

# CB PWS

circuit breaker DC power supply



Vanguard Instruments  
A DOBLE COMPANY





# CB PWS

## circuit breaker DC power supply

### ordering information

Part No.	Description
9120-UC	120Vdc CB PWS and cables
9121-UC	240Vdc CB PWS and cables
9120-SC	CB PWS shipping case

The CBPWS is a standalone DC power supply designed for operating circuit breakers. This compact and lightweight DC power supply can power the circuit breaker control circuit (trip and close coils, and charging motor) in situations where the substation DC supply is not available.

The CBPWS is powered by a wide AC voltage source (120 -240Vac) and available with factory preset 120Vdc or 240Vdc output.

The CBPWS' output rating is listed below:

#### 120 Vac Input:

- 120Vdc @ 15A, 10 second duration max ( 5% regulation) or 120Vdc@ 4A continuous (3% regulation)
- 240Vdc @ 7.5A, 10 second duration max (5% regulation) or 240Vdc @ 2A continuous (3% regulation)

#### 240 Vac Input:

- 120 Vdc @ 20 A, 10 second duration max ( 5% regulation) or 120 Vdc @ 4 A continuous (3% regulation)
- 240 Vdc @ 10 A, 10 second duration max (5% regulation) or 240 Vdc @ 2 A continuous (3% regulation)

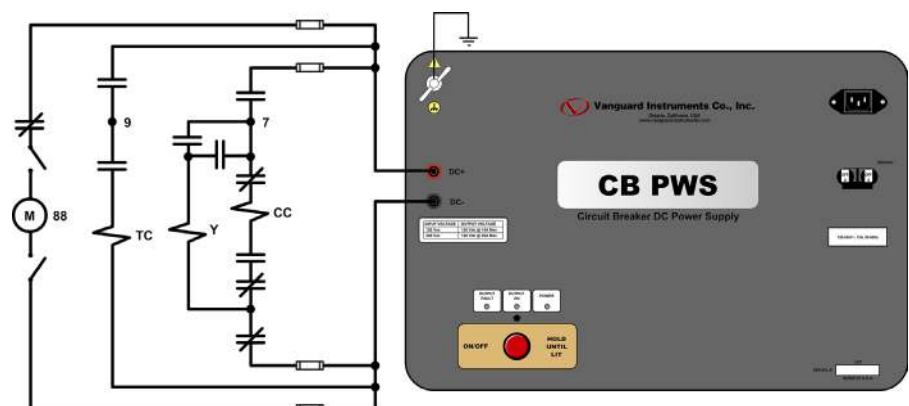
DC output is enabled via the power control switch on the front panel. LED indicators show the "Output On", "Output Fault", and "Power Input Available" status on the front panel.

The CBPWS offers several outstanding features:

- very lightweight (14 lbs. / 6.4 Kg)
- thermal and short circuit protected output
- output dc voltage source is isolated from the power input
- wide ac voltage input range (120 Vac to 240 Vac)

The CBPWS is housed in a heavy-duty, impact-resistant plastic enclosure and furnished with a power cord, ground cable, and DC power test leads.












