

Table 1-2. Specifications, Model 87

FUNCTION	RANGE	RESOLUTION	ACCURACY*			
			50 Hz to 60 Hz	45 Hz to 1 kHz	1 kHz to 5 kHz	5 kHz to 20 kHz ²
\bar{V}	400.0 mV	0.1 mV	$\pm(0.7\% + 4)$	$\pm(1.0\% + 4)$	$\pm(2.0\% + 4)$	$\pm(2.0\% + 20)$
	4.000V	0.001V	$\pm(0.7\% + 2)$	$\pm(1.0\% + 4)$	$\pm(2.0\% + 4)$	$\pm(2.0\% + 20)$
	40.00V	0.01V	$\pm(0.7\% + 2)$	$\pm(1.0\% + 4)$	$\pm(2.0\% + 4)$	$\pm(2.0\% + 20)$
	400.0V	0.1V	$\pm(0.7\% + 2)$	$\pm(1.0\% + 4)$	$\pm(2.0\% + 4)$	$\pm(2.0\% + 20)$
	1000V	1V	$\pm(0.7\% + 2)$	$\pm(1.0\% + 4)^2$	$\pm(2.0\% + 4)^2$	unspecified
\bar{V}	4.000V	0.001V	$\pm(0.1\% + 1)$			
	40.00V	0.01V	$\pm(0.1\% + 1)$			
	400.0V	0.1V	$\pm(0.1\% + 1)$			
	1000V	1V	$\pm(0.1\% + 1)$			
\bar{mV}	400.0 mV	0.1 mV	$\pm(0.1\% + 1)$			
Ω	400.0 Ω	0.1 Ω	$\pm(0.2\% + 1)$			
	4.000 k Ω	0.001 k Ω	$\pm(0.2\% + 1)$			
	40.00 k Ω	0.01 k Ω	$\pm(0.2\% + 1)$			
	400.0 k Ω	0.1 k Ω	$\pm(0.2\% + 1)$			
	4.000 M Ω	0.001 M Ω	$\pm(0.2\% + 1)$			
	40.00 M Ω	0.01 M Ω	$\pm(1\% + 3)$			
(nS)	40.00 nS	0.01 nS	$\pm(1\% + 10)$			

FUNCTION	RANGE	RESOLUTION	ACCURACY ³
Capacitance	5.00 nF	0.01 nF	$\pm(1\% + 3)$
	0.0500 μ F	0.0001 μ F	$\pm(1\% + 3)$
	0.500 μ F	0.001 μ F	$\pm(1\% + 3)$
	5.00 μ F	0.01 μ F	$\pm(1\% + 3)$
Diode Test	3.000V	0.001V	$\pm(2\% + 1)$

FUNCTION	RANGE	RESOLUTION	ACCURACY	BURDEN VOLTAGE TYPICAL
$\frac{mA}{A} \sim$ (45 Hz to 2 kHz)	40.00 mA	0.01 mA	$\pm(1.0\% + 2)$	1.6 mV/mA
	400.0 mA	0.1 mA	$\pm(1.0\% + 2)$	1.6 mV/mA
	4000 mA	1 mA	$\pm(1.0\% + 2)$	0.03 V/A
	10.00A ⁴	0.01A	$\pm(1.0\% + 2)$	0.03 V/A
$\frac{mA}{A} \equiv$	40.00 mA	0.01 mA	$\pm(0.2\% + 2)$	1.6 mV/mA
	400.0 mA	0.1 mA	$\pm(0.2\% + 2)$	1.6 mV/mA
	4000 mA	1 mA	$\pm(0.2\% + 2)$	0.03 V/A
	10.00A ⁴	0.01A	$\pm(0.2\% + 2)$	0.03 V/A

TYPICAL OHMS SHORT CIRCUIT CURRENT

Range	400	4k	40k	400k	4M	40M
Current	700 μ A	170 μ A	20 μ A	2 μ A	.2 μ A	.2 μ A

1 Accuracy is given as $\pm([\% \text{ of reading}] + [\text{number of least significant digits}])$ at 18°C to 28°C, with relative humidity up to 90%, for a period of one year after calibration. In the 4¹/₂-digit mode, multiply the number of least significant digits (counts) by 10. AC conversions are ac-coupled, true rms responding, calibrated to the rms value of a sine wave input, and valid from 5% to 100% of range. AC crest factor can be up to 3 at full scale, 6 at half scale. For non-sinusoidal wave forms add $-(2\% \text{ Rdg} \times 2\% \text{ Fs})$ typical, for a crest factor up to 3.

2 Below 10% of range, add 6 digits.

3 With film capacitor or better using Relative mode to zero residual.

4 10A continuous, 20A for 30 seconds maximum.