zentro elektrik

Elektronisch geregelte Stromversorgungssysteme

Programmable AC Power Source

Zentro-Elektrik Series of Programmable A C 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 SOURCE is provided with 16x2 character VF Display for parameter display (Output Voltage & selected voltage range, Current, Frequency, Power & Mode of operation; Local/Remote). The control is through a rotary encoder with the push button switch for control of output voltage & 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 five output power ratings of 500VA, 1000VA, 1500VA, 2000 VA & 3000 VA. 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.

Features:

- Compact size and light weight, Standard 19" rack construction
- Step-less Frequency setting from 45Hz to 450Hz
- Very Low distortion Sine wave output
- Output Voltage range selectable 135V or 270V AC
- Galvanically isolated Input/ Output
- Independent On/OFF Switch for input and output
- 16x2 Vacuum Fluroscent Display for parameter display
- Complete operation through push switches & a digital rotary encoder
- Automatic protection against overload, short circuit and over temperature
- Built in PFC to provide 0.99 input power factor and wide input range
- Conforms to **EN 61326-1**, Class A, Safety Standard **EN 61010-1**

zentro elektrik

Elektronisch geregelte Stromversorgungssysteme

Options:

Analog Programming 0...5VDC or 0...10VDC User Defined
RS232 Interface Programming
Extended Voltage Range 0...150V, 0...30V
Rack Mounting Kit

SPECIFICATIONS:

Sl. No	Details of Parameters	ZAFV500/ 270/2	ZAFV1000/ 270/4	ZAFV1500/ 270/6	ZAFV2000/ 270/8	ZAFV3000/ 270/12
ELECTRICAL						
A. INPUT						
01.	Voltage	90V – 265V AC, Single Phase			185 V – 264 V AC, Single Phase	
02.	Frequency	47 Hz to 440Hz			47 Hz to 440Hz	
03.	Power Factor	0.99 Typical @ Full Load			0.99 Typical @ Full Load	
04	Efficiency	85% Typical			85% Typical	
B. AC OUTPUT						
05.	Power	500VA/400W	1000VA/800 W	1500VA/1200W	2000VA/1600W	3000VA/2400W
06.	Voltage Range	0-135Vrms Ac or 0-270Vrms AC selectable				
	Resolution	0.1V				
	Accuracy	0.5% of full scale				
07.	Frequency	45Hz to 450Hz				
	Accuracy	0.2% of Full scale				
	Resolution	0.01Hz				
08.	Current – Maximum					
	(a) at 0-135V Range	4.0 Amps	8.0 Amps	12.0 Amps	16.0 Amps	24.0 Amps
	(b) at 0-270V Range	2.0 Amps	4.0 Amps	6.0 Amps	8.0 Amps	12.0 Amps
09.	Crest Factor	3: 1				
10.	Distortion	<2% THD @ 220VAC, 50 Hz				
11.	Load Power Factor	0.8 Lag to 0.8 Lead				
12.	Line Regulation	± 0.1%				
13.	Load Regulation	± 1%				
C. PROTECTIONS						
14.	Overload/Short-circuit	Output Trip and Indication				
15.	Over Temperature	Output Trip and Indication				
16.	Input side	Fast acting Fuse				
D. CONTROLS & INDICATIONS						
17.	Input Power ON/OFF	Rocker Switch with Indicator				
		Programmable		Manual		

18.	Read out	2x16 Character Vacuum Fluorescent display for Output Voltage, Current, Frequency, Power, Range & Mode	3 ½ digit 7 segment display for output voltage, current & Power through selector switch 4 digit 7 segment display for output Frequency
19.	Display		
	Voltage: Accuracy	+/- 0.5% of full Scale	+/-1% of full scale, +/- 1 digit
	Resolution	0.1 V	1 V
	Current: Accuracy	+/- 0.5% of full Scale	+/-1% of full scale, +/- 1 digit
	Resolution	0.01 A	0.1 A
	Power: Accuracy	+/- 2% of full scale	+/- 5% of full scale, +/- 1 digit, *
	Resolution	1W	1W
20.	Controls	Digital Rotary Encoder for Voltage & Frequency Setting	Multiturn Potentiometer for voltage & frequency setting
		5 Push Button Switches for Voltage, Frequency, Mode, Range & 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.
21.	Fault Alarm	Common LED alarm for Fault conditions (Over load & over temperature)	
22.	Interface	RS 232 as standard RS 485 or GPIB as optional 0 – 5 V or 0 -10 V Isolated Analog Control for Output Voltage setting as an Option.	
23.	Baud rate	9600	
24.	Command Protocol	SCPI Compliant	
MECHANICAL & ENVIRONMENTAL			
25.	Dimensions		
	(a) Height	88.0 mm	132 mm
	(b). Width	482.6 mm	
	(c). Depth	500.0 mm	
26.	Weight in KGs	20 Kg / 21 Kg / 23 Kg	30 Kg / 35 Kg
27.	Operating Temperature	0-45°C, peak 50° C	
28.	Input Connection	Terminal Block with safety cover or universal receptacle	
29.	Output Connection	Universal Socket	Terminal Block with safety cover
30.	Safety	**EN 61010-1**	
31.	EMC	**EN 61326-1 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.