

DCM2033, 2039

Digital Clampmeters



- **Excellent Price Performance**
- **Two Models 600 A and 1000 A**
- **Drop Proof**
- **EMC & IEC1010 Compliance**

DESCRIPTION

The DCM clampmeters are the ideal instruments for use in the installation, maintenance, monitoring or checking of electrical systems and equipment.

There are two different current clamps in the DCM range covering many applications. The series starts with a volt plus current unit where the user needs the flexibility of being able to make voltage measurements as well as current measurements and a high current a.c./d.c. unit.

The traditional measuring method for taking current measurements by inserting a shunt resistor or a current transformer has inherent disadvantages, like the necessity to break the circuit conductor. These competitively priced clamp-on instruments offer the user many advantages depending on the unit selected such as the measurement of d.c. as well as a.c. currents or the capability of measuring voltages and resistances.

The DCM2033 can be used for measuring volts, resistance and current. It offers the flexibility of a multimeter with the advantages of a current clamp. The L.C.D. display has a readout of 4000 counts with measurement capabilities of up to 600 A, 600 V and 40 k Ω . This versatile model also features a continuity buzzer on the resistance range and a data hold button for freezing the reading.

The highest current unit available in the series is the DCM2039. This instrument has a specified accuracy for measurements to 1000 A but has an over-range capability of up to 2000 A. As the clamp incorporates Hall Effect technology it can measure d.c. currents as well as a.c. currents. Additional features are the peak hold button and the frequency counter which will measure frequencies between 20 Hz and 10 kHz.

Safety

The tactile barrier indicates to the operator a safe working distance for his hand to be from live uninsulated conductors, providing added confidence when making measurements in hazardous voltage areas.

APPLICATIONS

These current clamps can be used to simplify current measurements since there is no need to switch off or break the circuit carrying the current. Instead, the clamp jaws surround the conductor while it remains energised. This makes the units ideal for commissioning and maintenance work and for routine testing or fault finding in electrical machinery, plant equipment or on cable installations.

Typical applications include measuring current when balancing the load on three phase supplies or checking feeder lines in the electrical supply industry.

FEATURES AND BENEFITS

- Measurement of high current made easier by retaining the circuit intact
- a.c. & a.c./d.c. models for various applications
- Jaw size up to 51 mm diameter for large conductors
- Hand Guard designed for operator safety

	DCM2033	DCM2039
a.c. CURRENT Ranges Resolution Accuracy	400 A, 600 A 0,1 A 50Hz - 60Hz $\pm(1,9\% \text{ rdg} + 5\text{d})$, 0 - 400 A $\pm(2,9\% \text{ rdg} + 5\text{d})$, 400 - 600 A	400 A, 1000 A 0,1 A 40Hz - 400Hz $\pm(1,9\% \text{ rdg} + 8\text{d})$, 0 - 40 A $\pm(1,9\% \text{ rdg} + 7\text{d})$, 40 - 400 A $\pm(2,9\% \text{ rdg} + 5\text{d})$, 400 - 1000 A
Conversion Type	Average sensing RMS indicating	Average sensing RMS indicating
a.c. VOLTAGE Ranges Resolution Accuracy Input Impedance Protection Conversion Type	400 V, 600 V 0,1 V in the 400 V range: $\pm(1,2\% \text{ rdg} + 5\text{d})$, 40Hz - 500Hz 10 M Ω / $<100\text{pF}$ a.c. 850 V rms Average sensing RMS indicating	
RESISTANCE Ranges Resolution Accuracy Overload Protection	4 k Ω , 40 k Ω , 1 Ω in the 4 k Ω range $\pm(2\% \text{ rdg} + 9\text{d})$ 500 V rms	
CONTINUITY TEST Threshold Indicator	$<200 \Omega$ approximate 2 kHz tone buzzer	
d.c. CURRENT Ranges Resolution Accuracy		400 A, 1000 A 0,1 A $\pm(2,9\% \text{ rdg} + 8\text{d})$, 0 - 40 A $\pm(1,9\% \text{ rdg} + 4\text{d})$, 40 - 400 A $\pm(2,9\% \text{ rdg} + 5\text{d})$, 400 - 1000 A
FREQUENCY COUNT Ranges Accuracy		20 Hz to 10 kHz $\pm(0,5\% \text{ rdg} + 3\text{d})$
GENERAL Display Measuring Rate Times per second Position Error Output Voltage a.c./d.c., 10 mV/A in 100 A, 1 mV/A in 600 A Type of Sensing Overrange indication Low Battery Indicator Auto Power Operating Temperature Storage Temperature Temperature Coefficient Shock Proof Safety: Designed to IEC1010 -2:032 Maximum Conductor size Maximum Jaw Opening Maximum Busbar Size Power Requirement Battery Life (Alkaline battery) Size W x L x D in mm Weight	4000 count L.C.D. 4 T/sec • current transformer “OL” + - 30 minutes non-use 0°C ~ 45°C, <75% R.H. -20°C ~ 60°C, <80% R.H. 0,2 x (spec. Acc’y)/°C, <18°C or >28°C 4 feet drop 600 V Cat. II to Earth dia.40mm 42mm 9 V PP3 (IEC 6LR61) 200 hrs 88 x 215 x 36 320 g	4000 count LCD 2 T/sec • Hall Effect (for a.c. & d.c.) “OL” + - 30 minutes non-use 1 kV Cat. III dia.51 mm 53 mm 24 x 60 mm 9 V PP3 (IEC 6LR61) 40 hrs 106 x 240 x 40 420 g

Reptame Equipment Inc.
www.reptame.com
(905) 936-6979

ORDERING INFORMATION

Item	Order Code	Included Accessories
600 A Current Clamp Multimeter	DCM2033	Test Leads (DCM 2033 only)
1000 A a.c./d.c. Clampmeter	DCM2039	Holster

UK
Archcliffe Road Dover
CT17 9EN England
T +44 (0) 1304 502101
F +44 (0) 1304 207342

UNITED STATES
4271 Bronze Way
Dallas TX 75237-1088 USA
T 800 723 2861 (USA only)
T +1 214 333 3201
F +1 214 331 7399

OTHER TECHNICAL SALES OFFICES
Norristown USA, Toronto CANADA,
Mumbai INDIA, Trappes FRANCE,
Sydney AUSTRALIA and the
Kingdom of BAHRAIN.

Registered to ISO 9001:2000 Cert. no. Q 09290
Registered to ISO 14001:1996 Cert. no. EMS 61597
DCM033_2039_DS_en_V11
www.megger.com
Megger is a registered trademark