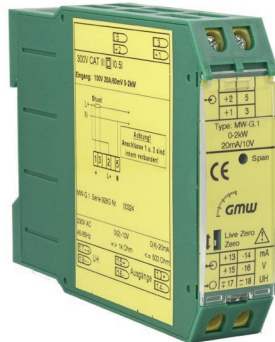


Measuring transducer for direct current power



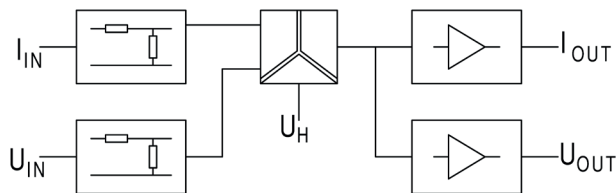
Type:
MW-G.1

Application

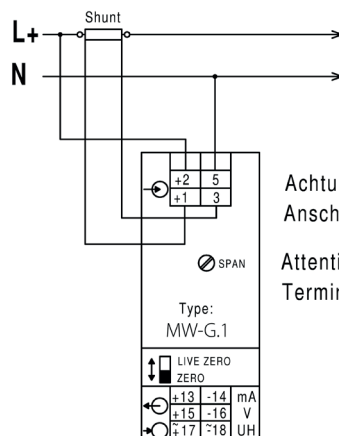
The measuring transducer MW-G.1 is used for the transformation and isolation of a DC power into an impressed direct current and direct voltage signal. The calibrated double outputs are switchable between 0-20 mA and 0-10 V or 4-20 mA and 2-10 V.

Function

The parameters to be measured are transmitted to the analog multiplier via internal voltage dividers or shunts. The instantaneous values are then multiplied and formed as the mean value of a direct voltage matching the active power in a subsequent integration stage. The galvanic isolation between input and output signals is done using optocoupler. An downstream amplifier supplies the impressed direct current and direct voltage signals. Both outputs are no-load proof and short-circuit proof. Connecting the two outputs is not permissible. An auxiliary voltage is required.



Connection



Achtung:
Anschlüsse 1 u. 2 sind intern verbunden!

Attention:
Terminals 1 and 2 are connected internally!

Technical data

| | | | |
|------------------------------|---|---|---|
| Input | Input variable | Direct current power (DC power) | |
| | Nominal power | 50-150 % of the DC power $P = U \times I$ | |
| | Rated current | via separate shunt with 0-60 mV, $R_i \geq 10 \text{ M}\Omega$ | |
| | Rated voltage | a value from 0-10 V to 0-600 V, $R_i \geq 4 \text{ k}\Omega / \text{V}$ | |
| | Overload permanent | Current input (shunt) 1.2 fold Voltage input 5-fold / max. 830 V | |
| | High surge load | Current input 5-fold, 5 s Voltage input 5-fold / max. 1000 V 1 s | |
| | Output | Output variables | Double output |
| | | Rated values | 0-20 mA / 500 Ω load and 0-10 V / max. load 10 mA as well as 4-20 mA / 500 Ω load and 2-10 V / max. load 10 mA switchable on the front side |
| | | | |
| Transmission behavior | Accuracy | $\pm 0.5 \%$ | |
| | Temperature range | - 15 °C to +20 °C to +30 °C to 55 °C | |
| | Temperature influence | < 0.3 % at 10 K | |
| | Auxiliary voltage influence | no | |
| | Load influence | no | |
| | External magnetic field influence | no (400 A/m) | |
| | Residual ripple | < 30 mVss | |
| | Response time | < 300 ms | |
| | Open-circuit voltage | max. 24 V | |
| | Current limiting | max. 2-fold in case of overload | |
| Test voltage | 4 kV between input, output, auxiliary voltage | | |
| Auxiliary voltage | | 230 V AC $\pm 20 \%$, 45-65 Hz, 2.5 VA | |
| | Options | <ul style="list-style-type: none"> ● 110 V AC $\pm 20 \%$, 45-65 Hz, 2.5 VA ● 24 V DC, - 15 % to + 25 %, 2 W ● 6-30 V AC + DC, 2 VA ● 36-265 V AC + DC, 2 VA | |
| | | | |
| | | | |
| | | | |
| Dimensions | Housing | Housing A, (22.5 mm wide) Page A1 | |
| Weight | | 190 g | |
| Installation | Fastening | Snap-on fastening on top hat rail 35 mm accord. to DIN EN 60 715 | |
| | Electrical connection | Screw terminal max. 4 mm ² | |