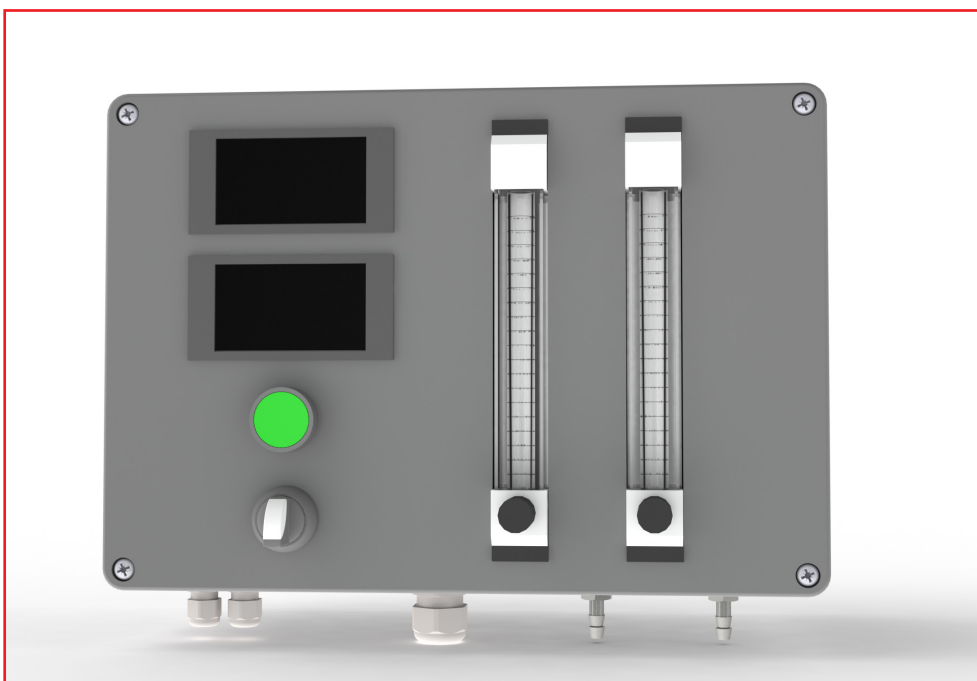
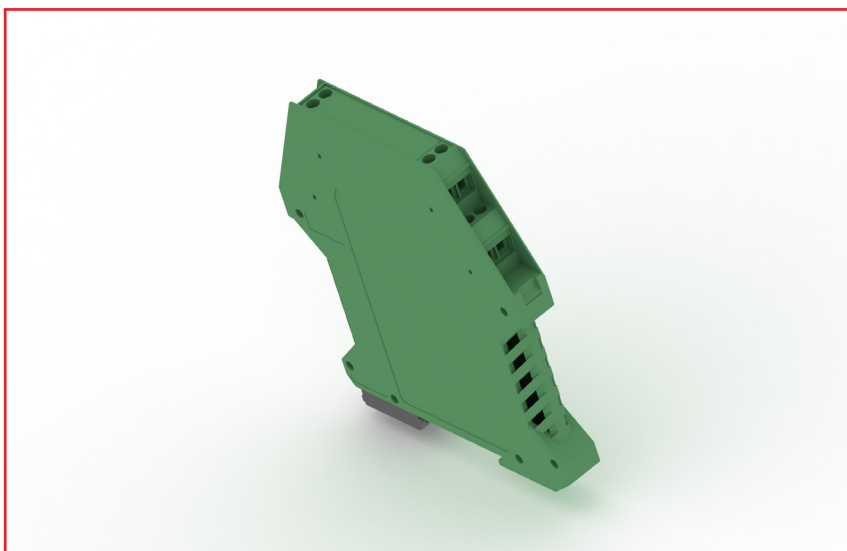
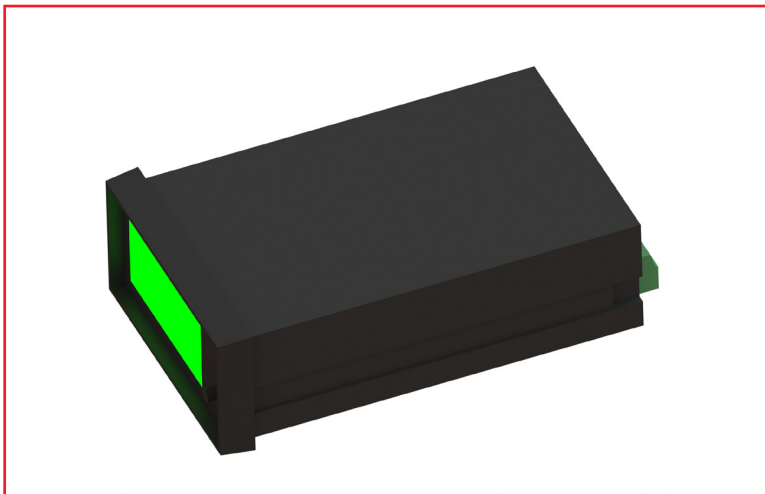
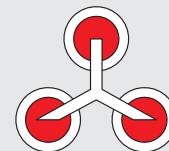


## Process connection with small flange

### Accessories





## Air Supply Unit

### Air Supply Unit

The unit supplies the oxygen probe with purging and, if necessary, reference air. The activation is triggered by electromagnetic valves using a 24V DC or 230V/50Hz (optionally 120V/60Hz) voltage.

