

Isolated Power Systems Test Kit for testing of Isolation Power Panels



LT2000



LT2000 Test Kit

- Complete Check Out Kit
- Easy Guide via Manual
- Used by certified ISOTROL SYSTEMS technicians
- Allows complete testing by own service personnel
- Savings in time and expense
- Two year warranty

Product Description

The BENDER Isolated Power Systems Test Kit LT2000 was developed to aid factory authorized technicians checking out newly installed Isolated Power Systems. It is also a valuable tool for check outs on existing Isolated Power Systems which have to be approved during regular intervals. The variety of included measuring instruments and accessories supplied with the LT2000 test kit make it useable for other applications. The tests necessary for an Isolated Power System check out include: Voltage, Panel Leakage, Branch Circuit Leakages, Line Isolation Monitor trip level, Receptacle Polarity, Conductive Surface Potential Difference and Ground Continuity.

Equipment

The LT2000 Test Kit comes in an industrial grade case which contains the following items:

- (1) BENDER CT1000 Current/Leakage Tester
- (1) Amprobe Precision Multimeter
- (1) BENDER Polarity Tester
- (1) BENDER FS100 Frequency Shaper
- (2) BENDER RA-T1xS1 Receptacle Adapter
- (1) BENDER RA-S1xBJ Adapter
- (1) 50' #10 Highly Flexible Wire w/Shielded Banana Plug
- (3) 48" Black Test Lead w/Clip & Shielded Banana Plug
- (1) 48" Green Test Lead w/Clip & Shielded Banana Plug
- (2) 48" Multimeter Test Lead Patch Cord
- (1) Multimeter Test Lead Set w/Clip and Probe

Operational Information

The various tests often require the combined use of two or more components of the LT2000 Test Kit. BENDER provides a manual with step by step instructions for the required tests. The manual also includes test related drawings which show in a clear way how the devices have to be connected to an Isolation Power System for getting optimal results.

Standards

The LT2000 is used to determine compliance with the test requirements of Chapter 3 : Electrical Systems in NFPA 99 Standard for Healthcare Facilities. The Impedance of the isolated wiring is measured as per section 3-3.2.2 : Isolated Power Systems. The functional response of the Line Isolation Monitor (LIM) is checked visually, audibly, and by measurements.

Section 3-3.3 Performance Criteria and Testing applies to patient care areas and allows for the determination of the effectiveness of the grounding circuit in each electrical receptacle by voltage and impedance measurements. The correct polarity of each isolated power system receptacle is confirmed. Tests are performed to ensure proper functioning of the LIM circuit.

CT1000

The CT1000 is designed to facilitate the checkout of Isolated Power Systems. The CT1000 can be used on systems with primary voltages up to 480V, single or three phase with a secondary of no more than 240V, single or three phase.

The CT1000 is connected to the Isolated Power Panel through the L1, L2, (L3 for three phase only) and ground jacks, using the test leads provided.

It is used as a switchboard and set point adjuster between the Isolated Power Panel and the Multimeter or the PT100.

FS100

The BENDER FS100 operates with the Amprobe. The FS100 is a low pass filter designed to attenuate the frequency response characteristic of the multimeter. This effectively weighs the contribution to the meter reading of various components of the signal being measured in accordance with their probable physiological effect. Maximum allowable current is <15mA. Voltage limit is <5V.

AMPROBE Multimeter

Following Specifications:

True RMS

DC Voltage - 10 μ V, .025%

AC Voltage - 10 μ V, .3%, DC to 100 kHz

Resistance - 10 m Ω , .07%

Frequency range - 5 kHz to 500 kHz

AC or AC + DC trms

Bar Graph

Meets IEC 1010 - 1

The AMPROBE multimeter, supplied with the test set, meets these requirements.

PT100

The BENDER PT100 is used in combination with the RA-S1xBJ Adapter to test receptacle polarity in Isolated Power Systems. The PT100 contains a neon indicator lamp and a jack for connection to a test lead. The PT100 can be used on 120V - 240V Isolated Power Systems.

Safety Instructions



Electrical equipment shall only be installed by qualified personnel in consideration of the applicable safety regulations.

Our Address

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CT1000



AMPROBE



FS100



PT100



RA-T1xS1 Receptacle Adapter



50' Highly Flexible Wire



RA-S1xBJ



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Black Test Leads

48" Multi Meter Test Lead Patch Cord



48" Multi Meter Test Lead Set w/Clip & Probe



48" Green Test Lead

