

Field and Lab AC Dielectric Test Sets 15-200 kV



Testing Applications

Suitable for dielectric testing a wide range of electrical apparatus

- A **premier** line of **AC Dielectric Test Sets** with ratings from **15 to 200 kV AC**
- **Lightweight** and **ruggedly constructed** for years of field use
- **Simple set-up** and **operation**
- Low **partial discharge** output
- **ISO17025 calibration** upon request
- **Fully automated** with **data acquisition**



Model 6CP200/100-10



Model
6CP100/50-7.5



Model 6CB30/15-3



Description

This portable rugged line of AC high voltage test equipment is ideally suited for use in the field or in the laboratory. The 6CP and 6CB line offers a complete test system in a mobile package. All units use a combination control and regulator enclosure and a separate high voltage section.

The 6CP system is equipped with advanced digital metering, and control and protection devices which are easy to use and provide the operator with all necessary information to safely operate the system.

The 6CB system is equipped with a 7" Full-Color Touch-Screen display with auto-ranging voltage and current meters plus many other additional features.

The Metering Guard Mode allows accurate measurements of the high voltage test specimen leakage current by bypassing stray capacitive currents. The high voltage section consists of a specially designed oil insulated high voltage transformer characterized by use of an isolating cylindrical housing mounted on a rugged steel base. The high voltage output is equipped with a corona free aluminum shielding electrode. The high quality design and construction is key to the superior partial discharge performance of the 6CP and 6CB line.

The system arrives ready to use with all power and interconnect cables included; the simple setup allows this system to be ready for testing in minutes. The rugged construction and dependability, backed by long-term warranty makes the 6CP and 6CB line an ideal choice for your high voltage testing requirements.



Model 6CP



Model 6CB

| | MODEL | 6CP30/15-3 | 6CP50/10-3 | 6CP100/50-7.5 | 6CP120/60-7.5 | 6CP100/50-10 | 6CP120/60-10 | 6CP200/100-10 |
|-----------------|-----------------------|--|---|---|--|---|--|---|
| INPUT | Voltage/Current | 110-120 V, 16 A 220-240 V, 8 A | 110-120 V, 16 A 220-240 V, 8 A | 110-120 V, 30 A 220-240 V, 15 A | 110-120 V, 30 A 220-240 V, 15 A | 220-240 V, 30 A | 220-240 V, 30 A | 220-240 V, 25 A |
| | Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz |
| OUTPUT | Voltage/Current | ≈ 0-15 kV, 200 mA ≈ 0-30 kV, 100 mA | ≈ 0-10 kV, 300 mA ≈ 0-50 kV, 60 mA | ≈ 0-50 kV, 150 mA ≈ 0-100 kV, 75 mA | ≈ 0-60 kV, 125 mA ≈ 0-120 kV, 62.5 mA | ≈ 0-50 kV, 200 mA ≈ 0-100 kV, 100 mA | ≈ 0-60 kV, 166 mA ≈ 0-120 kV, 83 mA | ≈ 0-100 kV, 100 mA ≈ 0-200 kV, 50 mA |
| | | DUTY CYCLES | 5 min ON/15 min OFF 15 min ON/1 hr OFF 1 hr ON/1 hr OFF | 3 kVA 2 kVA 1.5 kVA | 7.5 kVA 5 kVA 3 kVA | 10 kVA 7.5 kVA 5 kVA | | |
| FEATURES | Compensation | 50% Inductive Reactive | | 66% Inductive + Selectable Capacitive Preload | | 50% Inductive Reactive | | |
| | Metering Accuracy | 0.8% Reading +0.2% Full Scale | | | | | | |
| | Voltmeter Range(s) | 0-15/30 kV | 0-10/50 kV | 0-50/100 kV | 0-60/120 kV | 0-50/100 kV | 0-60/120 kV | 0-100/200 kV |
| | Currentmeter Range(s) | 0-200 μA/2 mA/ 20 mA/200 mA | | 0-200 μA/2 mA/ 20 mA/300 mA | | 0-200 μA/ 2 mA/ 20 mA/ 200 mA | | |
| Output | HV Electrode | | | | | | | |
| PD | PD level | <10 pC | | | | | | |
| | Optional up to 100kV | <3 pC | | | | | | |
| CABLES INCLUDED | Power Cable | 10'(3048 mm) | | 30'(9144 mm) | | | | |
| | Power Interconnect | 10'(3048 mm) | | 20'(6096 mm) | | | | |
| | Meter Interconnect | 10'(3048 mm) | | 20'(6096 mm) | | | | |
| | Ground | 10'(3048 mm) | | (2) 20'(6096 mm) each | | (3) 30'(9144 mm) ea | | |
| | Return | 10'(3048 mm) | | 20'(6096 mm) | | 10'(3048 mm) | | |
| | Divider Metering | n/a | | n/a | | 30'(9144 mm) | | |
| | Paralleling | n/a | | n/a | | 10'(3048 mm) | | |

