

M100A1

V-I Converter



V-I Converter M100A1 designed for calibrating and verifying Low-power Current Transformers / Current Sensors with an analog outputs. It efficiently converts the Low-power Current Transformer's secondary voltage into current.

V-I Converter M100A1 enhances the capabilities of Comparator **M100**

FEATURES AND BENEFITS

- V-I Converter M100A1 is designed for use with Comparator M100
- Specifications conform to the standards/recommendations of IEC 61869-10 and IEC 60044-8
- Supports a continuous range of rated secondary voltages for tested Low-power Current Transformers (LPCTs) / Current Sensors
- Test and calibrate LPCTs / Current Sensors with accuracy classes up to 0,1
- Optimized, user-friendly interface designed to easy use, minimize setup time and human error
- Storage of individual voltage settings, which can be corrected as required
- Possibility of using with automated current transformer calibration systems
- Small, lightweight, and easy-to-transport design

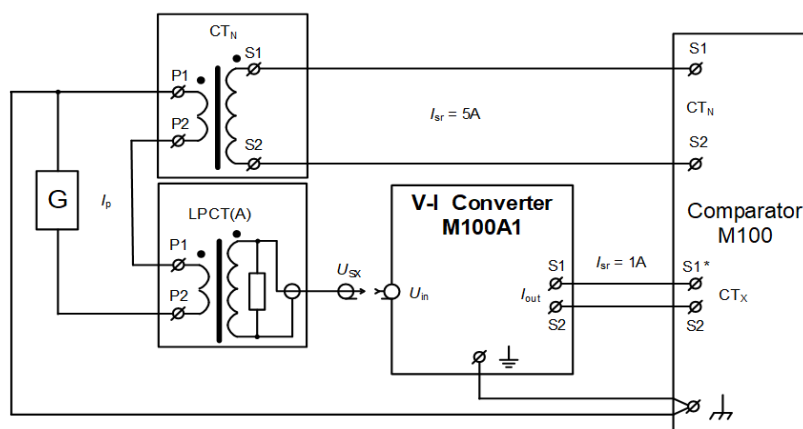
APPLICATIONS

V-I Converter **M100A1** is used by:

- Manufacturers of LPCT
- Metrology institutes
- Calibration laboratories
- On-site testing of LPCT



TEST ARRANGEMENT



LPCT testing with V-I Converter M100A1 and Comparator M100

TECHNICAL SPECIFICATIONS*

Specification	Value
Rated output current	1 A
Output current range	0,01...2 A (1...200%)
LPCT rated secondary voltages range (U_{sr})	0,02...4,00 V
Step of changing the LPCT rated secondary voltage	$\pm 0,1$ mV ($0,02 \leq U_{sr} < 0,1$ V) ± 1 mV ($0,1 \leq U_{sr} < 1$ V) ± 10 mV ($1 \leq U_{sr} \leq 4$ V)
Output burden	$\leq 0,2 \Omega$
Input impedance	$2 \text{ M}\Omega \parallel 50 \text{ pF}$
Rated frequency	50/60 Hz
Relative error ε_{U-I} of the conversion coefficient at output current: 0,01 A (1 %) 0,05 A (5 %) 0,2 A ... 2 A (20 ...200 %)	$\pm 0,1\%$ $\pm 0,03\%$ $\pm 0,015\%$
Phase displacement $\Delta\varphi_{U-I}$ at output current: 0,01 A (1 %) 0,05 A (5 %) 0,2 A ... 2 A (20 ...200 %)	± 3 min ($\pm 0,09$ crad) $\pm 1,5$ min ($\pm 0,045$ crad) $\pm 0,5$ min ($\pm 0,015$ crad)

Power mains

Rated voltage	100...240 V
Rated frequency	50/60 Hz
Operating temperature	0...40 °C
Relative humidity	up to 80 % non-condensing
Size (W × H × D)	250 × 150 × 345 mm
Weight (Main unit)	5 kg

*The manufacturer reserves the right to modify the technical specifications of the V-I Converter M100A1, subject to prior agreement with the customer.

ORDERING INFORMATION

No	Item	Part no.	
1	M100A1 V-I Converter	M100A1	
2	Mains cable 10 A EU (CEE 7/XVII - C13)	—	
3	IC(I) Measuring cable (1,6 m)	685612.131	
4	Functional Earth Cable (FE) (1,5 m)	M100A1.000.001	
5	Operating manual	M100A1 OM	
6	Passport	M100A1 P	
7	Bag	S3U255	

OLTEST LLC (UKRAINE)

Development and production
of measurement devices

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