

PP30 High Voltage Surge / High Potential Tester

The PP30 Power Pack is a high power impulse generator used to test very large high voltage windings.



The PP30 Power Pack is a high impulse generator. It is used to test very large high voltage windings. The output is controlled by a variable transformer from 2000 volts up to a maximum of 30,000 volts.

The PP30 performs both surge and DC high potential tests when used with the D12000, D12R or AWA as the control and display. It incorporates a supply monitor to insure safe operation from a well grounded supply. In addition, 60kV rated test lead cables are provided.

The "key element" of the Surge test circuit is a grounded grid hydrogen thyratron tube. The tube conducts very high peak current (1,000's of amps). Such high instantaneous currents are needed to fully test the very low impedance windings of large motors or form wound coils. This current is only produced for a few microseconds by the discharge of a 0.1 microfarad capacitor.

Voltage rise time is 100-200 nanoseconds (0.1-0.2 microseconds), so the PP30 complies with IEEE Standard 522-1992 and IEC Standard 34-15 when testing motor windings and coils.

The DC high potential test can also be done using the PP30 along with the D12000, D12R or AWA. Test voltage is set by the output control from 2,000 volts up to 30,000 volts. Current is displayed and a trip circuit monitors the test. If current exceeds the trip level, the test is automatically halted. In its most sensitive setting, the protective circuit will operate as low as 10 microamps.

In addition, the D12000, D12R, or AWA also monitors current. This provides a redundant level of safety for the DC high potential test.

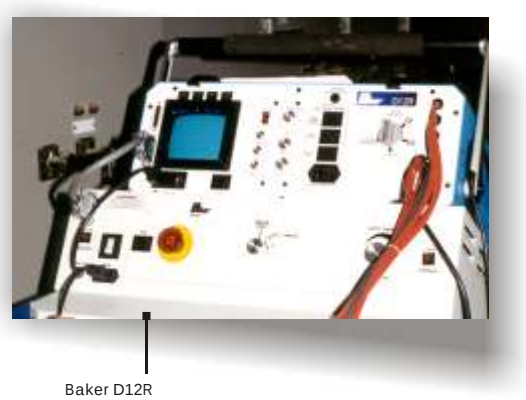
The PP30 is housed in a mobile case on pneumatic wheels. It provides power and accessory connections from the D12000, D12R or AWA as well as lead storage in a convenient portable unit. These features make the PP30 the most powerful and most advanced tester of its type.

Specifications*

Surge Test	
Maximum Output Voltage	30,000 Volts
Maximum Output Current w/test leads shorted together:	
Three Phase Selector Switch	1400amps - 1500amps pulse width @ 4 m
Seconds	
Single Coaxial Test Lead	1800amps - 1850 amps pulse width @ 2 m Seconds
Maximum Pulse Energy	45 joules
DC HiPot Potential Test	
Maximum Output Voltage	30,000 Volts
Maximum Output Current	1000 mAmps
Overcurrent Trip	10/100/1000 mAmps
Current Resolution	1/10/100 mAmps per div.
Physical Characteristics	
Weight (pounds/kilograms)	250 lbs/113 kilo
Dimensions	24 x 51 x 26 in
Power Requirements	110V/220V single phase 1000 Watts, 50/60 Hz

**Data Subject to change without notice. Printed in USA 9/04*

Whether you're troubleshooting, manufacturing, or rebuilding, Baker Testers consistently detects faulty windings that other testers miss.



Baker D12R with a PP30.

Baker Instrument Company
PO Box 587
Fort Collins, CO 80522
(970) 282-1200
(800) 752-8272
Fax: (970) 282-1010
www.bakerinst.com

Baker®