# **Mobile AC Dielectric Test Sets**

# **Aerial Lift, Elevated Platform, Insulated Boom Testing**



# **Testing Applications**

- Ideal for testing aerial lift devices and elevated platforms
- Capable of testing double and horseshoe liners (BK130/36)
- Complies with latest ANSI and IEC standards (A92.2-2015 / IEC 61057)
- Suitable for common dielectric and insulation testing requirements

### **Models Available**

- BK130/36
- BK130/36-B
- BK300
- Lightweight and ruggedly constructed for years of field use
- Simple set-up and operation
- ➤ Traceable Calibration to NRC (National Research Council Canada)
- Models available with easy to read digital meters or a full-color touch screen with data acquisition
- ➤ ISO17025 Calibration & Uncertainty Analysis available





















# **Description**

Phenix Technologies offers a rugged, portable line of AC high voltage equipment for dielectric testing of aerial lift platforms and trucks. These units provide a complete testing solution in one convenient package. The standard safety features combined with advanced metering make the Phenix line of aerial lift high voltage test systems the premium choice for testing single trucks to maintaining a whole fleet.

The precision metering equipped with guard circuits to eliminate stray leakage currents ensures only boom



Model BK130/36

### BK130/36 - Design & Safety Features

- Main power circuit breaker switch (with indicator)
- External warning circuit provision for safety devices such as flashing light
- High Voltage ON/OFF pushbuttons with indicators
- Emergency Off pushbutton (Locking)
- Manual control of output voltage
- Zero Start interlock
- External interlock provision
- Overload circuit adjustable from 10% to 110% of rated current
- Output overload indicator with reset button
- Slow and fast acting transient protection on all meters and relays
- Digital, LCD, multi-range metering
- Digital timer with audible alarm
- Guard mode for accurate current measurements

### **ACCESSORIES INCLUDED**

- User guide
- Calibration Certificate

# **Environmental Operating Conditions**

- 10-40°C, indoor/outdoor in fair weather
- Humidity <95% non-condensing</li>
- Altitude <3300 ft (1000 meters)

leakage is measured. Standard safety features include a zero start interlock, adjustable output overload circuit and short and long term thermal magnetic protection. The unit uses reactive compensation to reduce input power.

The oil-filled high voltage section is built in a rugged, fiberglass reinforced sealed vessel which is light weight and durable for years of field use.



Model BK130/36-B

### "B" Models - Design & Safety Features

- Main power circuit breaker switch
- External warning circuit provision for safety devices such as flashing light
- High Voltage ON/OFF buttons with indicators
- Emergency Off pushbutton (Locking)
- Automatic voltage control or manual voltage control via infinity dial
- USB port for data acquisition via USB drive
- Ethernet port for accessing the control from PC, Model BK300 only (Requires optional software)
- WiFi control from PC, Model BK130/36-B (Requires optional software)
- Auto-ranging meters for total current and return current
- 7" Full-color touch-screen display

# HMI displays metering, various controls, and system messages

- Breakdown memory voltmeter
- Maximum voltage reached memory voltmeter
- Duration and Dwell timers
- Zero Start interlock
- Adjustable rate of rise in Volts/seconds
- Adjustable overcurrent trip point
- Output overload indication with reset

|                    | MODEL   | BK130/36 or BK130/36-B  | BK300  |
|--------------------|---|---|--|
| INPUT              | Voltage/Current   | 110-120 V, 30 A<br>220-240 V, 15 A  | 208-240 V, 60 A  |
| Z                  | Frequency   | 50/60 Hz  | 50/60 Hz   |
| OUTPUT             | Voltage/Current   | ≈ 0-36 kV, 180 mA<br>≈ 0-130 kV, 50 mA  | 0-300 kV, 60 mA  |
| DUTY               |   | 5 min ON/15 min OFF, 50 mA/180 mA<br>1 hr ON/1 hr OFF, 33.3 mA/120 mA<br>Continuous, 25 mA/90 mA  | 5 min ON/30 min OFF, 60 mA   |
| SING               | Accuracy  | 0.8% Reading + 0.2% of range  | 0.8% Reading + 0.2% of range   |
| METERING           | Voltmeter Range(s)  Currentmeter Range(s)                     | 36/130 kV<br>0-200 μΑ/2 mA/ 20 mA/200 mA  | 0-300.0kV<br>0-60 mA, 0-300 μA   |
| PD                 | 3 ( )   | <3 pC at 100 kV (optional measurement)  | <15 pC at 300 kV   |
|                    |   | (   |  |
| -                  |   |   | ·  |
|                    | Input Power   | 30' (9 m)   | Optional   |
|                    | Power Interconnect  | 30' (9 m)<br>20' (6 m)  | Optional<br>Optional   |
|                    |   | 30' (9 m)<br>20' (6 m)<br>20' (6 m)   | Optional   |
| CABLES<br>INCLUDED | Power Interconnect Meter Interconnect                         | 30' (9 m)<br>20' (6 m)  | Optional Optional 20' (6 m)  |
| CABLES INCLUDED    | Power Interconnect  Meter Interconnect  Ground                | 30' (9 m)<br>20' (6 m)<br>20' (6 m)<br>20' (6 m) (qty. 2)   | Optional Optional 20' (6 m) 30' (9 m)  |
| CABLES INCLUDED    | Power Interconnect  Meter Interconnect  Ground  Return        | 30' (9 m)<br>20' (6 m)<br>20' (6 m)<br>20' (6 m) (qty. 2)<br>20' (6 m)<br>21.5"L x 17"W x 14" H, 49 lbs   | Optional Optional 20' (6 m) 30' (9 m) 30' (9 m) 30' (9 m)  |
|                    | Power Interconnect Meter Interconnect Ground Return  CONTROLS | 30' (9 m)<br>20' (6 m)<br>20' (6 m)<br>20' (6 m) (qty. 2)<br>20' (6 m)<br>21.5"L x 17"W x 14" H, 49 lbs<br>546 x 432 x 356 mm, 22 kgs<br>16" D x 30" H, 178 lbs | Optional Optional 20' (6 m) 30' (9 m) 30' (9 m)  32"L x 23"W x 68"H, 550 lbs 813 x 584 x 1727 mm, 250 kgs 30" D x 89" H, 1800 lbs. |

