

## Monitoring of UVC intensity with switching function Operating Power Detection – OPD 2

The OPD 2 evaluation unit controls service life according to the UVC rate. The level of service life is indicated by LEDs. In addition, every LED is pictured by a potential-free contact being implemented as a changeover contact.

These contacts may be used for external signaling or switching operations.



### Technical data of the monitoring unit

Voltage supply 230 V AC (110 V AC, 24 V DC or 12 V DC possible)

Input Input signal from SiC-UV-sensor

### Reading

Steady light (green LED) at > 70% of starting intensity

Pre-alarm (yellow LED) at < 70% of starting intensity

main alarm (red LED) at < 50% of starting intensity

red LED blinking No sensor, faulty Sensor

green LED blinking Cable break, faulty measurement amplifier  
Overdriven or faulty measurement amplifier

Additional function Potential-free contact of every LED implemented as a 100 mA changeover contact

With this option, light output is directly measured by a sensor. As soon as the service voltage is on, the unit starts seeking sensor figures in a cyclical way. Previously, however, the start-up process is implemented. Red, yellow and green LEDs will be flashing one after another for 1 second. This enables to control de LEDs' functioning. In addition, a specific interruption of the procedure enables the unit's referencing to the sensor's current measuring value. In that case the start-up procedure must be interrupted twice in a row by specifically disconnecting the OPD during the yellow phase. During its subsequent connection, the current sensor value (light output) will be saved in non-volatile way in the EEPROM as a reference value (100%). Referencing will be confirmed by a single blinking of the green LED. Thereafter, the green LED must light up. The system has been referenced anew. Two thresholds ( $P_{\text{yellow}}/P_{100\%}$  in %, as well as  $P_{\text{red}}/P_{100\%}$  in %) may also be saved in the unit's EEPROM. If the current sensor's measuring value is  $P > P_{\text{yellow}}$ , the green LED will light up. In case the current measuring value falls short of this threshold, the yellow LED will be activated. Should the second  $P_{\text{red}}$  threshold fall short, red would be signaled. If no measuring value can be established, the red LED will be blinking and so signaling a faulty device. Its causes could be the following: no sensor is on; a faulty sensor; cable breaking or a short-circuit; a faulty measurement amplifier of the device. Should the green LED blink, the measurement amplifier would be either overdriven or faulty. A faulty reading might therefore result.