6CP Safety and Design Features

- 2 or 3 piece designs
- Circuit breaker protection
- External interlock provision
- High voltage On/Off pushbuttons with indicator
- Zero Start interlock
- Manual control of output voltage
- Adjustable overload circuit
- Slow and fast-acting transient protection on all meters and relays
- Digital timer with audible alarm
- Digital multi range metering
- Emergency Off pushbutton with key lockout (excluding model 6CP30 and 6CP50)
- Guard mode for accurate current measurements
- Output overload indicator with reset switch
- All interconnect control and power cables are included
- Cable storage provision
- Operation/maintenance manual

6CB Safety and Design Features

- 7" Full-color Touch-screen Display
- Auto-ranging meters for voltage and current
- Breakdown memory voltmeter
- Maximum voltage reached memory indicator
- Duration and Dwell timers
- Zero Start interlock
- Motorized voltage Raise/Lower with Infinity Dial
- Adjustable rate of voltage rise in v/s
- Adjustable overcurrent trip point
- Communications port for data acquisition
- Status bar for system messages
- Warning circuit
- Emergency Off pushbutton
- Circuit protection
- High voltage On/Off pushbuttons
- Automatic voltage control
- Data logging to USB via csv file

Environmental Operating Conditions

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

| MODEL | | 6CB30/15-3 | 6CB50/10-3 | 6CB100/50-7.5 | 6CB120/60-7.5 | 6CB100/50-10 | 6CB120/60-10 | 6CB200/100-10 | |
|-----------------|-----------------------|---|---------------------------------------|---|--|---|--|---|--|
| INPUT | Voltage/Current | 110-120 V, 16 A 220-240 V, 8 A | 110-120 V, 16 A 220-240 V, 8 A | 110-120 V, 30 A 220-240 V, 15 A | 110-120 V, 30 A 220-240 V, 15 A | 220-240 V, 30 A | 220-240 V, 30 A | 220-240 V, 25 A | |
| | Frequency | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | 50/60 Hz | |
| OUTPUT | Voltage/Current | ≈ 0-15 kV, 200 mA ≈ 0-30 kV, 100 mA | ≈ 0-10 kV, 300 mA ≈ 0-50 kV, 60 mA | ≈ 0-50 kV, 150 mA ≈ 0-100 kV, 75 mA | ≈ 0-60 kV, 125 mA ≈ 0-120 kV, 62.5 mA | ≈ 0-50 kV, 200 mA ≈ 0-100 kV, 100 mA | ≈ 0-60 kV, 166 mA ≈ 0-120 kV, 83 mA | ≈ 0-100 kV, 100 mA ≈ 0-200 kV, 50 mA | |
| | DUTY CYCLES | 5 min ON/15 min OFF 15 min ON/1 hr OFF 1 hr ON/1 hr OFF | 3 kVA 2 kVA 1.5 kVA | 7.5 kVA 5 kVA 3 kVA | 10 kVA 7.5 kVA 5 kVA | | | | |
| FEATURES | Compensation | 50% Inductive Reactive | | 66% Inductive + Selectable Capacitive Preload | | 50% Inductive Reactive | | | |
| | Metering Accuracy | 0.8% Reading +0.2% of range | | | | | | | |
| | Voltmeter Range(s) | 0-15/30 kV | 0-10/50 kV | 0-50/100 kV | 0-60/120 kV | 0-50/100 kV | 0-60/120 kV | 0-100/200 kV | |
| | Currentmeter Range(s) | 0-200 μA/2 mA/ 20 mA/200 mA | 0-200 μA/2 mA/ 20 mA/300 mA | 0-200 μA/ 2 mA/ 20 mA/ 200 mA | | | | | |
| | Output | HV Electrode | | | | | | | |
| PD | PD level | <10 pC | | | | | | | |
| | Optional up to 100kV | <3 pC | | | | | | | |
| CABLES INCLUDED | Power Cable | 10'(3048 mm) | | 30'(9144 mm) | | | | | |
| | Power Interconnect | 10'(3048 mm) | | 20'(6096 mm) | | | | | |
| | Meter Interconnect | 10'(3048 mm) | | 20'(6096 mm) | | | | | |
| | Ground | 10'(3048 mm) | | (2) 20'(6096 mm) each | | | | (3) 30'(9144 mm) ea | |
| | Return | 10'(3048 mm) | | 20'(6096 mm) | | | | | |
| | Divider Metering | n/a | | n/a | | | | | |
| | Paralleling | n/a | | n/a | | | | | |