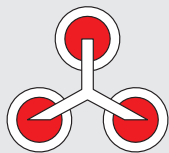
The air flow is adjusted with a variable flow-meter for each air system individually. The flow range for the reference air is between 5 and 50 l/h, the purging air range 50 and 500 l/h. The air is lead through nozzles, suitable for flexible tubes with 6mm inner diameter. The nozzles are mounted with a G1/8 thread and can be replaced by any nozzle connection system with a respective thread.

All parts are placed within a Aluminum casing, the cover can be modified with a hinge, to be protected against dust and dirt.

Upon request additional components such as amplifiers or switches can be included into the units as well.

<i>Material-No</i>	<i>Description</i>	<i>Specification</i>
92001463	<i>Air Supply Unit Oxygen probe 230V AC</i>	<i>30-0230-MP</i>
92001464	<i>Air Supply Unit Oxygen probe 24V DC</i>	<i>30-0024-MP</i>





## Reading Display Unit

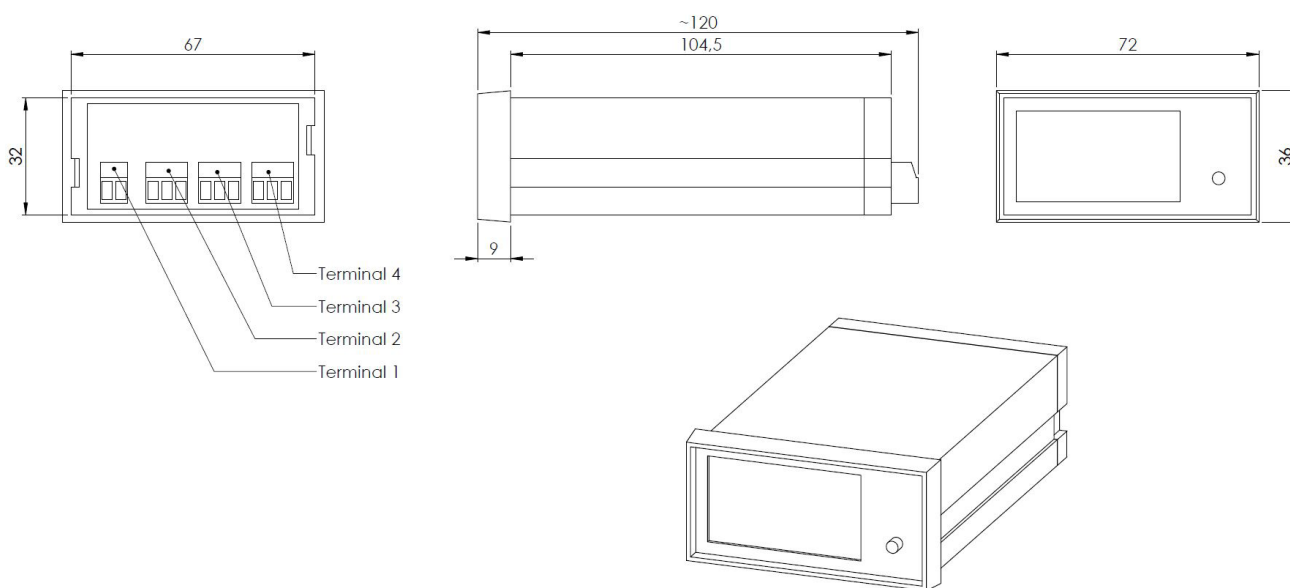
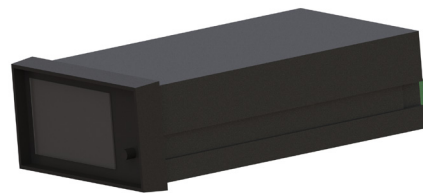
### Reading Display Unit

The O<sub>2</sub> meter is designed to be placed into controlling cabinets with a 1/4 DIN slot. It displays the actual reading of the probe voltage and temperature as well as the %-O<sub>2</sub>. The inner resistance of the meter is high enough to prevent a loading of the oxygen robe's voltage. The meter can be powered by 24V/DC or 230V/50Hz.

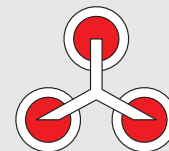
The output signal can be set as 4..20mA, RS485 or a simple -2/+2V. The RS485 output uses @[Typ]:O<sub>2</sub>=XX.XXE+XX%[CC] as configuration. The input signal of the thermocouple can be set as type S, K or N.

