

QRs of DC Regulated Power Supply

S.N.	Parameters	Specifications
<b>Output</b>		
1	Variable Voltage Range	0-30V +10%
2	Variable Voltage Control	Single Turn Coarse & Fine Control, Continuously adjustable
3	Variable Current Range	0-30A +10%
4	Variable Current Control	Single Turn Coarse & Fine Control, Continuously adjustable
5	Configuration	Constant Voltage (CV) & Constant Current (CC)
6	Load Regulation	$\leq \pm 0.1\% + 2\text{mV}$ for V 10% change in line Voltage
7	Line Regulation	$\leq \pm 0.1\% + 2\text{mV}$ for load change on Zero to Full load
8	Ripple & Noise	1mV RMS Max. 20 Hz to 20 MHz
9	Stability	Under constant line, load & temperature. < $\pm 0.2\% \pm 10$ mV in CV Mode. < $\pm 0.2\% \pm 0.5$ mA in Current Mode.
10	Transient Response	0.1 Sec to within 10 mV of set output voltage for load change from 50% to 90%
11	Total output power	Nominal 900 Watts Maximum 2000 Watts
12	Meters	Display to indicate Volts & Amps.
13	Voltage & Current accuracy	$\leq \pm 0.5\%$ Ref Voltage 1 Volt
14	Terminals	Provided on the front/rear panel
<b>Input</b>		
1	Voltage/Frequency	220 V $\pm 10\%$ , 50 Hz Single Phase AC
2	Total input VA	1300 VA or better @ 65% Efficiency
3	Input Current Rating	Nominal 5.65 Amps @ 220 Volts Maximum 6.28 Amps @ 207 Volts

S.N.	Parameters	Specifications
4	Connection	3 Pin , 15 Amps Moulded Cord
<b>Protection</b>		
1	Overload & Short Circuit	Through CC/CV Mode, DC Fuse plus MCB as well as AC MCB or OVP (over voltage protection)/OCP (over current protection)
<b>Environmental</b>		
1	Operating Temperature	0 to 55°C
2	Humidity	90% at 45° C Non-Condensing
3	Cooling	Forced Air + Natural Convection Cooling
<b>Other Conditions</b>		
1	All Measuring/ Charging probes with connectors should be provided	

WO. Gian Chand  
Assam Rifles

SI. Jagadish Mishra  
BSF

SI. Amit Sharma  
SSB

AC-I. Surender Singh  
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Karan Singh, AC(Tele)  
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P.R. Jha, DC(Comn)  
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Md. Jawed Akhtar, IPS,  
ADG (Work & Comn), CRPF

Approved/Not Approved

Rajeev Rai Bhatnagar, IPS  
DG, CRPF

TDs of DC Regulated Power Supply

S.N.	Parameters	Specifications	Trial Directives
<b>Output</b>			
1	Variable Voltage Range	0-30V +10%	Board will check practically.
2	Variable Voltage Control	Single Turn Coarse & Fine Control, Continuously adjustable	Board will check practically.
3	Variable Current Range	0-30A +10%	Board will check practically.
4	Variable Current Control	Single Turn Coarse & Fine Control, Continuously adjustable	Board will check practically.
5	Configuration	Constant Voltage (CV) & Constant Current (CC)	Board will check practically.
6	Load Regulation	$\leq \pm 0.1\% + 2\text{mV}$ for V 10% change in line Voltage	Firm will submit OEM Certificate.
7	Line Regulation	$\leq \pm 0.1\% + 2\text{mV}$ for load change on Zero to Full load	Firm will submit OEM Certificate.
8	Ripple & Noise	1mV RMS Max. 20 Hz to 20 MHz	Firm will submit OEM Certificate.
9	Stability	Under constant line, load & temperature. < $\pm 0.2\% \pm 10\text{ mV}$ in CV Mode. < $\pm 0.2\% \pm 0.5\text{ mA}$ in Current Mode.	Firm will submit OEM Certificate.
10	Transient Response	0.1 Sec to within 10 mV of set output voltage for load change from 50% to 90%	Firm will submit OEM Certificate.

S.N.	Parameters	Specifications	Trial Directives
11	Total output power	Nominal 900 Watts Maximum 2000 Watts	Board will check practically and firm will also submit OEM Certificate.
12	Meters	Display to indicate Volts & Amps.	Board will check practically.
13	Voltage & Current accuracy	$\leq \pm 0.5\%$ Ref Voltage 1 Volt	Firm will submit OEM Certificate.
14	Terminals	Provided on the front/rear panel	Board will check practically.
<b>Input</b>			
1	Voltage/Frequency	220 V $\pm 10\%$ , 50 Hz Single Phase AC	Board will check practically.
2	Total input VA	1300 VA or better @ 65% Efficiency	Board will check practically.
3	Input Current Rating	Nominal 5.65 Amps @ 220 Volts Maximum 6.28 Amps @ 207 Volts	Board will check practically.
4	Connection	3 Pin , 15 Amps Moulded Cord	Board will check practically.
<b>Protection</b>			
1	Overload & Short Circuit	Through CC/CV Mode, DC Fuse plus MCB as well as AC MCB or OVP (over voltage protection)/OCP (over current protection)	Board will check practically.



S.N.	Parameters	Specifications	Trial Directives
<b>Environmental</b>			
1	Operating Temperature	0 to 55°C	Firm will submit certificate of any Govt. Lab or NABL or ILAC accredited laboratory or OEM certificate.
2	Humidity	90% at 45° C Non-Condensing	
3	Cooling	Forced Air + Natural Convection Cooling	Board will check practically.
<b>Other Conditions</b>			
1	All Measuring/ Charging probes with connectors should be provided		Board will check practically.

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