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SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 • Effective: 7/8/02 • DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1453	A	Released	JWM	9/22/03	HO	9/29/03	DJC	9/29/03



General Specifications

Maximum voltage between any terminal and earth ground: 600VRMS

- Environmental Conditions

- Installation Categories III
- Pollution Degree 2
- Altitude Up to 2000 Meters
- Indoor Use Only
- Relative Humidity: 80% max.
- Operation Ambient: 0°C to 40°C

- Operation Principle: Dual Slope Integration

- Display: 3<sup>3</sup>/<sub>4</sub> Digit Liquid Crystal Display

- 3999 Max. Reading
- Automatic Indication of Functions and Symbols

- Bargraph Display: 40 Segments (resolution: 100 counts/segment)

- Range Selection: Automatic or Manual

- Over Range Indication: LCD will show a "4" flashing in the highest position accompanied by a continuous beeping. (Except for ranges of 1000A AC and 600V AC/DC)

- Low Battery Indication: The symbol is displayed when the battery voltage drops below the operating voltage.

- Sampling Rate: 20 times/sec. (Barograph), 2 times/sec. (Digital Display)

- Battery Life: 300 hours approx. (Alkaline)

- Polarity: Automatic polarity "-" display for negative input

- Auto-Power OFF Time: 30 Minutes

- Operating Temperature and Humidity: 0°C to 50°C [32°F~122°F]; R.H. <80% non-condensing

- Storage Temperature and Humidity: -10°C to 60°C [14°F~140°F]; R.H. <70% non-condensing

- Dimensions: 239mm(L) x 66mm(W) x 34mm(H)

- Weight: 430 gr. approx. including battery

- Includes: Battery (one 006p 9V), Instruction Manual, Test Leads, and Carrying Case

- Jaw Opening Diameter: 46mm

DISCLAIMER:  
ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jeff McVicker	9/22/03
CHECKED BY:	DATE:
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APPROVED BY:	DATE:
Daniel Carey	9/29/03

DRAWING TITLE:

AC/DC Clamp-On Meter with NIST Calibration

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	72-6130C	50N2250.dwg	A
SCALE: NTS	U.O.M.: Millimeters	SHEET: 1 OF 2	

### AC Current (Aurorance & Manual)

Range	Resolution	Accuracy	Overload Protection	Frequency Response
400A	0.1A	±(2% + 10)	1100A	40 ~ 450Hz
1000A	1A			

Response time: 5 seconds max. to rated accuracy within selected range

### DC Voltage (Aurorance & Manual)

Range	Resolution	Accuracy	Input Impedance	Overload Protection
400mV	0.1mV	±(0.75% + 2)	≥1000MΩ	660VRMS
4V	0.001V		≈11MΩ	
40V	0.01V		≈10MΩ	
400V	0.1V			
600V	1V			

Response time: 3 seconds max. to rated accuracy within selected range

### AC Voltage (Aurorance & Manual)

Range	Resolution	Accuracy	Input Impedance	Overload Protection	Frequency Response
4V	0.001V	±(1.2% + 5)	≈11MΩ	660VRMS	40~450Hz
40V	0.01V		≈10MΩ		
400V	0.1V				
600V	1V	±(1.5% + 5)			

Response time: 5 seconds max. to rated accuracy within selected range

### Frequency (Hz) (Aurorance for Voltage)

Range	Resolution	Accuracy	Sensitivity	Overload Protection
100Hz	0.01Hz	±(0.1% + 2)	100mV	660VRMS
1KHz	0.1Hz			
10KHz	0.001KHz			
100KHz	0.01KHz			
800KHz	0.1KHz		1V	

### Frequency (Hz) (Aurorance for Current)

Range	Resolution	Accuracy	Sensitivity	Overload Protection
100Hz	0.01Hz	±(0.5% + 5)	5A	1100A
1KHz	0.1Hz			

### Resistance (Ohms) (Aurorance & Manual)


Range	Resolution	Accuracy	Open Circuit Voltage	Overload Protection
400 Ohms	0.1 Ohm	±(1% + 5)	≤0.5VDC	660VRMS
4K Ohms	0.001K Ohm	±(1% + 3)		
40K Ohms	0.01 K Ohms			
400K Ohms	0.1K Ohms			
4 Megohms	0.001 Megohms	±(1.5% + 5)		
40 Megohms	0.01 Megohms			

Response time: 5 seconds max. to rated accuracy for 400 ohms to 4 Megohms. 15 seconds maximum to rated accuracy for 40Megohms

### Audible Continuity

Range	Continuity Beeper	Open Circuit Voltage	Overload Protection
∞))	<40 Ohms	<0.5V	660VRMS

### Diode Test

Range	Resolution	Accuracy	Overload Protection
	0.001V	±(1% + 2)	660VRMS

Max. open circuit Voltage: 3V

Max. short circuit Current: 0.8mA (typical)

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