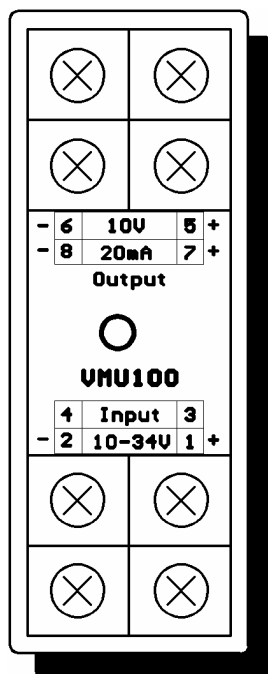


AC Voltage (RMS) Measuring Transducer VMU100

Functional ranges:

Input (rated)	Output	Jumper setting
0-231V	0-20mA	A
0-231V	4-20mA	C
0-231V	0-10V	A
0-231V	2-10V	C



Application:

The Measuring Transducer VMU100 is used to transform the AC input voltage into an 0/4-20mA or 0/2-10V output signal for driving display units and controls. The potential separation of the measuring circuit from the output circuit and the supply voltage (10-34VDC) make the VMU100 suitable in particular for use in disturbed environments and with ambiguous potentials. This allows the VMU10 to also measure AC voltages on other voltage levels.

After the measurement of the actual effective value, the input value is transferred to the output in linear fashion. Internal jumper settings allow the device to be operated at output ranges of 0-20mA, 4-20mA, 0-10V and 2-10V. The trimmer potentiometers located on the top of the device allow the output value and the zeroing to be adapted to the periphery.

Connections and Settings

The output circuit can supply the 20mA signal or a simultaneous 10V signal (top terminals). The supply voltage is connected to the bottom terminals. The coding of the jumpers for setting the operating modes is usually carried out according to customer specifications. The customer can change the jumper settings at any time by opening the snap-in housing (by pressing in the two nipples on the ends) and changing the jumper setting (with no operating voltage applied).

Technical Data

Typ	AC Voltage (RMS) Measuring Transducer VMU100
Construction	Plastic housing on 35 mm hat acc. to DIN EN 50022
Material of housing	Bayblend FR 1439/0240 modified ABS with burning protection UL 94 VO
Dimension/Weight	22,5x68x109mm (WxHxD), appr. 100 g
Supply voltage	10 - 34 VDC, max. 100mA, mispolarisation protection (or 15-20VAC, 100mA)
Input	AC voltage 50-400Hz 0,2 - 400V (on request of customer), True RMS measurement
Outputs	0/4-20mA (max.500 Ohm) and 0/2-10V (min. 1KOhm or max. 10mA)
Class of accuracy	< 1% %
Linear distortion	< 0,5%
Temperature drift	< 0,25% / 10°C
On-period	100 %
Voltage protection	Rated isolation voltage 1000V 50Hz (Input- Output, Input- Aux., Output- Aux.)
Connecting terminals	2 Wires per terminal up to 2,5 mm² each
Type of protection	Housing IP 40 , terminals IP 20 (VDE 0106T100/VBG4)
Ambient temperature	-10 °C to +55°C, 95% Hum
Mains isolating	EN 60 742 (safety transformers)
General regulations	EN 50 178 (electrical units in power current installation)
Radio interference	EN 55 022/B
EMV	EN 61000 und EN V 50 140
Installation position	Any
Maintenance	Maintenancefree