1. ELECTRICAL SPECIFICATIONS

Accuracy is given as ± [% readings + (number of dgt * resolution)] at reference conditions

Step/Contact voltage measurements

Measure voltage range	Resolution	Accuracy
0.01 ÷ 19.99mV	0.01mV	±(2.0% rdg + 2dgt)
20.0 ÷ 199.9mV	0.1mV	
200 ÷ 1999mV	1mV	
2.00 ÷ 19.99V	0.01V	
20.0 ÷ 59.9V	0.1V	

Calculated voltage range	Resolution	Accuracy
0.0 ÷ 199.9V	0.1V	Calculated value (*)
200 ÷ 999V	1V	

(*) The calculated value of step/contact voltage is obtained by the relationship: U_S=Umeas ·Iflt/Igen; U_C=Umeas ·Iflt/Igen;

Range of fault current (selectable):	10A ÷ 200kA
Input resistance(selectable):	1kΩ, 1MΩ
Noise reducing/erasing:	DSP filtering 55Hz, 64dB rejection on noise at 50/60Hz

Generated current range	Resolution	Accuracy
0.00 ÷ 9.99A	0.01A	±(3.0% rdg + 5 dgt)
10.0 ÷ 99.9A	0.1A	±(3.0% rdg + 3 dgt)

Generated current:	55A max
Test voltage:	<55V
Test frequency:	55Hz

Earth resistance measurement

Measurement range	Resolution	Accuracy
0.001Ω ÷ 1.999Ω	0.001Ω	±(2.0% rdg + 5 dgt)
2.00Ω ÷ 19.99Ω	0.01Ω	
20.0Ω ÷ 99.9Ω	0.1Ω	
100.0Ω ÷ 199.9Ω		±(5.0% rdg)

Open voltage:	< 50V AC
Test current:	< 7.5A
Frequency of test signal:	55Hz
Influence of probe resistance:	≤ ±(10% rdg + 10 dgt)
(Rc, Rp)max	(10Ω + 100R) o 2kΩ considering the lower value
Automatic test on the probe resistance:	Yes
Automatic detection of voltage noise	

Earth resistivity measurement

Measurement range	Resolution	Accuracy
0.00Ωm ÷ 9.99Ωm	0.01Ωm	Calculated value, consider accuracy of Resistance to earth function
10.0Ωm ÷ 99.9Ωm	0.1Ωm	
100Ωm ÷ 999Ωm	1Ωm	
1.00kΩm ÷ 9.99kΩm	0.01kΩm	
10.0kΩm ÷ 99.9kΩm	0.1kΩm	

Measurement principle: Wenner method → ρ = 2*π* distance* R

2. GENERAL SPECIFICATIONS

Power unit

Power supply:	230V AC (±10%), 50/60Hz
Max. power consumption:	750VA
Protection on power supply:	fuse T 5A / 250V (5mm x 20mm)
Safety condition on meter:	IEC/EN61010-1
Safety condition on test leads:	IEC/EN61010-031
Installation over 1kVAC:	HD 637 S1
Eart/resitivity measurements:	ANSI/IEEE Std 81
Italian guideline:	CEI 11-1
Spanish guideline:	RAT 2008
Insulation:	class I
Measurement category:	CAT II 300V, CAT IV 50V
Pollution degree:	3
Mechanical protection:	IP30
Display:	LCD dot matrix (128 x 64) with backlight
Internal memory:	1000 locations
Generated current:	values storage for min 24h
Comunication interface:	RS-232 (with voltmetric unit)
Dimensions (LxWxH):	563 x 257 x 275mm
Weight (without accessories):	29.5kg

Voltmetric unit

Power supply:	6x1.2V rechargeable batteries NiMH type AA LR03 6x1.5V alkaline batteries type AA LR03
Battery (chargeable) life:	12 hours (typical)
External power supply:	100-240V AC, 50-60Hz / 12V DC
Safety condition on meter:	IEC/EN61010-1
Safety condition on test leads:	IEC/EN61010-031
Insulation:	double insulation
Measurement category:	CAT IV 50V
Pollution degree:	2
Mechanical protection:	IP40
Display:	LCD dot matrix (128 x 64) with backlight
Auto Power OFF:	after 15 minutes of idleness (not disable)
Internal memory:	1500 locations
Comunication interface:	RS-232 and USB (to PC)
Dimensions (LxLaxH):	230 x 115 x 103mm
Weight (with batteries):	1.3kg

ENVIRONMENTAL CONDITIONS:

Reference temperature:	10°C ÷ 30°C
Reference humidity:	35% ÷ 65%RH
Working temperature:	0° ÷ 40°C
Working humidity:	<80%HR
Storage temperature:	-10 ÷ 60°C
Storage humidity:	< 80%HR

This instrument complies to the prescriptions of the European directive on low voltage 2006/95/CE (LVD) and EMC 2004/108/CE

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