TECHNICAL DATA

Fluke 87V/E2 Industrial Electrician Combo Kit



Key features

All functionality of the 87V Industrial Digital Multimeter, plus:

- Fully insulated 3 mm exposed metal test probes for electricians working in high energy environments
- C35 Soft Carrying Case holds meter, test leads and other accessories
- TPAK magnetic hanging strap lets you attach the meter to any ferrous surface, such as cabinets and iron pipes.

Product overview: Fluke 87V/E2 Industrial Electrician Combo Kit

Ideal for electricians, this combo kit is built around the Fluke 87V, the most widely used industrial digital multimeter in the world and includes essential accessories to make you even more productive. This kit offers 15% savings compared with the individual price of all the accessories. Plus you'll be working with the most trusted tools in the world.

Assembled in the USA. Lifetime warranty.

The Fluke 87V/E2 Industrial Electrician Combo Kit is designed and assembled in the USA. The 87V multimeter is backed by a limited lifetime warranty, so you can rely on your DMM every time you take it out of your tool box.

Solve the difficult problems

Working on VSDs/VFDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals.

Industrial troubleshooting: Get the resolution and accuracy you need to solve more problems on motor drives, in-plant automation, power distribution, and electromechanical equipment.

Checking power quality: Capture glitches and spikes as short as 250 µs. Identify irregular signals.

Advanced measurement functions

- True-rms ac measurements
- 0.05% dc accuracy
- 6,000 counts, 3-3/4 digit resolution, or 20,000 counts, 4-1/2 digit—resolution
- 10 A ac or dc (with test leads and current jacks) with 0.1 µA resolution
- Temperature measurements up to 1090 °C with included thermocouple probe
- Provides 10,000 µF capacitance range for components and motor caps
- Provides peak capture and Min/Max/Avg recording to capture intermittent as short as 250 µS
- Easy access door for fast battery changes without breaking the calibration seal
- Fits into an optional magnetic hanger for easy set-up and viewing while freeing your hands for other tasks
- Presents a large digit display with bright, two-level backlight for easier reading in low light
- Includes an analog bar graph for fast changing or unstable signals
- Auto and manual ranging for maximum flexibility
- Relative mode to calculate and display difference between two readings
- Holds readings on display for safe viewing after removing probes using Touch Hold technology

Electrical Safety

All inputs are protected to CAT IV 600 V, CAT III 1000 V. They can withstand impulses in excess of 8.000 V and reduce risks related to surges and spikes.

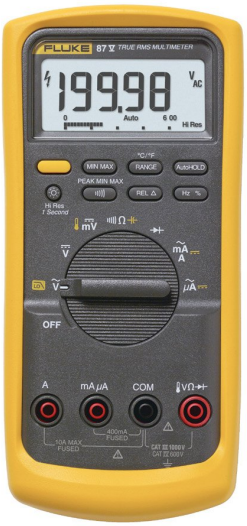
Specifications: Fluke 87V/E2 Industrial Electrician Combo Kit

Specifications		
Voltage DC	Maximum Voltage	1000 V
	Accuracy	±(0.05% + 1)
	Maximum Resolution	10 µV
Voltage AC	Maximum Voltage	1000 V
	Accuracy	±(0.7% + 2) True RMS
	AC Bandwidth	20 kHz with low pass filter; 3 db @ 1 kHz
	Maximum Resolution	0.1 mV
Current DC	Maximum Amps	10 A (20 A for 30 seconds maximum)
	Amps Accuracy	±(0.2% + 2)
	Maximum Resolution	0.01 µA
Current AC	Maximum Amps	10 A (20 A for 30 seconds maximum)
	Amps Accuracy	±(1.0% + 2) True RMS
	Maximum Resolution	0.1 µA

Resistance	Maximum Resistance	50 MΩ
	Accuracy	±(0.2% + 1)
	Maximum Resolution	0.1Ω
Capacitance	Maximum Capacitance	9,999 µF
	Accuracy	±(1% + 2)
	Maximum Resolution	0.01 nF
Frequency	Maximum Frequency	200 kHz
	Accuracy	±(0.005% + 1)
	Maximum Resolution	0.01 Hz
Duty Cycle	Maximum Duty Cycle	99.9%
	Accuracy	±(0.2% per khz +0.1%)
	Maximum Resolution	0.1%
Temperature Measurement	-200.0°C - 1090°C -328.0°F - 1994.0°F excluding probe	
80 BK Temperature Probe	-40.0°C - 260°C -40.0°F - 500°F, 2.2°C or 2% whichever is greater	
Conductance	Maximum Conductance	60.00 nS
	Accuracy	±(1.0% + 10)
	Maximum Resolution	0.01 nS
Diode	Range	3 V
	Resolution	1 mV
	Accuracy	±(2% + 1)
Duty Cycle Range	Accuracy	Within ±(02% per kHz +0.1%)
Environmental Specifications		
Operating Temperature	-20°C to +55°C	
Storage Temperature	-40°C to +60°C	
Humidity (Without Condensation)	0% - 90% (0°C - 35°C) 0% - 70% (35°C - 55°C)	
Operating Altitude	2000 m	
Safety Specifications		
Overvoltage category	EN 61010-1 to 1000 V CAT III, 600V CAT IV	
Agency Approvals	UL, CSA, TÜV, VDE listed	
Mechanical and General Specifications		
Size	201 x 98 x 52 mm (with holster)	
Weight	355 g 624 g - with holster	

Display	Digital	6000 counts updates 4/sec. 19,999 counts in high-resolution mode
	Analog	32 segments, updates 40/sec.
	Frequency	19,999 counts, updates 3/sec at > 10 Hz
Warranty	Lifetime	
Battery Life	Alkaline	~400 hours typical, without backlight
Shock	1 Meter drop per IEC 61010-1:2001	
Vibration	Per MIL-PRF-28800 for a Class 2 instrument	

Ordering information



Fluke 87V/E2 Kit

Fluke 87V/E2 Industrial Electrician Combo Kit

Includes:

- 87V Industrial Multimeter
- TL224 SureGrip™ Insulated Test Leads
- AC220 SureGrip™ Alligator Clips
- TL238 SureGrip™ Test Probes
- ToolPak™ Magnetic Meter Hanging Kit
- 80BK-A DMM Temperature Probe
- C35 Soft Carrying Case
- 9V battery (installed)

Fluke 87V/E2 Kit CAL

Fluke 87V/E2 Industrial Electrician Combo Kit, with a traceable certificate of calibration with data from Fluke

Includes:

- 87V Industrial Multimeter
- TL224 SureGrip™ Insulated Test Leads
- AC220 SureGrip™ Alligator Clips
- TL238 SureGrip™ Test Probes
- ToolPak™ Magnetic Meter Hanging Kit
- 80BK-A DMM Temperature Probe
- C35 Soft Carrying Case
- 9V battery (installed)
- A traceable certificate of calibration with data from Fluke

Fluke. *Keeping your world up and running.®*

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
In the U.S.A. (800) 443-5853
In Canada (800) 36-FLUKE
From other countries +1 (425) 446-5500
www.fluke.com

©2024 Fluke Corporation.
Specifications subject to change without notice.
03/2024

Modification of this document is not permitted without written permission from Fluke Corporation.