

DCM330 Specifications

The characteristics listed in this section apply under the following conditions:

- The instrument operates in a 0° to 50° C (32° to 122° F) ambient environment unless otherwise noted.
- The instrument warms up for at least 20 minutes.

NOTE. All specifications are warranted unless marked "typical." Typical characteristics are not guaranteed but are provided for the convenience of the user.

Table 1: Electrical characteristics

Characteristic	Description
Overload Protection	2000 A for one minute
Uninsulated Wire Voltage	600 V _{RMS} CAT II
Measuring Rate	2 times per second nominal
AC Current, Auto Ranging	
Ranges	400 A and 1000 A
Uninsulated Wire Voltage Rating	600 V _{RMS} CAT II
Resolution	
400 A Range	0.1 A
1000 A Range	1 A
Accuracy	
0 A to 400 A	±(1.9% of reading + 8 counts)
401 A to 1000 A	±(2.9% of reading + 5 counts)
Crest Factor	1.4 to 2.0, add 1.0% to accuracy 2.0 to 2.5, add 2.5% to accuracy
DC Current, Auto Ranging	
Ranges	400 A and 1000 A
Resolution	
400 A Range	0.1 A
1000 A Range	1 A

Table 1: Electrical characteristics (cont.)

Characteristic	Description
Accuracy	
0 A to 20 A	$\pm(1.9\% \text{ of reading} + 10 \text{ counts})$
20.1 A to 400 A	$\pm(1.9\% \text{ of reading} + 40 \text{ counts})$
401 A to 1000 A	$\pm(2.9\% \text{ of reading} + 5 \text{ counts})$
Frequency, Auto Ranging	
Ranges	4 kHz and 10 kHz
Sensitivity	6 A _{RMS} (10 A _{RMS} , 1kHz to 10 kHz)
Resolution	
4 kHz Range	1 Hz
10 kHz Range	10 Hz
Accuracy	$\pm(0.5\% \text{ of reading} + 3 \text{ counts})$
Peak Hold	
Range	Low, High
Resolution	
Low	0.1 A
High	1.0 A
Accuracy	$\pm(3\% \text{ of reading} + 10 \text{ counts})$

Table 2: General specifications

Characteristic	Description
Auto Power Off	Approximately 30 minutes
Battery	9 V, ANSI/NEDA1604A, IEC 6F22
Battery Life	40 hours (alkaline)
Maximum Conductor Size	51 mm (2 inch) diameter or 24 × 60 mm (.95 × 2.36 inch) bus bar

Table 3: Certifications and compliances

Certifications	Canadian Standards Association certified to Standard CSA 1010.1, Standard UL3111-1 for Electrical and Electronic Measuring and Testing Equipment, and IEC1010-2-032 particular requirements for hand-held current clamps for electrical measurement and test.	
Overvoltage Category	Category:	Examples of Products in this Category:
	CAT III	Distribution-level mains, fixed installation
	CAT II	Local-level mains, appliances, portable equipment
	CAT I	Signal levels in special equipment or parts of equipment, telecommunications, electronics
Pollution Degree 2	Do not operate in environments where conductive pollutants may be present.	

Table 4: Environmental characteristics

Characteristic	Description
Temperature	
Operating	0° to 50° C (32° to 122° F), <75% relative humidity
Nonoperating	-20° C to +60° C (21° to 140° F), <80% relative humidity
Temperature Coefficient	0.2 × (specified accuracy) per °C at <18° C or >28° C
Maximum Altitude (Operating)	2,000 m (6,562 ft)