

Baker PPX Power Packs

High Voltage motor testing



- Complete range of tests like surge, winding resistance, Megohm (PI, DA), continuous ramp DC step-voltage, and DC hipot tests.
- Used to extend insulation testing range of AWA-IV static motor analysers and DX analysers.
- Test voltages from 5 kV to 40 kV.
- Baker PPX30A includes an internal armature test circuit built in for testing large DC motors.
- Available in three models (PPX30, PPX40, PPX30A).

DESCRIPTION

High-voltage motors and generators are critical to the operation of industrial plants and power generation facilities. Testing of this equipment during the manufacturing process, or in a plant as part of a predictive maintenance program, or in a motor shop before and after repair, requires equipment that can perform tests at voltages as high as 40 kV.

The Megger Baker Power Packs PPX30 and PPX40 provide increased test voltage ranges for our static motor and coil analyzers up to 40 kV. This makes these power pack/analyzer combinations ideal for assessing insulation condition on form-wound coils, high-voltage AC motors, large DC motors and transformers.

Effective testing of medium and high voltage apparatus insulation requires a range of tests to characterize and locate insulation weaknesses and defects. Baker power packs used with Baker static motor analyzers thoroughly test the ground wall insulation between a motor stator's core and windings by combining multiple tests, including:

- Megohm test
- Step and ramp voltage tests
- High-potential (hipot) test
- Polarization index (PI) and dielectric absorption (DA) tests

The condition of winding (turn-to-turn) and phase-to-phase insulation is assessed with:

- Surge test
- Pulse-to-pulse error-area ratio (PP-EAR) analysis

Coil resistance and inductance measurements are made to assure proper winding construction, and correct assembly of the coils into the motor. Capacitance to ground is also measured. (Inductance, Capacitance and Resistance tests require a Baker DX or Baker Power Pack Controller with applicable options.)

FEATURES

- Regulated test voltages from 0kV to 40kV (with host unit)
- Complete range of tests
- Multiple safety features
- Large pneumatic wheels for mobility
- AC outlet and storage area for leads
- Arc detection
- Over-current detection
- User-settable voltage ramp rate eliminates nuisance trips and improves repeatability
- Fast, clearly reported HV coil testing mode (with Baker DX or Power Pack Controller)
- Professional results reporting

BENEFITS

- Provide extended test voltage ranges for static motor analyzers
- Accurately test large apparatus and coils
- Minimize unexpected motor failures
- Optimize productivity
- Improve worker safety
- Easy transport to testing areas



BAKER POWER PACK CONTROLLER

The Baker Power Pack Controller is a low-cost option designed to operate the Baker PPX30, Baker PPX40 and Baker PPX30A high-voltage power packs. It is used when performing DC hipot and surge tests to record and display the results. This controller can only be used when attached to a Baker power pack; it is not a standalone analyzer.

Report storage and analysis

The Baker Power Pack Controller can store multiple test results in a single folder and automatically attach a time/ date stamp. Data is quickly and easily reviewed using the scroll button on the analyzer's touch screen interface. Nameplate data is easy to enter, and can be sent directly to a printer through the front-panel USB port. Keep your company's or client's brand in front of customers by easily adding a logo to reports and screens. Test results with company logos can be exported to our Surveyor DX desktop report generation software on a PC.

Ease of use

The controller's large, 8-inch touch screen is an industrial-grade, ruggedized color display designed to withstand the rigors of daily use in shop and field motor testing environments. The user interface features large, intuitive icons for easy touch operation, even when an operator is wearing insulated electrical gloves.

BENEFITS

- Displays surge test waveforms
- Displays DC hipot results
- Displays hundreds of coil waveforms for quick analysis
- Stores reference waveforms when coil testing for future reference
- Fast waveform analysis
- Automatic indication of faulty coils
- Fast, efficient coil test function can store up to 400 coil results in a single record
- EAR bar chart analysis for quick identification and reporting of defective coils
- Easily print results directly from controller (printer is optional)
- Export results to Surveyor DX desktop report software (Surveyor DX is optional)
- Master / reference waveform for coil test

OPTIONS

The Power pack controller is available in three versions:

- Power Pack Controller
- Power Pack Controller with resistance test
- Power Pack Controller with RLC test

