

## 8175 PL Series

### 175 kV Modular Portable DC Hipot Testers

■ The 8175PL Series DC Hipot Testers The 8175PL Series dc hipot testers offer a 175 kV to 875 kV range in a convenient cascade design. These systems are SF6 insulated with each module individually capable of producing 175 kV at 17 mA. The standard power rating is 3 kW. Low leakage measurement, even with fluctuating line voltage, is possible with the standard 1% line regulation. The design also offers reversible polarity.

This modular (expandable) construction favors the use of these portable testers in situations formerly requiring large mobile units. For example, when field testing, each technician can be equipped with one controller and as many modules as routine tests require. Then, for any non-routine higher voltage tests, additional modules may be assembled at the test site. A reusable shipping container is provided for each module for storage and transportation.



#### FEATURES

- ☑ **Expandable** from 175 kV to 875 kV
- ☑ **Rugged, light weight, portable** modular construction
- ☑ **High current** output for testing large loads
- ☑ **Reversible polarity**
- ☑ **Ripple <0.2% per mA**
- ☑ Analog kilovolt and current meters
- ☑ **Zero start interlock** and external interlock provisions for safety during operation
- ☑ **Anti-corona** toroid
- ☑ **Compact control** unit allows remote positioning ideal for field use
- ☑ **Momentary current reversal switch**
- ☑ **Optional high voltage shorting solenoid**
- ☑ **Reusable shipping containers** for modular storage

#### BENEFITS

**Quick and Easy** - a modular system limits the setup time and user-friendly controls make it simple to use

**Modular Construction** - bring only the number of modules necessary for the required voltage

**Easily Transportable** - SF6 insulated modules make it light weight and simple to transport in a van or pickup truck

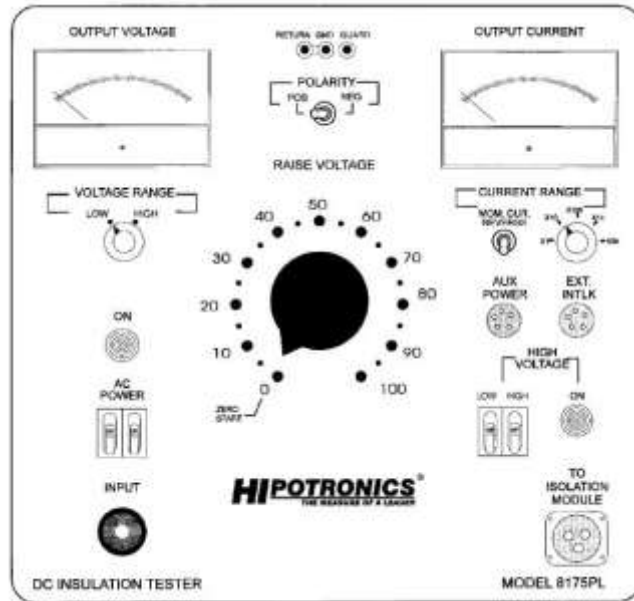
**Accurate Leakage Current Measurements** -while guard circuit eliminates stray leakage currents

#### APPLICATIONS

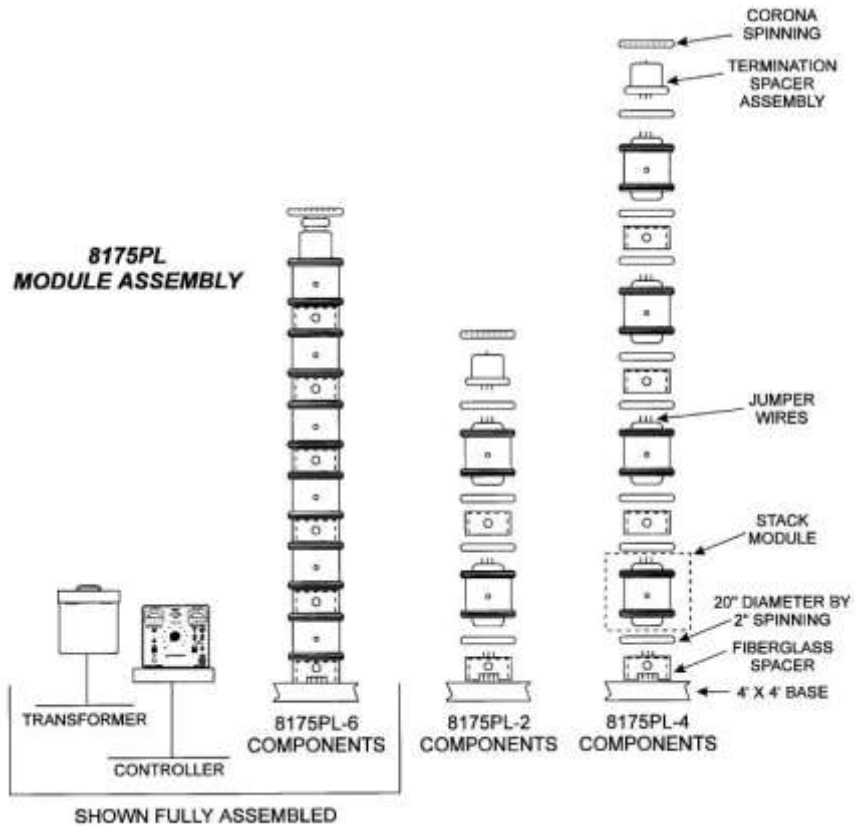
DC Hipot testing of:

- **Cable**
- **Electrical switchgear**
- **Motors & Generators**
- **Other electrical apparatus**

## CONTROL PANEL



## MODULE ASSEMBLY



## TECHNICAL SPECIFICATIONS

### General

|                           |                                  |          |          |          |          |
|---------------------------|----------------------------------|----------|----------|----------|----------|
| Model Number              | 8175PL-1                         | 8175PL-2 | 8175PL-3 | 8175PL-4 | 8175PL-5 |
| Input Voltage / Frequency | 230V, 50/60Hz                    |          |          |          |          |
| Number of Modules         | 1                                | 2        | 3        | 4        | 5        |
| Output Voltage (kV DC)    | 175                              | 350      | 525      | 700      | 875      |
| Output Current (mA)       | 17                               | 8.5      | 5.7      | 4.3      | 3.4      |
| Duty Cycle                | 15 minutes on / 1 hour off       |          |          |          |          |
| Output Polarity           | Reversible                       |          |          |          |          |
| Output Ripple             | < 0.2% per mA                    |          |          |          |          |
| Voltmeter                 | 0-100 kV dc and 0-200 kV dc      |          |          |          |          |
| Ammeter                   | 0-5 / 50 / 500 $\mu$ A 5 / 25 mA |          |          |          |          |
| Accuracy                  | $\pm$ 2% Full Scale Accuracy     |          |          |          |          |

### Weights and Dimensions (W x H x D, net weight, ship weight)

|                       |                                      |                   |                   |
|-----------------------|--------------------------------------|-------------------|-------------------|
| Controller            | 20" x 11" x 15" (508 x 279 x 381 mm) | 125 lbs (56.8 kg) | 135 lbs (61.4 kg) |
| HV Section            | 18" x 26" x 18" (457 x 660 x 457 mm) | 180 lbs (81.8 kg) | 320 lbs (14.5 kg) |
| Isolation Transformer | 20" x 15" x 20" (508 x 381 x 508 mm) | 125 lbs (56.8 kg) | 135 lbs (61.4 kg) |

## SCOPE OF SUPPLY

|        |   |
|--------|---|
| Qty. X | 8175-MOD 175 kV Module (quantity depends upon model number) |
| Qty. 1 | 8175-CONT Controller and Isolation Transformer              |
| Qty. 1 | R5160A Resistor, 285 kohm, 7 kJ                             |
| Qty. 1 | 8175-RES DC Hipot Resistor Support Kit#                     |
| Qty. 1 | 8175-EXT-HV HV expansion Kit#                               |
| Qty. 1 | Input Line Cord, 10 feet (3 m)                              |
| Qty. 1 | Extension Cord, 40 feet (12.2 m)                            |
| Qty. 1 | Interconnection Cable, 10 feet (3 m)                        |
| Qty. 1 | Calibration Certificate                                     |
| Qty. 1 | User's Manual # Supplied ONLY with 8175PL-4 and 8175PL-5    |

## ORDERING INFORMATION

### System

|                         |                 |
|-------------------------|-----------------|
| 175 kV, 15 mA DC Hipot  | <b>8175PL-1</b> |
| 350 kV, 8.5 mA DC Hipot | <b>8175PL-2</b> |
| 525 kV, 5.7 mA DC Hipot | <b>8175PL-3</b> |
| 700 kV, 4.3 mA DC Hipot | <b>8175PL-4</b> |
| 875 kV, 3.4 mA DC Hipot | <b>8175PL-5</b> |

### Accessories

|  |                    |
|--|--------------------|
| Controller kit with controls and isolation transformer   | <b>8175-CONT</b>   |
| 175 kV Module Kit with module, spinning, insulator separator, resistor section and module interconnect leads | <b>8175-MOD</b>    |
| High Voltage Expansion Kit   | <b>8175-EXT-HV</b> |
| Resistor Support Kit   | <b>8175-RES</b>    |
| Resistor 285 k ohm, 7 kJ   | <b>HHR5160A</b>    |
| Shorting Switch, 175 kV - 1 MV   | <b>8175-SS</b>     |
| Lifting Tongs  | <b>8175-LFT</b>    |