### CB PWS connections



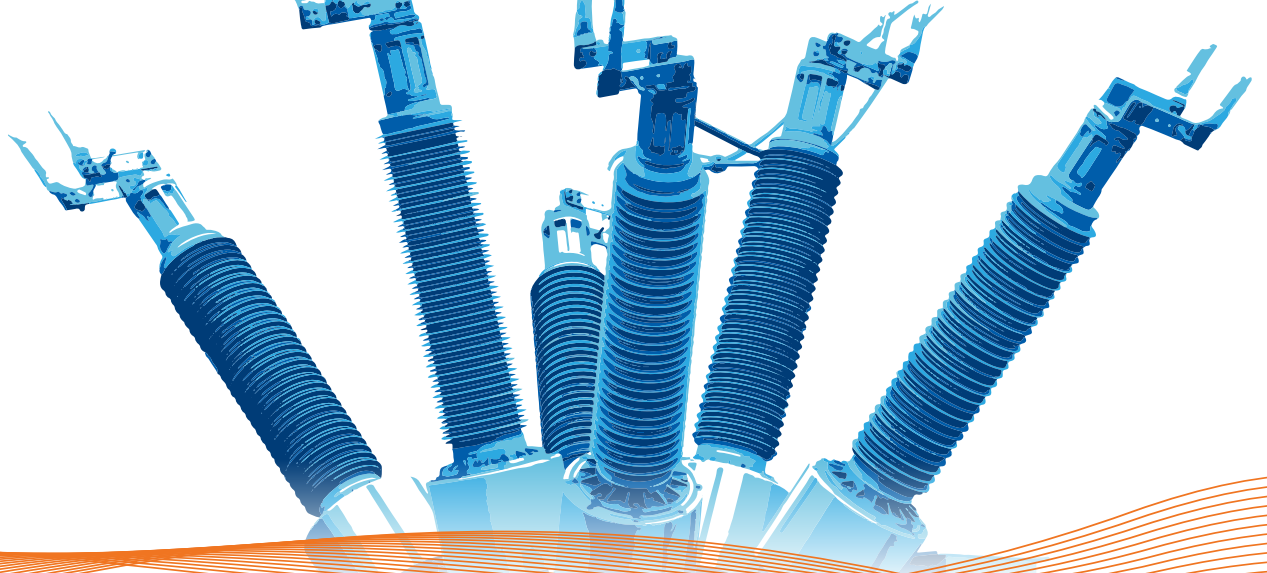
# CB PWS Features



## CB PWS technical specifications

 <b>physical specifications</b>	<b>Dimensions:</b> 17"W x 7"H x 13" D (43 cm x 17.8 cm x 33 cm) <b>Weight:</b> 14 lbs. (6.4 Kg)	 <b>input voltage</b>	100 – 130 Vac, 50/60 Hz or 200 – 240 Vac, 50/60 Hz
 <b>output voltage</b>	<b>120 Vac input voltage:</b> <b>120 Vdc model:</b> 120Vdc @ 15A, 10 second duration max ( 5% regulation) or 120Vdc@ 4A continuous (3% regulation) <b>240 Vdc model:</b> 240Vdc @ 7.5A, 10 second duration max (5% regulation) or 240Vdc @ 2A continuous (3% regulation) <b>240 Vac input voltage:</b> <b>120 Vdc model:</b> 120Vdc @ 20A, 10 second duration max ( 5% regulation) or 120Vdc@ 4A continuous (3% regulation) <b>240 Vdc model:</b> 240Vdc @ 10A, 10 second duration max (5% regulation) or 240Vdc @ 2A continuous (3% regulation)	 <b>safety</b>	designed to meet the UL 61010A-1 and CAN/CSA C22.2 No 1010.1-92 standards
 <b>led indicators</b>	power available, output available, and output fault	 <b>humidity</b>	90% RH @ 40°C (104°F) non-condensing
 <b>temperature</b>	<b>Operating:</b> -10°C to +50°C (+15°F to +122°F) <b>Storage:</b> -30°C to +70°C (-22°F to +158°F)	 <b>cables</b>	power cord, safety ground, 10ft DC power supply test leads
 <b>altitude</b>	2,000 m (6,562 ft) to full safety specifications	 <b>warranty</b>	one year on parts and labor
 <b>options</b>	shipping case		

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



## Instruments designed and developed by the hearts and minds of utility electricians around the world.

Founded in 1991 and located in Ontario, California, USA, Vanguard Instruments™ offers a wide range of diagnostic test equipment that accurately and efficiently measures the health of critical substation equipment, such as transformers, circuit breakers, and protective relays.

Our first product was a computerized, extra high voltage (EHV) circuit breaker analyzer, which became the forerunner of an entire line of EHV circuit breaker test equipment. Over the years, our portfolio has grown tremendously to include microcomputer-based precision micro-ohmmeters; single- and three-phase transformer winding turns-ratio testers; transformer winding-resistance meters; mega-ohm resistance meters; and a variety of other application-specific products.

Our instruments are rugged, reliable, accurate, and user friendly. They eliminate tedious and time-consuming operations, while providing fast, complex test-result calculations. Using our equipment helps reduce errors and eliminates the need to memorize long sequences of procedural steps.

In 2017, Vanguard Instruments became a part of Doble Engineering Company, an energy industry leader in hardware, software, and services that diagnose and monitor the health of critical assets.



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