



METREL®

Measurement and Regulation Equipment Manufacturers

<http://www.metrel.si>
E-mail: metrel@metrel.si

METREL d.d.
Ljubljanska c. 77, SI - 1354 HORJUL
SLOVENIA

Phone: +386 (0) 1 75 58 200
Fax: +386 (0) 1 75 49 095
+386 (0) 1 75 49 226
Fax(Sales): +386 (0) 1 75 58 206
ID VAT No: SI56387512

Declaration of Conformity

No.: DEK015/06

Name and address of manufacturer

METREL d.d.
Ljubljanska cesta 77
1354 Horjul
Slovenia

Description of the equipment

MI 3100
EurotestEASI

Hand-held battery powered instrument intended for testing electrical installations properties like continuity, insulation resistance, fault loop impedance, line impedance, RCD testing, phase sequence testing, voltage and frequency monitoring. Instrument is controlled by microcontroller.

Reference to the harmonized standards

EN 61010-1: 2001
EN 61010-031: 2002
EN 61326: 1997 + A1: 1998 + A2: 2001 + A3: 2003

References to the specifications to which conformity is declared, if appropriate

73/23/EEC: Electrical equipment designed for use within certain voltage limits
2004/108/EC: Electromagnetic compatibility

Last two digits of the year in which the CE marking was affixed

06

Place and date of issue

Horjul, 2006-05-26

Manufacturer's representative - signature

Zvone Teržan

Code: 20 750 839

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Production Verification Data

Model: EurotestEASI

Date: 2006-07-21

Serial No. 16070973

Tested By: Koprivec, Petkovšek

Signature 

Date Placed In Service: _____ Due Date: _____

Metrel Recommended Cal Interval: 12 months

* The due date may be established (by the customer) by adding the "Recommended Cal Interval" to the "Date Placed In Service."

No.	Function / Ubat=5,5V	Input	Low limit	Reading	Uncertainty	High limit		
1	Outlook, battery indication, keys, rotary switch			Pass				
2	Insulation resistance R _{ISO} U _N = 100 V DC	0 MΩ	0,000 MΩ	0,000	0,001 MΩ	0,003 MΩ		
		0,1 MΩ	0,092 MΩ	0,100	0,001 MΩ	0,108 MΩ		
		10 MΩ	9,47 MΩ	9,98	0,06 MΩ	10,53 MΩ		
		190 MΩ	180,2 MΩ	189,7	1,6 MΩ	199,8 MΩ		
		Uiso output/ open circuit	10 MΩ	100 V	113	1 V	120 V	
	Uiso displayed / open circuit	UisoOut	UisoOut - 6 V	114	1 V	UisoOut + 6 V		
3	Insulation resistance R _{ISO} U _N = 250V DC	0,1 MΩ	0,092 MΩ	0,100	0,001 MΩ	0,108 MΩ		
		1 MΩ	0,947 MΩ	0,998	0,006 MΩ	1,053 MΩ		
		100 MΩ	94,7 MΩ	99,6	0,7 MΩ	105,3 MΩ		
4	Insulation resistance R _{ISO} U _N = 1000V DC	0 MΩ	0,000 MΩ	0,000	0,001 MΩ	0,003 MΩ		
		1 MΩ	0,977 MΩ	1,002	0,006 MΩ	1,023 MΩ		
		190 MΩ	185,9 MΩ	189,0	1,2 MΩ	194,1 MΩ		
		900 MΩ	810 MΩ	884	1,2 MΩ	990 MΩ		
		Uiso output/ 1MΩ	1 MΩ	1000 V	1049	5 V	1200 V	
	Uiso displayed/ 1MΩ	UisoOut	UisoOut - 33 V	1057	5 V	UisoOut + 33 V		
5	Continuity resistance R _{±200mA}	0,00 Ω	0,00 Ω	0,00	0,01 Ω	0,03 Ω		
		1,00 Ω	0,94 Ω	1,00	0,01 Ω	1,06 Ω		
		19,00 Ω	18,40 Ω	18,98	0,11 Ω	19,60 Ω		
		1900 Ω	1805 Ω	1919	11 Ω	1995 Ω		
	I _{±200mA} output/2Ω Ubat=7 V	2 Ω	200 mA	Pass		250 mA		
6	PHASE ROTATION: 1.2.3			Pass				
7	Voltage AC 50 Hz	U _{L-PE}	0 V	0 V	0	1 V	2 V	
			230 V	224 V	230	2 V	236 V	
		U _{L-N}	0 V	0 V	0	1 V	2 V	
			230 V	224 V	230	2 V	236 V	
	Frequency		50 Hz	49,9 Hz	50,0	0,1 Hz	50,1 Hz	
8	Loop impedance	Z _{Loop}	0,30 Ω	0,24 Ω	0,31	0,01 Ω	0,36 Ω	
			10 Ω	9,45 Ω	10,07	0,07 Ω	10,55 Ω	
			100 Ω	94,5 Ω	101,0	0,6 Ω	105,5 Ω	
			1000 Ω	945 Ω	1007	6 Ω	1055 Ω	
		Z _s (rcd)	0,3 Ω	0,02 Ω	0,26	0,05 Ω	0,58 Ω	
			10 Ω	8,75 Ω	10,09	0,05 Ω	11,25 Ω	
			100 Ω	95,0 Ω	100,0	0,5 Ω	105,0 Ω	
			1000 Ω	950 Ω	1004	5 Ω	1050 Ω	
9	Line impedance	Line	0,30 Ω	0,24 Ω	0,29	0,01 Ω	0,36 Ω	
10	Contact voltage	RCD	U _c / I _{ΔN} = 10mA	0,30 Ω	0,0 V	0,0	0,1 V	0,2 V
			U _c / I _{ΔN} = 500mA	100 Ω	50,0 V	52,0	0,3 V	55,0 V
			U _c / I _{ΔN} = 1000mA	0,3 Ω	0,1 V	0,3	0,1 V	0,5 V
11	Trip time I _{ΔN} = 100mA	RCD	18,3 ms	15 ms	19	1 ms	21 ms	
	Residual currents: values, shapes				Pass			

All results in accordance with technical specification.

Reference instruments:

No.	Instrument	Type	Certificate No.	Due
1	Calibration System	9100, Wavetek	06C00741	2007-07-07

Koda: 20 750 840



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