

## Measuring Transducers

### Type Alternating Current-Transducer MA-1.1s Sinusoidal



The measuring transducer MA-1.1s is used for the transformation and galvanic isolation of a sinusoidal alternating current into an impressed direct current and (or) direct voltage signal. The alternating current to be measured is transmitted to a current transformer, serving for galvanic isolation and transformation and from there to the downstream rectifier circuit. The direct voltage generated there is amplified and transformed into an impressed direct current and (or) in an impressed direct voltage. The output is no-load proof and short-circuits proof. Only for "LIVE ZERO", an auxiliary voltage is required.

#### Technical Data

##### Input Data

<b>Input variable</b>	sinusoidal alternating current
<b>Rated values</b>	<b>0-1A, 0-1,2 A, 0-5A or 0-10 A</b>
<b>Rated frequency</b>	50-60 Hz or 400 Hz
<b>Energy consumption</b>	1 VA, with "LIVE ZERO" 0,3 VA
<b>Overload permanent</b>	2-fold
<b>High surge load</b>	20-fold, 1 sec.

##### Output Data

<b>Outputs</b>	0-20 mA/0-500 Ohm load <b>no Auxiliary Voltage</b> or 0-10 V max. 10 mA load or 4-20 mA/0-500 Ohm <b>no Auxiliary Voltage</b>
	4-20 mA/0-500 Ohm load and 2-10 V max. 10 mA <b>with Auxiliary Voltage</b> load, switchable on front side, if both outputs are used simultaneously, the maximum load on the voltage output is 1 mA, $I_{max} < 40 \text{ mA}$ , $U_{max} < 24 \text{ V}$
<b>Option</b>	<ul style="list-style-type: none"> <li>• frequency module a value from 0-5 Hz to 0-10 kHz <ul style="list-style-type: none"> <li>○ „open-collector“ NPN, max. 30V, 100 mA load, impulse/break 50/50 %</li> <li>○ square wave signal 5V, max. 10 mA load, impulse/break 50/50 %</li> </ul> </li> </ul>
<b>Load influence</b>	no
<b>Residual ripple</b>	< 40 mVss

# Measuring Transducers

## Type Alternating Current-Transducer MA-1.1s Sinusoidal

### Auxiliary Voltage

<b>Default</b>	230 V AC $\pm 20\%$ , 45-65 Hz, 2,5 VA
<b>Options</b>	<ul style="list-style-type: none"> <li>• 110 V AC <math>\pm 20\%</math>, 45-65 Hz, 2,5 VA</li> <li>• 24 V DC, -15 % to +25 %, 2 W, (EMC EN 61326 class A)</li> <li>• 6-30 VAC+DC or 36-265 VAC+DC, 2 VA, (EMC EN 61326 class A)</li> </ul>

### General Data

<b>Accuracy</b>	$\pm 0,5\%$ full scale at 5-100 % of rated value (with auxiliary voltage 0-100 % of rated value)
<b>Frequency influence</b>	$< 0,05\%$ with 10 Hz
<b>Response time</b>	$< 400$ ms
<b>Operation temperature</b>	-15 to +20 to +30 to +55 °C
<b>Storage temperature</b>	-25 ... +85 °C
<b>Temperature influence</b>	$< 0,1\%$ at 10 K

### Installation

snap on mounting on top hat rail 35 mm (EN 60715)  
 The equipment is suitable for tight on tight assembly, however, with ambient temperatures of  $>45\text{ °C}$  a distance apart of 10 mm is recommended. The assembly location should if possible be free from vibration.

### Terminals

screw terminal max. 4 mm<sup>2</sup>, tightening torque 0,8 Nm

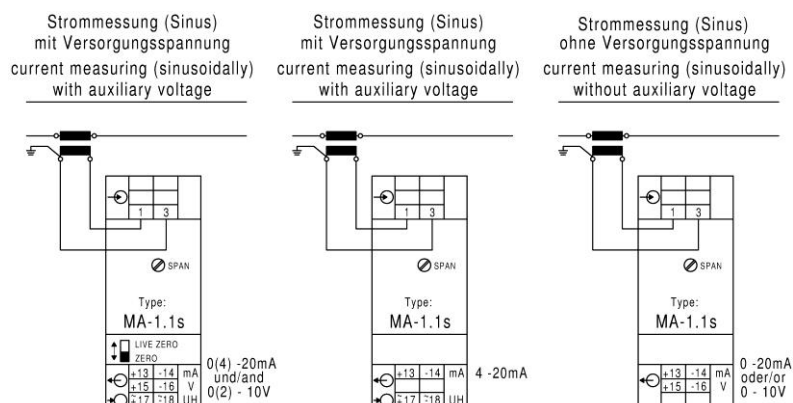
### Weight

190 g

### Adjustment

At transducers with double output, the output can be changed between "LIVE ZERO" (4-20 mA/2-10 V) and "ZERO" (0-20 mA/0-10 V) with the slide switch. Please refer to the manual.

### Connection



For devices with frequency output further outputs not available. Terminals +13 and -14 are the frequency output

**GILGEN Müller & Weigert (GMW) GmbH & Co. KG,**  
 Am Farrnbach 4A, D-90556 Cadolzburg

Telefon: +49 9103 7129-0, Fax: +49 9103 7129-207

[www.g-mw.de](http://www.g-mw.de) [info@g-mw.de](mailto:info@g-mw.de)