



CIRCUIT BREAKER TESTING

CBCT

PROGRAMMABLE DC POWER SUPPLY



CBCT

Programmable DC Power Supply



PRODUCT OVERVIEW

The CBCT provides one pulse and one continuous DC output. The unit's built-in short-circuit protection feature protects the coil under test if the current exceeds 80 amperes or if the current drawing duration is more than 500 milliseconds. A general purpose single channel timer is also available for checking circuit breaker operating time or for any other timing application.

The Vanguard Circuit Breaker Coil Tester (CBCT) is a variable voltage DC power supply designed specifically to test substation circuit-breaker Open and Close coils. The CBCT uses the substation's DC power supply to electronically generate a programmable output voltage from 5% to 95% of the source voltage. The CBCT can maintain up to an 80A test current while maintaining 2% or better voltage regulation during the circuit breaker coil operation. The CBCT provides a safe and convenient method of testing minimum operating voltages of Open and Close coils.

Input Voltage

The CBCT's input voltage range is from 20 to 300 Vdc. The input circuit is also protected from a reversed polarity connection.

CBCT Timer

The built-in, single channel timer can be used to verify circuit-breaker timing parameters or for any timing application. The timing range is from 0.000 to 999.000 seconds with an accuracy of 0.1 milli-seconds. The timing results are displayed in both milli-seconds and cycles. The timer can be started by circuit breaker coil initiation or can be triggered by the dry or wet contact input. The timer can be stopped by either the dry or wet contact input.

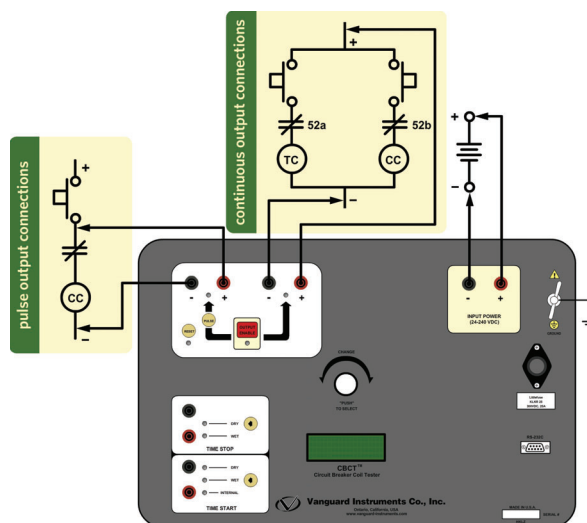
Output Voltage

The output voltage is programmable from 5% to 95% of the input voltage and is set using the dial on the front panel. Output voltage regulation is better than 2% under load. Two DC outputs (one continuous and one pulse) are available on the CBCT. Both outputs are capable of sourcing up to 80 amperes. These outputs are protected against short-circuit conditions and will not exceed 8- amperes or a duration of 500 milli-seconds.

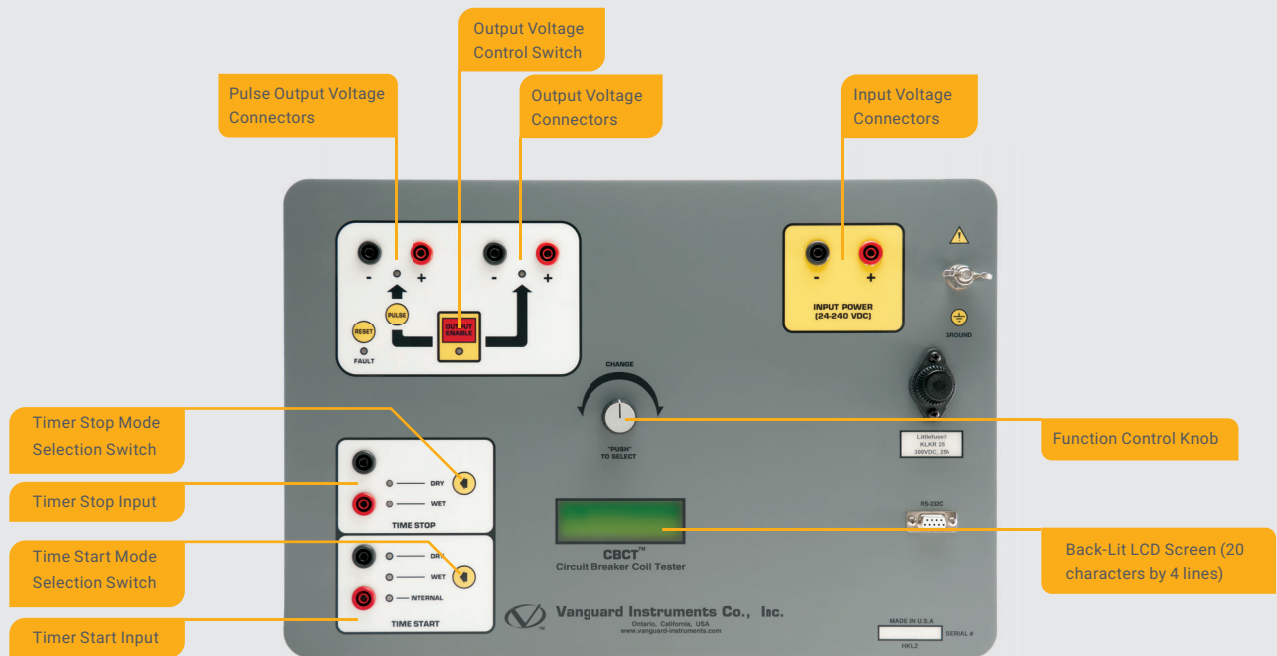
ORDERING INFORMATION

Part No.	Description
9063-UC	CBCT unit and cables

CBCT Connections



CBCT Features



CBCT Technical Specifications

	Physical Specifications	Dimensions: 19"W x 7"H x 15" D (48 cm x 17 cm x 38 cm) Weight: 25 lbs. (11.3 Kg)		Input Voltage	20 ~ 300 Vdc, 20A fuse
	Output Voltages	5% ~ 95% of input voltage with 2% regulation at max current (up to 80A)		Output Voltage Protection	Shutdown if current exceeds 80A or if current drawing time exceeds 500 ms @ 80A
	Output Voltage Channels	One continuous and one pulse DC output		Volt Meter Range	Input/output meters, 0 ~ 300 Vdc; accuracy: 1% of reading, $\pm 0.2V$
	Timer Start Input	Internal (coil initiation), wet-contact input (20 ~ 240 Vac/dc) or dry-contact input (1 ~ 200 ohms)		Timer Stop Input	Wet-contact (20 ~ 240 Vac/dc) or dry-contact (1 ~ 200 ohms)
	Timer Display Range	0.0000 ~ 999.999 seconds; accuracy: 0.1 ms, ± 1 digit		Display	Back-lit LCD screen (20 characters by 4 lines)
	Safety	Designed to meet UL 61010A-1 and CAN/CSA C22.2 No. 1010.1-92 standards		Humidity	90% RH @ 40°C (104°F) non-condensing
	Temperature	Operating: -10°C to +50°C (+15°F to +122°F) Storage: -30°C to +70°C (-22°F to +158°F)		Altitude	2,000 m (6,562 ft) to full safety specifications
	Cables	Two 6-foot (1.83m) #8 AWG DC cable sets, two 10-foot (3.05m) cable sets, one ground cable, one cable bag			
	Options	Shipping case		Warranty	One year on parts and labor

NOTE : the above specifications are valid at nominal voltage and ambient temperature of +25°C (+77°F). Specifications are subject to change without notice.



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