

Field and Lab AC Dielectric Test Sets

15-200 kV



康高特-PHENIX 6CB/6CP系列交流介电测试装置 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
- Models available with **easy to read digital meters** or a **full-color touch screen display** with **data acquisition**
- **ISO17025 calibration** upon request



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 inter-connect 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.

"6CP" Models – 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



Model 6CP

"6CB" 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
- WiFi control from PC (Requires optional software)
- Auto-ranging meters for voltage and 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 6CB

	MODEL	6CP or 6CB 30/15-3	6CP or 6CB 50/10-3	6CP or 6CB 100/50-7.5	6CP or 6CB 120/60-7.5	6CP or 6CB 100/50-10	6CP or 6CB 120/60-10	6CP or 6CB 200/100-10
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	3 kVA		7.5 kVA		10 kVA		
	15 min ON/1 hr OFF	2 kVA		5 kVA		7.5 kVA		
	1 hr ON/1 hr OFF	1.5 kVA		3 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)				10'(3048 mm)
	Divider Metering	n/a		n/a				30'(9144 mm)
	Paralleling	n/a		n/a				10'(3048 mm)

MODEL		6CP or 6CB 30/15-3	6CP or 6CB 50/10-3	6CP or 6CB 100/50-7.5	6CP or 6CB 120/60-7.5	6CP or 6CB 100/50-10	6CP or 6CB 120/60-10	6CP or 6CB 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	16.5"(419mm) x 15.25"(388mm)		21.25"(540mm) x 16.75"(426mm) x 13.75"(349mm)			
		H	x11.25"(286mm)					
	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	14"(356 mm)		16"(406mm)	19"(483mm) x 19"(483mm) x 30"(762mm)		19"(483mm)
		W	14"(356 mm)		16"(406mm)			19"(483mm)
		H	17"(432 mm)		30"(762mm)			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	HV Divider is internal					
W		9"(229mm)						
H	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	21"(533 mm)		34"(864mm)	34"(864mm)		34"(864mm)					
		W	21"(533 mm)		27"(686mm)	27"(686mm)		27"(686mm)					
		H	16"(406 mm)		56"(1422mm)	56"(1422mm)		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	20"(508 mm)						34"(864mm)				
		W	20"(508 mm)						27"(686mm)				
		He	20"(508 mm)						56"(1422mm)				
	Weight	83 lbs(38 kgs)	86 lbs(39 kgs)					372 lbs(169 kgs)					
	Package 3	L							34"(864mm)				
		W							27"(686mm)				
H		56"(1422mm)											
Weight							66 lbs(30 kgs)						

Options

➤ Flashing Light, Mounted or Stand-alone

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



➤ Safety Foot Switch with 20' (6 m) lead



➤ Low Voltage Line Filters



➤ Safety Hand Switch with 10' (3 m) lead

➤ Ground Stick



➤ Vinyl Cover



- PD Test Certification
- ISO17025 Calibration

For "B" models Only

- Windows software for connection to PC

- Hand cart for 30 kV & 50 kV models
- Upgrade to Heavy-duty Cart
- Aluminum Transformer Cover



➤ Lift Kit for HV Tank

ACCESSORIES INCLUDED

- User guide
- Calibration Certificate

Environmental Operating Conditions

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