



Measuring transducer for current and voltage (True RMS) for installations up to 1000 V (CAT III)

Type:
leffT-MU / UeffT-MU

from 01.03.2022
plus 6,8 %
surcharge



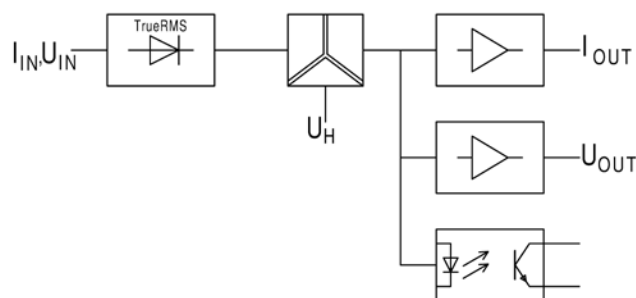
Application

The measuring transducers leffT-MU and UeffT-MU are used for the transformation and isolation of a current or a voltage into an impressed direct current and direct voltage signal. An integrated limit monitoring serves for monitoring the input signal.

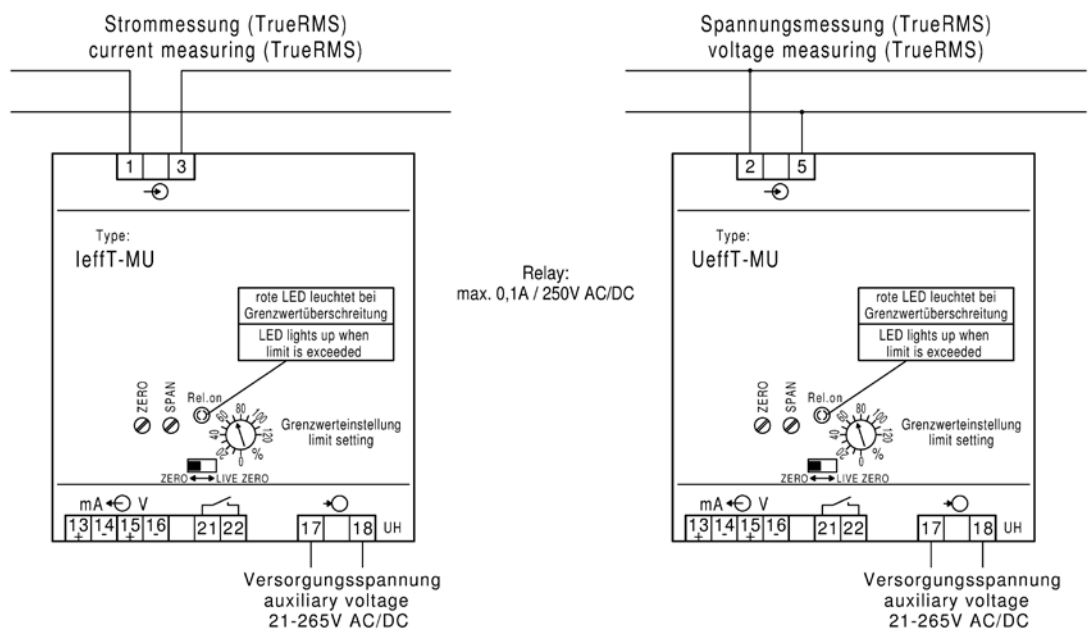


Function

The measurand is transmitted to the rms rectifier via an input protective circuit. Crest factors (ratio between peak value and rms value) up to a value of 4 may be processed without problems. The direct voltage thus generated is galvanically isolated from the output by an optocoupler. A downstream amplifier effectuates the direct current and direct voltage impression. Both outputs are no-load proof and short-circuit proof. Connecting the two outputs is not permissible. The limit value may be adjusted within a range of 0-120 % of the input signal. Exceeding the limit value is indicated by an LED. An auxiliary voltage is required.



Connection



Price

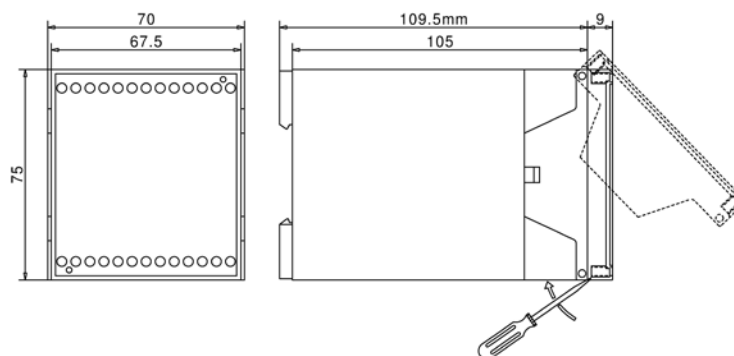
Input	leffT-MU a value from 0-1 mA to 0-5 A	€ 281,00
	UeffT-MU 0-1000 V (other values on request)	€ 281,00
Output	0-20 mA and 0-10 V as well as 4-20 mA and 2-10 V, switchable on front side	



Technical data

Input	Input variables	direct and alternating voltage / direct and alternating current of arbitrary waveform
	Rated values	I _{effT-MU} a value from 0-1 mA to 0-5 A, voltage drop 60 mV U _{effT-MU} a value from 0-1000 V, R _i = 2 M Ω
	Rated frequency	DC / 40-200 Hz
	Option	● DC / 40-1000 Hz
	Overload permanent	for current 2-fold, for voltage 5-fold / max. 2000 V
	High surge load	for current 20-fold 1 s
Output	Output variables	double output
	Rated values	0-20 mA / 0-500 Ω load and 0-10 V / max. load 10 mA as well as 4-20 mA / 0-500 Ω load and 2-10 V / max. load 10 mA switchable on front side
	Limit value output	1 NO contact, hysteresis approx. 4 % of limit value, contact load max. 0,1 A / 250 V AC/DC
	Function indicator	red LED if limit value is exceeded
Transfer behavior	Accuracy	± 0,5 %
	Crest factor	4 with max. error of 0,5 %
	Frequency influence	< 0,5 % with DC / 40-200 Hz
	Temperature range	-15 °C to +20 °C to +30 °C to +55 °C
	Temperature influence	< 0,2 % at 10 K
	Auxiliary voltage influence	no
	Load influence	no
	External magnetic field influence	no (400 A/m)
	Residual ripple	< 50 mV _{ss}
	Response time	< 300 ms
	Open circuit voltage	max. 24 V
	Current limiting	max. 2-fold in case of overload
	Test voltage	7,4 kV between input to output, input to auxiliary voltage and input to relay contacts 4 kV between output to auxiliary voltage and relay contacts
	Standards	EMC
Mechanical strength		DIN EN 61010 part 1
Electrical safety		DIN EN 61010 part 1 housing insulated, protection class II, for working voltages up to 1000V (phase to neutral) pollution level 2, measuring category CAT III
Accuracy, overload		DIN EN 60688
Air and creep distances		DIN EN 61010 Part 1
IP code		DIN EN 60529 housing IP30, terminals IP20
Connection		DIN 43807
Auxiliary voltage	21-265 VAC + DC, 2 VA	
Weight	220 g	

Dimensions



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