

Annexure-1

Specifications of Programmable 3-Phase AC power source			
Description		BHEL Specifications	Vendor compliance
1	Input		
(a)	Phases	3 Phase or Single phase	
(b)	Voltage and frequency	380 – 415 V, 49-51 Hz (in case of three phase)	
		220-240V, 49-51 Hz (in case of single phase)	
2	AC output		
(a)	Phases and connection	3 phase, 4 wire, sinusoidal	
(b)	Maximum output power for 3 phase	3000 VA or more	
(c)	Maximum output Power per phase	1000 VA or more	
(d)	Phase Voltage range	5 to 150 V variable with accuracy of 0.5% + 0.5% of full scale or better	
(e)	Frequency range	40Hz to 1kHz variable with accuracy of 0.5 % or better	
(f)	Maximum Phase current (RMS)	8 A or more	
(g)	Short duration peak current	32 A or more	
(h)	THD	3% or better at 400Hz Full Load condition	
3	Output Measurements		
(a)	Display	LCD or any standard digital display	
(b)	All three output phase/line voltages (RMS)	Required with accuracy of 0.5% + 0.5% of full scale or better	

(c)	All three output phase/line currents (RMS)	Required with accuracy of 0.5% + 0.5% of full scale or better	
(d)	frequency	Required with accuracy of 0.5% or better	
(e)	True power	Required with accuracy of 0.5% + 0.5% of full scale or better	
(f)	Power factor	Required with accuracy of 1% or better	
4	Interface	Required (RS 232 or GPIB or any other standard interface)	
5	Protection		
(a)	Over voltage	Required	
(b)	Over current	Required	
6	Safety and EMC compliance	CE or any equivalent standard compliance is required	
7	Warranty	The minimum acceptable warranty period is 12 months from the date of receipt and acceptance of product by BHEL. Supplier shall comply to the minimum acceptable warranty period. The offers of the suppliers not complying to the minimum warranty period will be rejected.	
8	Performance Bank Guarantee	Successful bidder shall submit Performance Bank Guarantee as per BHEL enquiry terms & conditions.	

9	Pre-qualification criteria	(a) The offered product model should be a catalog product.	
		(b) The offered product model should be CE or any equivalent standard certified product. Vendor shall submit the relevant certificate of the offered product model along with the technical bid.	
		(c) Vendor shall submit catalog and user manual (hard copy or soft copy or soft copy download link) of the offered product model along with the technical bid.	
10	Test certificate	Manufacturer's Test Certificate required and shall be provided before dispatch.	
11	Accessories	Offer shall include all the accessories required for normal operation of equipment	
12	BHEL's Preferred delivery period	12 weeks from the date of placement of order. However, vendor may quote delivery period explicitly.	