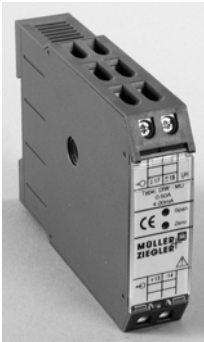


# MEASURING TRANSDUCERS FOR ALTERNATING CURRENT (SINUSOIDAL) FOR DIRECT CONNECTION UP TO 50 A OR 60 A

DIW-MU



- General information** This operating manual is included with the equipment as standard. It contains the information required for correct usage. It is aimed at trained personnel and specialist staff who are familiar with the assembly, installation and commissioning of the product described here. If additional information is required, further details can be requested by the address given below.
- Conformity** This equipment conforms to the requirements of the Directive from the Council of the European Community on the harmonisation of the member states regarding electromagnetic compatibility, EMC Directive 2004/108/EC, as well as Low Voltage Directive 2006/95/EC.
- Application** The measuring transducers DIW-MU serve to convert a sinusoidal alternating current into a load-independent direct-current or direct-voltage signal.
- Function** The alternating current to be measured will get via a opening in the housing where you can put through the circuit to the succeeding rectifying circuit via a current transformer serving for galvanic separation. The direct voltage gained in this way will be increased and converted into a load-independent direct-current or into an impressed direct voltage. The outputs are no-load resistant and short-circuit proof. An auxiliary voltage will be required only in case of "live zero" .

## Technical data

<b>Input</b>	Input quantity	sinusoidal alternating current	
	Rated values	0-10 A or 0-12 A leading through the primary wire 5 x 0-12,5 A or 0-15 A leading through the primary wire 4 x 0-25 A or 0-30 A leading through the primary wire 2 x 0-50 A or 0-60 A leading through the primary wire 1 x	
	Rated frequency	50 Hz, 60 Hz or 400 Hz	
	Overload permanent Surge overload	2-fold 20-fold 1 sec.	
<b>Output</b>	Output quantities	single-output	
	Rated values Option	0-20 mA/500 Ohm of load or 0-10 V max. load 10 mA - "live zero" 4-20 mA/500 Ohm of load (aux. will be required)	
<b>Dynamic system behaviour</b>	Accuracy	+/- 0,5 % at 5-100 % of the rated value	
	Frequency influence	< 0,01 % with difference frequency 10 Hz	
	Temperature range	-15°C up to +20°C up to +30°C up to +55 °C	
	Temperature influence	< 0,1 % at 10 K	
	Influence of aux.	none	
	Load influence	none	
	External magnetic field influence	none (up to 400 A/m)	
	Residual ripple	< 30 mV <sub>ss</sub>	
	Response time	< 400 ms	
	No-load voltage Current limitation	max. 24 V max. 2-fold in case of saturation	
<b>Adjustment</b>	Testing voltage	4 kV between input and output, input and aux., output and aux.	
	After taking off the plexiglass cover it is possible to adjust with the potentiometer which is named "SPAN" the final value and with the potentiometer which is named "ZERO" the zero-point.		
<b>Regulations</b>	EMC	DIN EN 61326	
	Mechanical strength	DIN EN 61010 part 1	
	Electrical security	DIN EN 61010 part 1 Housing all insulated, protection class II, at a working voltage up to 300V (network to neutral conductor) degree of pollution 2, overvoltage category CAT III at a working voltage up to 600V (network to neutral conductor) degree of pollution 2, overvoltage category CAT II	
	Accuracy, overload	DIN EN 60688	
	Separation	DIN EN 61010 part 1, 3,52 kV 50 Hz 10 sec.	
	Air gaps and creep distances	DIN EN 61010 part 1	
	System of protection	DIN EN 60529 housing IP30, terminals IP20	
	Connection	DIN 43807	

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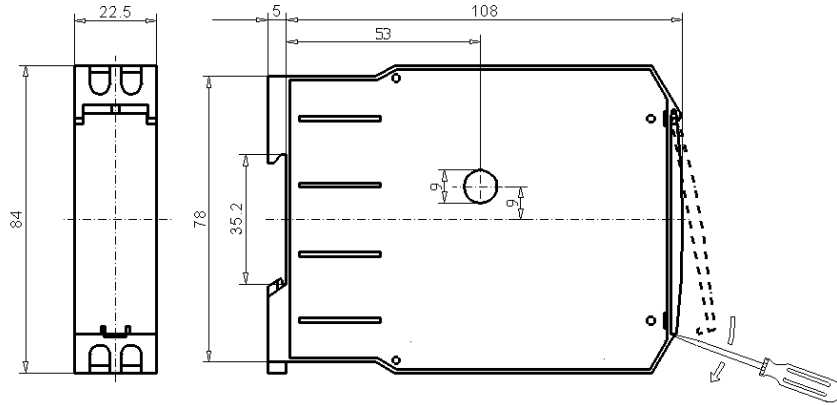
**Auxiliary voltage**

- Option
- Only required in case of "live zero":  
 230 V AC  $\pm$  20 %, 45-65 Hz, 2,5 VA
- 110 V AC  $\pm$  20 %, 45-65 Hz, 2,5 VA
  - 24 V DC, -15 % bis +25 %, 2 W, (EMC DIN EN 61326 class A)
  - 6-30 V AC + DC or 36-265 V AC + DC, 2 VA, (EMC DIN EN 61326 class A)

**Weight**

190g

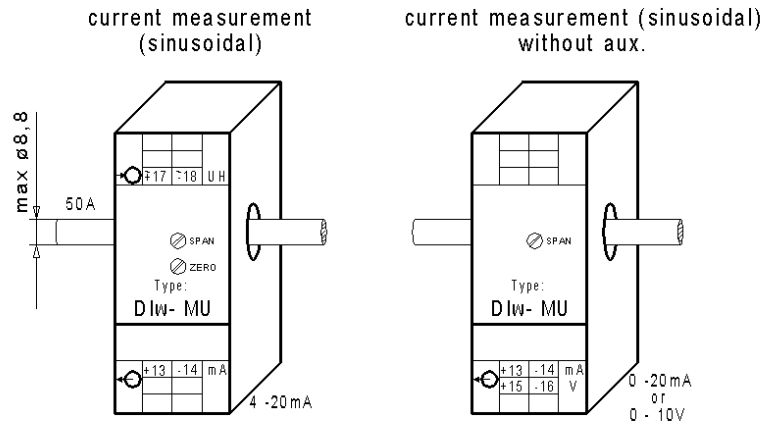
**Dimensions**



**Installation**

Attachement snap-on mounting according to DIN EN 50 022  
 Electrical connection threaded terminal end 4 mm<sup>2</sup> max.

**Connection**



**Warning!** Before starting any work on or in a device, it must be disconnected from the mains or switched to a voltage-free state.

**Maintenance** The device is maintenance-free when used correctly.

**Caution!** Servicing or maintenance work must only be carried out by trained specialist personnel.