| MODEL 6CP & 6CB | | 30/15-3 | 50/10-3 | 100/50-7.5 | 120/60-7.5 | 100/50-10 | 120/60-10 | 200/100-10 | |
|--------------------------------|------------|-----------------------|--|---|--|---|---|--|--|
| DIMENSIONS & WEIGHTS (approx.) | Cart(s) | L x W x H optional | optional | 22.5" (572mm) x 29.25" (743mm) x 50" (1270mm) | | | | | |
| | | Weight | | 61 lbs (28 kgs) | | 70 lbs (32 kgs) | | 61 lbs (28 kgs) | |
| | Controls | L x W H | 16.5" (419mm) x 15.25" (388mm) x 11.25" (286mm) | | 21.25" (540mm) x 16.75" (426mm) x 13.75" (349mm) | | | | |
| | | Weight | 6CP: 30 lbs (14 kgs) / 6CB: 34 lbs (15 kgs) | | 6CP: 52 lbs (24 kgs) / 6CB: 56 lbs (25 kgs) | | 6CP: 63 lbs (29 kgs) / 6CB: 67 lbs (30 kgs) | | |
| | HV Tank(s) | L W H | 14" (356 mm) 14" (356 mm) 17" (432 mm) | | 16" (406mm) 16" (406mm) 30" (762mm) | 19" (483mm) x 19" (483mm) x 30" (762mm) | | 19" (483mm) 19" (483mm) 53" (1346mm) | |
| | | Weight | 76 lbs (34 kgs) | 80 lbs (36 kgs) | 178 lbs (81 kgs) | 255 lbs (116 kgs) | 280 lbs (127 kgs) | | 240 lbs (109 kgs) 222 lbs (101 kgs) |
| | HV Divider | L W H | HV Divider is internal | | | | | 9" (229mm) 9" (229mm) 43" (1092mm) | |
| | | Weight | | | | | | 40 lbs (18 kgs) | |
| | Cables | Weight | 6 lbs (3 kgs) | | 20 lbs (9 kgs) | | 30 lbs (14 kgs) | | |
| | Total Unit | Weight | 114 lbs (52 kgs) | 120 lbs (55 kgs) | 315 lbs (143 kgs) | 392 lbs (178 kgs) | 447 lbs (203 kgs) | 447 lbs (203 kgs) | 660 lbs (300 kgs) |

| | | | | | | | | |
|--------------------------|-----------|--------------|--|-----------------|--|--|--|-------------------|
| SHIPPING SIZES (approx.) | Package 1 | L W H | 21" (533 mm) 21" (533 mm) 16" (406 mm) | | 34" (864mm) 27" (686mm) 56" (1422mm) | 34" (864mm) 27" (686mm) 56" (1422mm) | 34" (864mm) 27" (686mm) 56" (1422mm) | |
| | | Weight | 37 lbs (17 kgs) | | 353 lbs (160 kgs) | 430 lbs (195 kgs) | 485 lbs (200 kgs) | 420 lbs (191 kgs) |
| | Package 2 | L W He | 20" (508 mm) 20" (508 mm) 20" (508 mm) | | | | 34" (864mm) 27" (686mm) 56" (1422mm) | |
| | | Weight | 83 lbs (38 kgs) | 86 lbs (39 kgs) | | | 372 lbs (169 kgs) | |
| | Package 3 | L W H | | | | | 34" (864mm) 27" (686mm) 56" (1422mm) | |
| | | Weight | | | | | 66 lbs (30 kgs) | |

Options

➤ **Flashing Light, Mounted or Stand-alone**

- FL-1 Flashing Light, Mounted, Telescoping Pole
- FL-2 Flashing Light only with magnetic base
- FL-3 Red/Green Light, Folding Base, Security Circuit, E-stop, 20' Cable
- FL-4 Flashing Light with Security Circuit, magnetic base

➤ **Foot Switch with 20' lead**

➤ **Low Voltage Line Filters**

➤ **PD Test Certification**

➤ **ISO17025 Calibration**

➤ **Ground Stick**

➤ **Vinyl Cover**

➤ **Upgrade to Heavy-duty Cart**

➤ **Aluminum Transformer Cover**

➤ **Lift Kit for HV Tank**

PHENIX
TECHNOLOGIES

WORLD HEADQUARTERS
Phenix Technologies, Inc.
75 Speicher Drive
Accident, MD 21520 USA
Ph: +1.301.746.8118
Fx: +1.301.895.5570
Info@phenixtech.com

BRANCH OFFICES
Phenix Systems AG
Riehenstrasse 62A, 4058 Basel, Switzerland
Ph: +41.61.383.2770, Info@phenixsystems.com
Phenix Asia
Zhong Cheng Rd, Sec 1, No 177, 2F, Taipei 11148 Taiwan
Ph: +886.2.2835.9738, Fx: +886.2.2835.9879, Info@phenixasia.com

ISO
9001:2008
Compliant



www.phenixtech.com

© Copyright – Phenix Technologies, Inc. 8/2019

A RENT

a-rent.com

(IL) 630.748.8900
(TX) 713.564.8900

sales@a-rent.com