

 **Analoger Spannungsüberwachungssensor**

Dieser Spannungsüberwachungssensor ist zum Anschluss an das Sensormodul des ELM Systems geeignet. Er dient zur Überwachung der Netzspannung.

- 3000-U40-00 Kabelende mit offenen Kontakten
- 3000-U40-01 mit Stecker für ELM 19"-Einschübe oder ELM Box-Module

Technische Änderungen vorbehalten.

 **Analogue Mains Voltage Sensor**

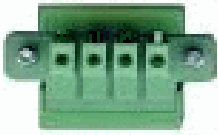
This voltage sensor can be connected to a sensor module of the ELM system. It is used to monitor the mains voltage.

- 3000-U40-00 cable ends with open contacts
- 3000-U40-01 with connector plug for ELM 19"-racks or ELM box modules

Subject to technical changes.



Fig. 1: 3000-U40-01

Plug front side view	Pin number of plug	Signal	Wire color
	1	(not used)	-
	2	Sensor	orange
	3	Ground	white
	4	(not used)	-

Characteristics

- Outlet system: Type C, CEE 7/16 (Euro plug, round 2-pin)
- Measuring range: 80 ... 250 V AC, 47 ... 63 Hz
- Output voltage: 80 V: 1900 mV, 260 V: 5900 mV
- Output resistance: 1.8 kΩ
- Dimensions: 75 x 43 x 38 mm³
- Cable length: 3 m

Using with ELM sensor module 3000-U13

When connecting the sensor to the 3000-U13 it is possible to assign set-points for switching relays and/or initiating alarms. Because of the sensor output resistance of 1.8 kΩ and the U13 input resistance of 13.3 kΩ the voltage measured by U13 will be 1670 ... 5500 mV. The mains voltage dependent on the output voltage is calculated according to the below formula:

$$\text{MainsVoltage[V]} = (\text{voltage[mV]} * 0.051) - 5$$

Parameters for ELMcontrol:

lower value	lower limit	upper value	upper limit	fitting scale	fitting offset
80 V AC	1670 mV	260 V AC	5200 mV	0.051	-5.0