



Measuring transducer for alternating current (AC)

(sinusoidal)
for direct connection
up to 50 A , 60 A, 100 A or 150 A

Type:
DIW-MU



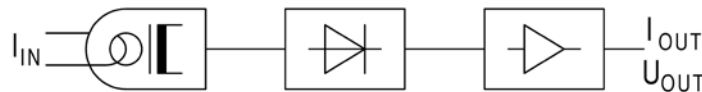
Application

The measuring transducer DIW-MU is used for the direct transformation of a sinusoidal alternating current into an impressed direct current or direct voltage signal.

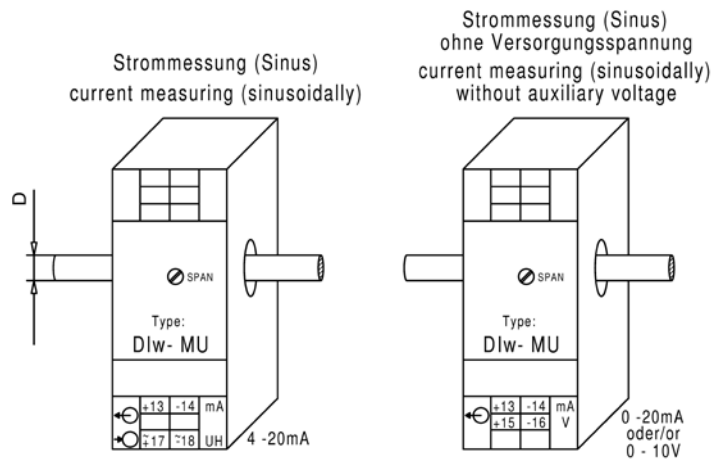


Function

The alternating current to be measured is transmitted to a current transformer - serving for galvanic isolation and transformation - via a through hole and from there to the downstream rectifier circuit. The direct voltage generated there is amplified and transformed into an impressed direct current or in an impressed direct voltage. The output is no-load proof and short-circuit proof. Only for "live zero", an auxiliary voltage is required.



Connection



DIW 50A bzw./resp. 60A: D=max. Ø8,5mm
DIW 100A bzw./resp. 150A: D=max. Ø15mm



Types and variants

Input	50 A or 60 A (please specify value in case of order)
Output	0-20 mA (without auxiliary voltage) 0-10 V (without auxiliary voltage) 4-20 mA (with auxiliary voltage)
Input	100 A oder 150 A (please specify value in case of order)
Output	0-20 mA (without auxiliary voltage) 0-10 V (without auxiliary voltage) 4-20 mA (with auxiliary voltage)
Surcharges	Auxiliary voltage other than 230 V AC: 24 V DC 6-30 V AC + DC 36-265 V AC + DC 110 V AC



Technical data

Input	Input variables	sinusoidal alternating current			
	Rated values	Inputs			
		0-50 A	0-60 A	0-100 A	0-150 A
		0-10 A	0-12 A	0-20 A	0-30 A Pass through prim. cond. 5 times
		0-12,5 A	0-15 A	0-25 A	0-37,5 A Pass through prim. cond. 4 times
		0-25 A	0-30 A	0-50 A	0-75 A Pass through prim. cond. twice
	0-50 A	0-60 A	0-100 A	0-150 A Pass through prim. cond. once	
	Rated frequency	50 Hz, 60 Hz or 400 Hz, 16 2/3 Hz (auxiliary voltage required)			
	Overload permanent	2-fold			
	High surge load	20-fold, 1 s			
Output	Output variables	Single output			
	Rated values	0-20 mA / 500 Ω load or 0-10 V / max. load 10 mA			
	Option	● „live zero“ 4-20 mA / 500 Ω load (auxiliary voltage required)			
Transfer behavior	Accuracy	± 0,5 % at 5-100 % of rated value (with auxiliary voltage 0-100 % of rated value)			
	Temperature range	-15 °C to +20 °C to +30 °C to +55 °C			
	Temperature influence	< 0,1 % at 10 K			
	Auxiliary voltage influence	no			
	Load influence	no			
	External magnetic field influence	no (400 A/m)			
	Residual ripple	< 30 mVss			
	Response time	< 400 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 (with „live zero“ only)		230 V AC ± 20 %, 45-65 Hz, 2,5 VA			
	Options	<ul style="list-style-type: none"> ● 110 V AC ± 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			
	Through hole	8,5 mm at 50 A and 60 A 15 mm at 100 A and 150 A			
Weight		250 g			
Installation	Fastening	Snap-on fastening on top hat rail 35 mm acc. to DIN EN 60 715			
	Electrical connection	Screw terminal max. 4 mm ²			