

Power Supplies - Heavy Duty Power Series



These super-rugged DC power supplies are ideal for powering 12 and 24 volt communication/navigation equipment onboard commercial vessels where reliability is essential. The proven linear circuit design provides pure noise free output and long service life.

Features

- Excellent Regulation and Ripple Spec: Output voltage maintained within 1% under all rated line and load conditions
- Polyurethane conformal coated PC board and corrosion resistant heavy duty aluminum case with integral shock mounts assures survival in hostile environments
- Heat generated by semi-conductors is extracted and dissipated by large heat sink fins for cool operation
- Protection: overvoltage, current limit; (set @ 105% of intermittent rating), thermal overload and input/output fusing
- Thermally activated cooling fan on "CD" units

Model	Nominal Input/VAC	Maximum Input Current		Output Amperage		Case Size Ref.	Weight	
		@115	@230	Intermittent	Continuous		Lbs.	Kg.
12 Volt Output								
115-12-8	115/230	2.5	1.5	8	5	P-1	10	4.5
115-12-20A	115/230	5.5	2.5	20	8	P-2	20	9.1
115-12-35CD	115/230	7.5	3.5	35	35	P-3	32	14.6
24 Volt Output								
115-24-10	115/230	5.5	2.5	10	4	P-2	20	9.1
115-24-18CD	115/230	7.5	3.5	18	18	P-3	32	14.6
115-24-35CD	115/230	12.5	7.5	35	35	P-4	60	27.3



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Specifications

Input Range

105-125/210-250 VAC (selectable),
50-60 Hz; Derate to 50% output below
110 and 220 VAC

Operating Temperature

Standard Units

0-50°C, Derate Linearly From 100% @ 40°C To
50% @ 50°C Thermal shutdown @ 85°C Case
temperature

C.D. Units

0-65°C, Derate Linearly From 100% @ 50°C To
50% @ 65°C Thermal Shutdown @ 85°C Case
temperature

Duty Cycle

Intermittent: 20 minutes max on time, 20% duty
Continuous: 24 Hours/Day 100% Duty

Options

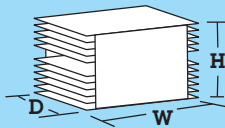
- Modify for use as a Battery Charger
- Output voltage adjust (see Output Voltage for range)
- Transfer relay for back-up battery in event of power failure (ERC option)

Output Voltage

12 V Models: 13.6 VDC
(Internally adjustable 12.6-14.5 VDC)
Ripple: 40mV P-P
(@ 110-125 / 220-250 VAC input)

24 V Models: 24.5 VDC
(Internally adjustable 21-27.5 VDC)
Ripple: 70mV P-P
(@ 110-125 / 220-250 VAC input)

Regulation All Models: 1% Line and Load
(@ 110-125 / 220-250 VAC input)



	Inches			Centimeters		
	H	W	D	H	W	D
P-1	6.0	4.6	8.5	15.2	11.7	21.6
P-2	5.7	4.8	16.3	14.5	12.2	41.4
P-3	6.5	9.5	14.0	16.5	24.1	35.6
P-4	6.5	13.0	18.75	16.5	33.0	47.6

Mechanical

- Powder coated aluminum heat sink case
- Front panel terminal block
- Heavy duty mounting flange
- Conformal coated PC board

Back in 1974, Newmar began producing the Heavy Duty Power Supply Series, the first model designated 115-12-6A. The unit pictured, serial number 133, came off the tug boat "Hercules" in Galveston and was in service for 15 years powering a VHF radio. It returned to Newmar as when the vessel was refitted, it worked perfectly and there were no records or indications that the unit had ever been repaired.



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