

Programmable AC Power Source



Features:

- Compact size and light weight, standard 19" rack construction
- Step-less frequency setting from 45 to 450Hz
- Very low distortion sine wave output
- Output voltage range selectable 135 or 270V AC
- Galvanically isolated input/output
- Independent on/off switch for input and output
- 16x2 vacuum florescent display for parameter display
- Complete operation through push switches and a digital rotary encoder
- Automatic protection against overload, short circuit and over temp.
- Built in PFC to provide 0.99 input power factor and wide input range
- Conforms to EN55022, class A, safety standard EN60950

Aplab's all new 8600 series of Programmable AC Power Source is compact in size and light in weight due to the use of the state of the art switch mode high frequency PWM technology. These A C Power Sources come with a built in PFC with universal input to provide a typical input power factor of 0.99 at full load, suitable for all the utility power outlets in almost all the countries. The output AC is of full rated current and is delivered in the voltage range of 135V AC or 270V AC, which is user selectable, using a push switch on the front panel.

The Programmable AC Power Source is provided with 16x2 character VF display for parameter display (output voltage and selected voltage range, current, frequency, power and mode of operation; local/remote). The control is through a rotary encoder with the push button switch for control of output voltage and frequency. A separate output ON/OFF switch controls power to the load. The unit is protected against over temperature, overload and short circuit.

These units are available in three output power ratings of 500VA, 1000VA and 1500VA. However higher power models can be offered against specific requirements. It is ideally suitable for industrial product testing; power conversion, automatic test equipment, avionics and military applications for bench top or standard 19" rack mount applications.

Model Selection:

<p>8 6</p> <p>Series</p>	<p>0 5</p> <p>Power Output</p> <p>05-500VA 10- 1000VA 15- 1500VA 20-2000VA 30- 3000VA</p>	<p>M</p> <p>M- Manual A- Analog Prog. 0-5V DC/0-10V DC User Defined P- Programmable</p>	<p>S</p> <p>Optional Features V-Extended Voltage Range, 0-150V, 0-300V R-Factory fitted Rack mounting Kit</p>
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SPECIFICATIONS:

Model	8605P	8610P	8615P	8620P	8630P
Parameters	500VA	1000VA	1500VA	2000VA	3000VA
ELECTRICAL					
INPUT					
Voltage	90V - 265V AC, single phase			185V - 264V AC, single phase	
Frequency	47Hz to 63Hz				
Power Factor	0.99 typical @ full load				
Efficiency	85% typical				
AC OUTPUT					
Power	500VA/400W	1000VA/800W	1500VA/1200W	2000VA/1600W	3000VA/2400W
Voltage Range	0-135Vrms AC or 0-270Vrms AC selectable				
Resolution	0.1V				
Accuracy	1% of full scale.				
Frequency	45Hz to 450Hz.				
Accuracy	0.2% of full scale.				
Resolution	0.01Hz.				
Current - Maximum					
At 0-135V Range (Amps)	4.0	8.0	12.0	16.0	24.0
At 0-270V Range (Amps)	2.0	4.0	6.0	8.0	12.0
Crest Factor	3:1				
Distortion	<2% THD @ 220VAC, 50 Hz				
Load Power Factor	0.8 lag to 0.8 lead				
Line Regulation	±0.1%				
Load Regulation	±1%				
PROTECTIONS					
Overload/Short-circuit	Output trip and indication				
Over Temperature	Output trip and indication				
Input side	Fast acting fuse				
CONTROLS & INDICATIONS					
Input Power ON/OFF	Rocker switch with indicator				
Read out	Programmable		Manual		
	2x16 character vacuum fluorescent display for output voltage, current, frequency, power, range and mode		3½ digit 7 segment display for output voltage, current and power through selector switch 4 digit 7 segment display for output Frequency		
Display					
Voltage: Accuracy	±1% of full scale		±2% of full scale, ±1 digit		
Resolution	0.1V		1V		
Current: Accuracy	±1% of full scale		±2% of full scale, ±1 digit		
Resolution	0.01A		0.1A		
Power: Accuracy	±2% of full scale		±5% of full scale, ±1 digit.*		
Resolution	1W		1W		
Controls	Digital rotary encoder for voltage and frequency setting		Multiturn potentiometer for voltage and frequency setting		
	5 push button switches for voltage, frequency, mode, range and output ON/OFF selection.		3 push button switches for display selection, one push button switch for output range selection. rocker switch for output ON/OFF selection.		
Fault Alarm	Common LED alarm for fault conditions (overload and over temperature)				
Interface	RS232 as standard RS485 or GPIB as optional 0 - 5V or 0 -10V isolated analog control for output voltage setting as an option.				
Baud Rate	9600				
Command Protocol	SCPI compliant				
MECHANICAL & ENVIRONMENTAL					
Dimensions (mm)	88H x 482.6W x 500D			132H x 482.6W x 520D	
Weight (Kgs)	20	21	23	30	35
Operating Temperature	0-45°C, peak 50°C.				
Input Connection	Terminal block with safety cover or universal receptacle				
Output Connection	Universal socket		Terminal block with safety cover		
Safety	EN60950				
EMC	EN55022 class A				

* Wattmeter readings are indicative in Manual version.

Note: Specifications are subject to change without notice. Specifications are warranted over an ambient temperature range of 25±5°C. unless otherwise noted; specifications are for a sine wave with a resistive load and apply after a 15-minute warm-up period. The unit will operate with input voltage range of 90V-265V AC. However for continuous operation, the voltage required will be 100V and above.