

Specification CM69 TRMS AC Earth Leakage Clamp Meter



ELECTRICAL

All specified accuracies are at 23°C ± 5°C, <80% RH for 1 year.

Temperature coefficient: Add 0.1 x (specified accuracy) per °C. (0°C to 18°C, 28°C to 40°C).

All accuracies below are expressed as \pm (percentage of reading + digits)

DC Voltage

Range	Resolution	Input impedance	Accuracy
60V	0.01V	2MO	1.0% + 2
600V	0.1V	∠IVI∑2	

Overload protection: 660V DC or AC rms

AC Voltage (True RMS)

Range	Resolution	Input impedance	Accuracy (50 to 500Hz)
60V	0.01 V	2MO	1.0% + 3
600V	0.1 V	ZIVIS2	

Crest factor: 2.0

Overload protection: 660V DC or AC rms



Specification CM69 TRMS AC Earth Leakage Clamp Meter

GENERAL

Display: Liquid crystal display with maximum reading 6000

Sample rate 2 times/sec

Polarity: automatic, positive implied, '-' for negative polarity

indication

Overrange: (OL) is displayed

Power: 2 x 1.5V, AAA alkaline batteries (IEC LR03, NEDA 24A)

Battery life (alkaline): 40 hours typical for ACV, ACmA and ACA ranges
60 hours typical for DCV and resistance ranges

Auto power off: after 30 minutes Jaw opening capability: 23mm Dimensions: 206 x 76 x 33.5mm Weight: 262g approx. including batteries

Includes: carrying case, set of TL16 test leads, $2 \times 1.5 \text{V}$ AAA batteries,

instructions

ENVIRONMENTAL

Temperature & Humidity

(Operating): 0°C to 40°C <80% R.H., non-condensing (Storage): -10°C to 60°C <70% R.H., batteries removed

Altitude: up to 2000m Pollution degree: 2

SAFETY

Conforms to: BS EN 61010-1, BS EN 61010-2-032, CAT IV 300V,

CAT III 600V

Class II, double insulation

EMC

Conforms to BS EN 61326-1



Specification CM69 TRMS AC Earth Leakage Clamp Meter

AC Current (True RMS)

Bonne	Range Resolution		Accuracy		
Range	Resolution	(50 to 60Hz)	60 to 500Hz or LPF selected		
6mA	0.001mA	1.0% + 8	2.0% + 8		
60mA	0.01mA	1.0% + 5	2.0% + 5		
600mA	0.1mA				
6A	0.001A				
60A	0.01A				

Crest factor: 2.0

Overload protection: 100A DC or AC rms

Low pass filter

Cut-off frequency: 160Hz approx

Attenuation characteristic: -24dB/octave approx

Resistance

Range	Resolution	Open circuit voltage	Accuracy
600Ω	0.1Ω		1.0% + 2
6kΩ	0.001kΩ	0.074-	
60kΩ	0.01kΩ	2.2V dc 1.0% + 2	
600kΩ	0.1kΩ		

Overload protection: 600V DC or AC rms

Continuity

Open circuit voltage	Audible indication	
2.8V dc	<55±10Ω	

Overload protection: 600V DC or AC rms



Specification CM69 TRMS AC Earth Leakage Clamp Meter

SPECIFICATION FOR TL16 TEST LEADS

Maximum voltage: 1000V AC/DC Maximum current: 10A continuous

Connector: 4mm banana plug with fixed shroud

Environmental

Temperature (Operating & Storage): 0°C to 40°C

Altitude: up to 2000m Pollution degree 2

Safet

Conforms to BS EN 61010-031, CAT IV 600V, CAT III 1000V, 10A (Probe tip

covers fitted)

CAT II 1000V, 10A (Probe tip covers

removed)

Class II, double insulation

Martindale Electric Company Limited

Metrohm House, Penfold Trading Estate, Imperial Way, Watford WD24 4YY, UK
Tel: +44 (0)1923 441717 Fax: +44 (0)1923 446900
E-mail: sales@martindale-electric.co.uk
Website: www.martindale-electric.co.uk

© 2015 Martindale Electric Company Ltd. Registered in England No. 3387451. Rev1 LITCM69