# Quick Reference Capabilities per ANSI A92.2-2015 standard (IEC/ISO similar)

| Category A&B Devices Periodic Test |                 |  |
|------------------------------------|-----------------|--|
| 46 kV & Below Voltage Class        | BK130/36, BK300 |  |
| 69 kV Voltage Class                | BK130/36, BK300 |  |
| 138 kV Voltage Class               | BK130/36, BK300 |  |
| 230 kV Voltage Class               | BK300           |  |
| 345 kV Voltage Class               | BK300           |  |

| Category C, D, & E Device   | es Periodic Test |
|-----------------------------|------------------|
| 46 kV & Below Voltage Class | BK130/36, BK300  |

| Insulating Aerial Ladders & Insulating Aerial<br>Vertical Towers Periodic Test |                 |
|--|-----------------|
| 46 kV & Below  | BK130/36, BK300 |
| 20 kV & Below  | BK130/36, BK300 |

| Category A&B Devices 50/60 Hz<br>Qualification Test |                 |  |
|---|-----------------|--|
| 46 kV & Below Voltage Class                         | BK130/36, BK300 |  |
| 69 kV Voltage Class                                 | BK130/36, BK300 |  |
| 138 kV Voltage Class                                | BK130/36, BK300 |  |
| 230 kV Voltage Class                                | BK130/36, BK300 |  |
| 345 kV Voltage Class                                | BK300           |  |

| Category A&B Devices 50/60 Hz<br>2 Second Withstand Test |                 |  |
|--|-----------------|--|
| 46 kV & Below Voltage Class                              | BK130/36, BK300 |  |
| 69 kV Voltage Class                                      | BK130/36, BK300 |  |
| 138 kV Voltage Class                                     | BK300           |  |

| Category A&B Double Rated Voltage Test |                 |  |
|--|-----------------|--|
| 46 kV & Below Voltage Class            | BK130/36, BK300 |  |
| 69 kV Voltage Class                    | BK130/36, BK300 |  |
| 138 kV Voltage Class                   | BK300           |  |
| 230 kV Voltage Class                   | BK300           |  |

| Category C Qualification Test |                 |  |
|-------------------------------|-----------------|--|
| 46 kV & Below Voltage Class   | BK130/36, BK300 |  |

| Insulating Aerial Ladders & Insulating Aerial<br>Vertical Towers Qualification Test |                 |
|---|-----------------|
| 46 kV & Below   | BK130/36, BK300 |
| 20 kV & Below   | BK130/36, BK300 |

# **Options**

### Accessory Package

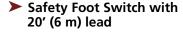
- 1 HV Output Cable, 50' (15 m)
- 1 Return Cable, 50' (15 m)
- 1 Shielded Return Cable, 50' (15 m)
- 3 Jumper Leads, 5' (1.5 m)
- 1 Foot Switch, 30' (9 m) or 50' (15 m) Lead (Hand Switch also available)
- 8 Insulating Pads 2' x 2' x 3/8" (609 mm x 609 mm x 9.5 mm)
- 1 Copy of A92.2 Standard (latest revision)



- Flashing Light, Mounted, Telescoping Pole
- Flashing Light with Security Circuit, magnetic base
- Red/Green Light, Folding Base, Security Circuit, E-stop, 20' (6 m) Cable



Ground Stick





Safety Hand Switch with 10' (3 m) lead

### For Model BK130/36 Only

- Upgrade to Heavy-duty Cart
- **Aluminum** Transformer Cover



Low Voltage Line Filters



Vinyl Cover



- > PD Test Certification
- Calibration Data, NRC
- ➤ ISO17025 calibration

### For "B" models Only

- Windows software for connection to PC
- Fiber Optic communications for lab use (Model BK300 only)





For Model BK300 Only

Casters





### **WORLD HEADOUARTERS**

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