

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)					10'(3048 mm)
	Divider Metering	n/a		n/a					30'(9144 mm)
	Paralleling	n/a		n/a					10'(3048 mm)

		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	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 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)		

		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	
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 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



- ▶ PD Test Certification
- ▶ ISO17025 Calibration

▶ Low Voltage Line Filters



▶ Ground Stick



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



▶ Lift Kit for HV Tank



▶ Vinyl Cover



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