ACCESSORIES FOR PPX SYSTEMS USING DX, AWA OR POWER PACK CONTROLLER

Check ordering information section for compatibility and other details



**ATF5000 and
AFT4000**



ATP02-C



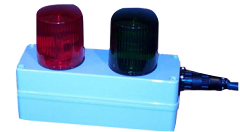
ATP02-P



**25 ft. or 50 ft 60KV High
Voltage Test Extension Leads**



Footswitch



PP-L



PP-S

PPX Power Pack series Specifications			
	Baker PPX30	Baker PPX40	Baker PPX30A
Surge Test			
Maximum output voltage	30 kV	40 kV	30 kV
Max output current (leads shorted)	1400 A	2600 A	1400 A
Maximum impulse energy	45 J	120 J	45 J
Accuracy	12%	12%	12%
DC high potential test			
Maximum output voltage	30 kV	40 kV	30 kV
Voltage accuracy	3%	3%	3%
Maximum output current	10 mA	9 mA	10 mA
Current accuracy	5%	5%	5%
Overcurrent trip	12/120/1200 μ A	12/120/1200 μ A	12/120/1200 μ A
Current scales (per division)	1/10/100 μ A	1/10/100 μ A	1/10/100 μ A
Armature bar-to-bar test (Baker PPX30A only)			
Maximum voltage	-	-	(no load) 2100 V
Maximum current	-	-	7000 A
Maximum impulse energy	-	-	45 J
Maximum test inductance	-	-	20 μ H
Minimum test inductance	-	-	0.4 μ H
Physical characteristics			
Weight	310 lbs (141 kg)	290 lbs (132 kg)	321 lbs (146 kg)
Power requirements (Specified by order part number)	120 or 240 V AC, 50/60 Hz, 1000 W	120 or 240 V AC, 50/60 Hz, 1000 W	120 or 240 V AC, 50/60 Hz, 1000 W
Test leads	3	1	3+1 (armature)
Dimensions	Without handle and cable storage (W x H x D): 24 x 48 x 26 in (610 x 1219 x 660 mm) With handle and cable storage (W x H x D): 24 x 48 x 33 in (610 x 1219 x 838 mm)		
Operates with	Baker AWA-IV, DX, Controller	Baker DX, Controller	Baker AWA-IV, DX, Controller

PPX Power Pack Controller Specifications	
Power requirements	100 to 240 V AC, 50/60 Hz, 2.5 A
Dimensions (H x W x D)	40.6 cm x 35.6 cm x 20.3 cm (16 in x 14 in x 8 in)
Weight (all configurations)	15.4 kg (34 lbs)
VGA touch screen display	8-inch color touch screen
Optional accessories	USB printer, foot switch, remote equipment stop safety lights, Surveyor DX software

ORDERING INFORMATION

Item (Qty)	Part. No.	Item (Qty)	Part. No.
Baker PPX30 Power Pack 30 kV Auxiliary Surge/DC HiPot Power Pack 120 V AC or 240V AC with 3-phase selector switch and pneumatic rubber tires. Comes with foot switch 20-005RC. Used With: AWAIV-12HO, AWAIV-12, AWAIV-6, DX units except DX15A	99-350-030RC (120V) 99-350-032RC (220V)	AWA/ PPX30 Connection Cable Replacement cable to connect AWA to PPX30. This cable is included with power pack and AWA purchase..	23-350-084RC
Baker PPX30A 30KV Power Pack with Armature Test 30 kV Auxiliary Surge/DC HiPot Power Pack 120 V AC or 240V AC with built in bar-to-bar testing capabilities and solid rubber tires. Comes with foot switch 20-005RC, ATF 5000RC, test clips. Used With: AWAIV-12HO, AWAIV-12, AWAIV-6, DX Units except DX 15A	99-350-085RC (120V) 99-350-087RC (220V)	25 ft. 60KV High Voltage Test Extension Leads 4 leads (3 red, 1 black), for units over 15kV	84-001-25RC
Baker PPX40 Power Pack 40 kV Auxiliary Surge/DC HiPot Power Pack 120 V AC or 240 V AC and solid rubber tires. Comes with foot switch 20-005RC Used With: DX Units only except DX15A	99-350-040RC (120V) 99-350-042RC (220V)	50 ft. 60KV High Voltage Test Extension Leads 4 leads (3 red, 1 black), for units over 15kV	84-001-50RC
ATF 5000 Armature test fixture for Baker PP85 and PPX30A. Specify host so appropriate adapters can be included.	84-ATF-001RC	Footswitch Start AWA and DX tests using this footswitch for easy armature and coil testing. 20-007RC is compatible with testers with the new-style footswitch connector.	20-007RC
ATF 4000 Armature surge span testing accessory. Allows surge testing of multiple armature bars. Works with any AWA, DX or other surge tester. Maximum surge voltage 4kV. Not for use with ZTX. Not intended for resistance measurements.	84-ATF-002RC	PP-L Remote Access Unit w/ lights, 6 ft. cable (Safety lights work with AWA and DX testers)	81-SL-001RC
ATP02-C Armature Low-Imp. Test Probe Clips. Requires ZTX. (works with PPX30A)	84-028RC	PP-S Remote Access Unit w. disable switch, 6 ft. cable (Emergency Equipment STOP) for AWA and DX testers.	81-SL-002RC
ATP02-P Armature Low-Imp. Test Probe Pts. Requires ZTX.(works with PPX30A)	84-029RC		
Power Pack Controller DX Controller for PP24, PP30, PP40, PP85, PPX30, PPX30A, PPX40 surge and HiPOT tests. Includes Power Pack Interface and USB for printing and data export.	99-DX-PPRC		
DX Power Pack Controller with Resistance DX Controller for PP24, PP30, PP40, PP85, PPX30, PPX30A, PPX40 surge and HiPOT tests. Includes low voltage resistance test, Power Pack Interface and USB for printing and data export.	99-DX-RPPRC		
DX/ PPX Connection Cable Replacement cable to connect DX to PPX. This cable is included with power pack and DX purchase.	23-D301-020RC		

SALES OFFICE
 Megger Baker Instruments
 4812 McMurry Avenue,
 Fort Collins, CO 80525, USA
 Tel: +1 970-282-1200
 baker.sales@megger.com
 megger.com/baker

Baker PPX_DS_V01_EN
 www.megger.com
 ISO 9001
 The word 'Megger' is a registered trademark