

Datasheet | OS-Display for high voltage module for electrostatic precipitators

The LCD-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 = 0.25mm² (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:

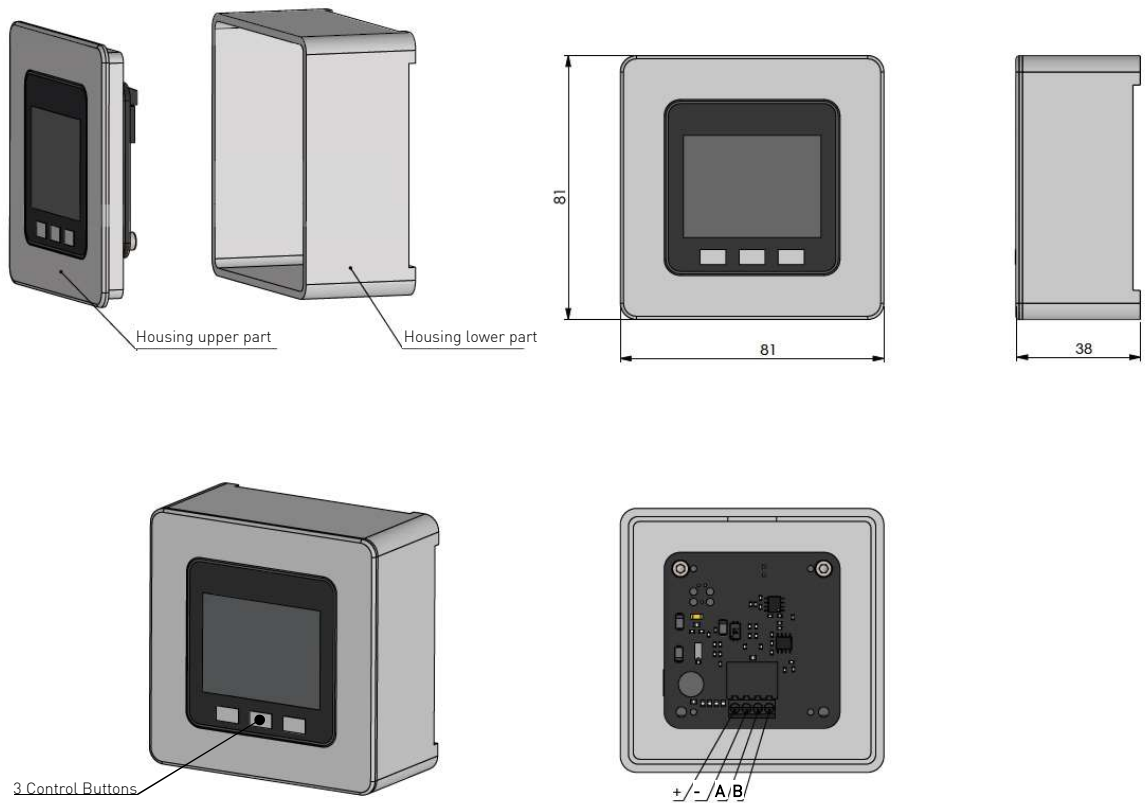
- Temperatures
- HV voltage and power
- Operating hours and status messages (display only)

Mounting Instructions:

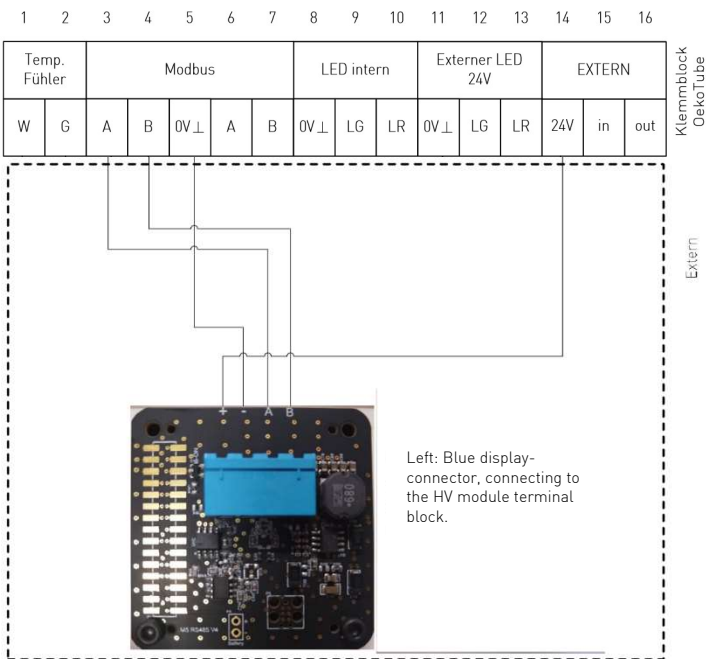
The display may only be installed in dry interior rooms.

| | |
|--------------------|-------------------------------|
| Temperature range: | 0°C to 40°C { 32°F to 104°F } |
|--------------------|-------------------------------|

Dimension:



Connecting with HV module



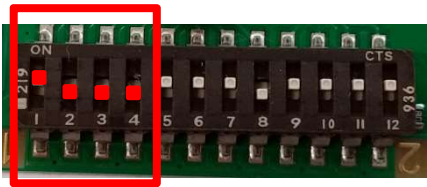
| Filter terminal | Display terminal | Description |
|-----------------|------------------|--------------------------------|
| 3 [A] | A | Modbus A |
| 4 [B] | B | Modbus B |
| 5 [0V] | - | 0V ground for 24V supply |
| 14 [24V] | + | 24V extern: Supply for display |

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!