

# Universal-Measuring-Transducer MU2000K

## AC and DC, Voltage and Current

### MU2000K



**Part number:** T236053

Measuring transducers MU2000K can measure DC- and AC- voltages up to 600 V and AC- and DC- currents 0-1/5 A.

Preset measuring ranges can be selected. More measuring ranges (zero and full scale) can be easily scaled.

The output signals DC 0/2-10 V and 0/4-20 mA are insulated from measuring input and supply voltage.

With its universal supply voltage AC/DC 24-240 V the measuring transducer can be connected to all common supply voltages.

The MU2000K e.g. is suitable for measuring DC voltages and charging currents at batteries or for measuring AC voltages and currents in plants for own generation of energy.

#### Inputs:

- Voltage AC/DC 600 V (preset 0-30/150/300/600V, 80-120V)
- Current AC/DC 5 A (preset 1/5 A)
- AC and DC measuring without switching over

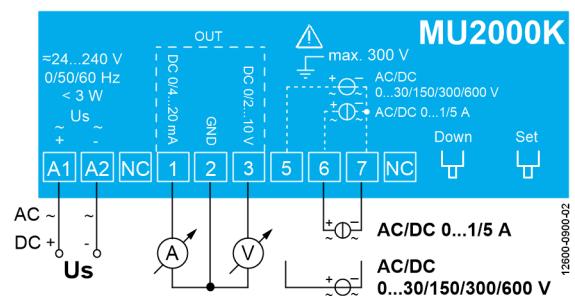
Zero and full scale for other ranges can be scaled by the user.

#### Outputs:

- DC 0/4-20 mA
- DC 0/2-10 V
- Insulation between input, output and supply voltage

#### Displays and control elements:

- 2 buttons for scaling
- 4 LEDs for display of state and scaling
- Universal supply-voltage AC/DC 24-240 V
- Housing type K, 22,5 mm wide



### Technical Data

Rated supply voltage Us

AC/DC 24V-240 V, 0/50/60 Hz < 3 W  
DC 20,4 - 297 V, AC 20 - 264 V

Input voltage

AC/DC 0-30/150/300/600 V, 80 - 120 V,  $R_i = 500 \text{ k}\Omega$ ,  
max. 600 V, max. 300 V to GND

Accuracy

DC  $\leq 0,2\%$  AC  $\leq 0,5\%$  (50/60 Hz) from full scale,  
drift  $< 0,02\% K$

Input current

AC/DC 1A, 5A, max. 7,5 A/4s, 25A/1s, 30 m $\Omega$   
DC  $\leq 0,2\%$ , AC  $\leq 0,5\%$  (50/60 Hz) from full scale,  
drift  $< 0,02\% K$

Accuracy

Measuring method/ Resolution

RMS (AC), Averaging (DC)/ 14 Bit

Output voltage

DC 0/2-10 V, load min. 1 k $\Omega$

Accuracy

$\leq 0,3\%$  from full scale, drift  $< 0,01\% / K$

Resolution

11.6 Bit,  $< 3,1 \text{ mV}$

Output current

DC 0/4-20 mA, load max. 500  $\Omega$

Accuracy

$\leq 0,3\%$  from full scale, drift  $< 0,015\% / K$

Resolution

11,6 Bit,  $< 6,1 \mu\text{A}$

Error load

0,3 % of current x (250 $\Omega$  - load / 250 $\Omega$ )

Galvanic insulation

Supply voltage - input - output

Measuring time/ Averaging

45 ms + 20 ms x number of averages (1/2/8/16/32 values)

Test conditions

see "general technical information"

Rated ambient temperature range

-20 °C ... +50 °C

Housing dimensions (H x W x D)

Design K, 75 x 22,5 x 115 mm

Protection housing/terminals

IP 40 / IP 20

Attachment

35 mm standard rail or screws M4

Weight

app. 100 g