

# Universal-Measuring-Transducer MU2000K

## AC and DC, Voltage and Current

### MU2000K



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 0-30/150/300/600 V, 80-120V)
- Current AC/DC 5 A (preset 1/5 A)

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

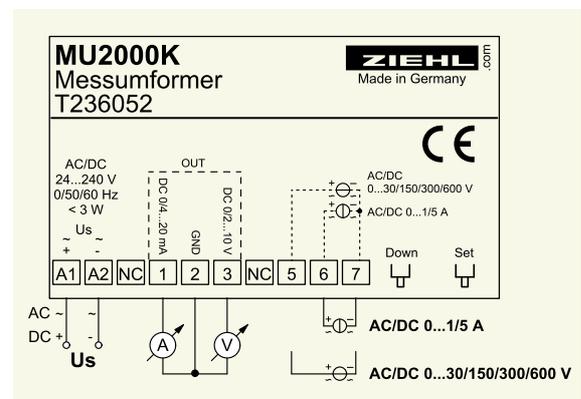
#### Outputs:

- 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

Order-number **T236052**



### Technical Data

#### Rated supply voltage $U_s$

AC/DC 24V-240 V, 0/50/60 Hz < 3 W < 8 VA  
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

#### Accuracy

DC  $\leq 0,1\%$  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 $\Omega$

#### Accuracy

DC  $\leq 0,1\%$ , AC  $\leq 0,5\%$  (50/60 Hz) from full scale, drift < 0,02 %/K

#### 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 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

20 ms

#### Averaging

adjustable 1, 2, 4, 8, 16, 32 measurements

#### Test conditons

see "general technical information"

#### Rated ambient temperature range

-20  $^{\circ}\text{C}$  ... +50  $^{\circ}\text{C}$

#### 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