltage and power
- Operating hours and status messages (display only)
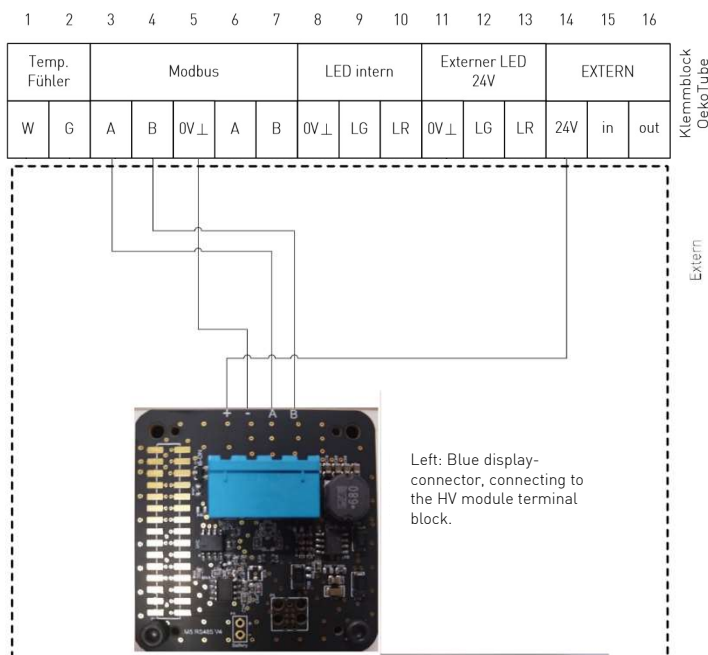
Mounting Instructions:
The display may only be installed in dry interior rooms.

Temperature range: 0°C to 40°C   (32°F to 104°F)

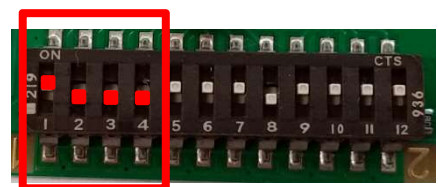# OekoSolve

Dimension:

Housing upper part | Housing lower part

81 | 81 | 38

3 Control Buttons

+ / - / A / B

Connecting with HV module

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	Temp. Fühler		Modbus					LED intern			Externer LED 24V			EXTERN			Klemmblock OekoTube
	W	G	A	B	0V⊥	A	B	0V⊥	LG	LR	0V⊥	LG	LR	24V	in	out	

Extern

Left: Blue display-connector, connecting to the HV module terminal block.

Filter terminal		Display terminal	Description
3	[A]	A	Modbus A
4	[B]	B	Modbus B
5	[0V]	-	0V ground for 24V supply
14	[24V]	+	24V extern: Supply for display

Dip-Switches at the HV module

The Dip-Switches are to be set as follows:
- die modbus address = 1   (Switch 1-3)
- force display as master   (Switch 4)

Switch 1	Switch 2	Switch 3	Switch 4
ON	OFF	OFF	OFF

Note: If the display is set as master (switch 4 = OFF), the settings of switches 5-11 are ignored.

ATTENTION: If the display is wired incorrectly, the Oekotube filter will be destroyed!