Following pins are available:

- Terminal 1 – 2 pin – Power supply + / -
- Terminal 2 – 3 pin – Signal output + / - / GND
- Terminal 3 – 3 pin – Signal input emk thermocouple + / - / GND
- Terminal 4 – 3 pin – Signal input emk probe + / - / GND



Material-No	Description	Specification
92001984	O <sub>2</sub> Meter 48V DC - 4..20mA	TTAG-I0420-048
92001985	O <sub>2</sub> Meter 260V AC - 4..20mA	TTAG-I0420-260
92001986	O <sub>2</sub> Meter 48V DC - RS486	TTAG-RS486-048



## Isolating amplifiers

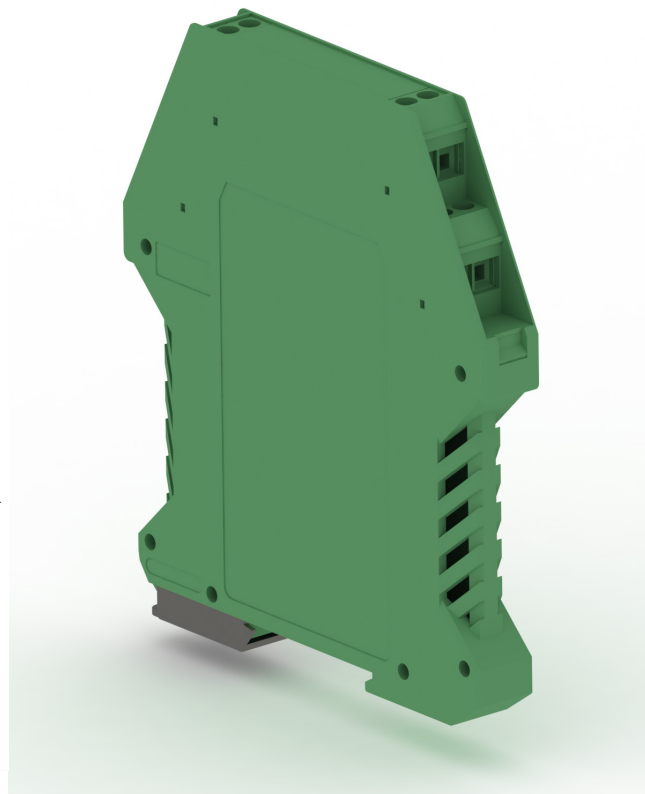
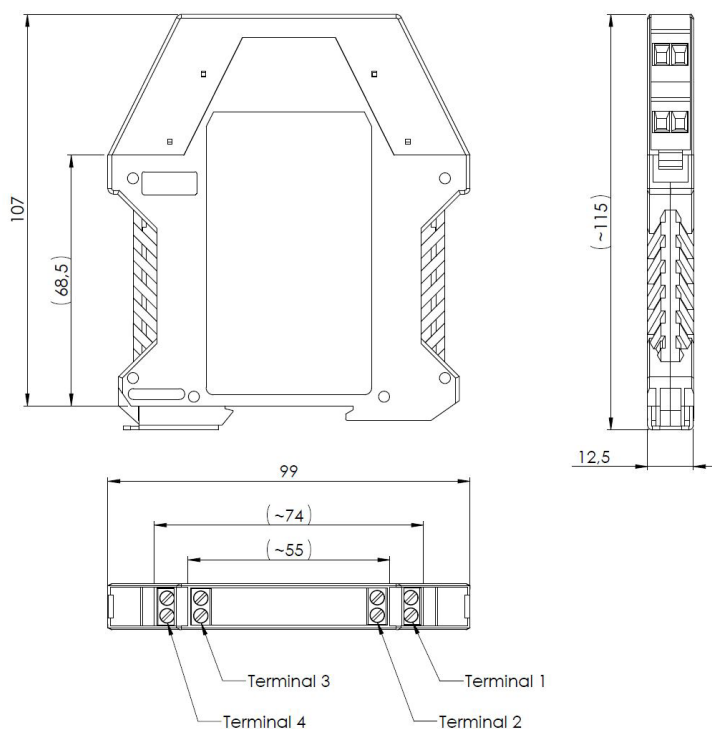
### Isolating amplifiers

This amplifier is applied in environments where the probes output signal is interfered by magnetic fields or equipment with low inner resistance (such as old SPS units). Due to a very high inner resistance and a galvanic isolation this amplifier does not load the oxygen probe and ensures a save operation.

The output signal can be set as a  $-2/+2V$  DC or  $4..20mA$  signal. The power supply of the amplifier can be chosen between 48V or 230V. The different modes can be set via jumpers individually.

Following pins can be used:

- Terminal 1 – Power supply + / -
- Terminal 2 – Input signal emk probe + / -
- Terminal 3 – Output probe + / -
- Terminal 4 – not assigned



Material-No	Description	Specification
92001073	Isolating amplifiers Oxygen probe for DIN cap rail 48V/DC with $4..20mA$ Signal	TCA-TVOP-048-4A
92001074	Isolating amplifiers Oxygen probe for DIN cap rail 48V/DC with $-2V .. +2V$ Signal	TCA-TVOP-048-2V
92001085	Isolating amplifiers Oxygen probe for DIN cap rail 230V/AC with $4..20mA$ Signal	TCA-TVOP-230-4A
92001086	Isolating amplifiers Oxygen probe for DIN cap rail 230V/AC with $-2V .. +2V$ Signal	TCA-TVOP-230-2V