

# BALMAR 98-SERIES ALTERNATOR DATA SHEET

## REVISED 05/15/09

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Balmar's 98-Series, extra large case alternators are scaled to bridge the gap between standard alternators and gensets. Commonly found on USCG 47-foot motor lifeboats, the 98-Series alternator is the largest and most powerful Balmar alternator

A robust J180 saddle-style dual foot mounting configuration is ideal as a replacement for standard J180 mount alternators or for use as a second alternator on custom J180 saddle mount brackets. Isolated grounding termination provides sure continuity to system ground. High amperage diodes and extra-large sealed bearings ensure dependability and long alternator life.

The 98-Series alternator features a D+ lamp circuit, custom rotor and stator windings designed to maximize low rpm output, and an efficient dual fan design for increased alternator cooling. Requires external p-type voltage regulation. Meets USCG Title 33, CE, SAE 8846 and ISO J1171 standards for ignition protection. One year limited warranty. ShWt 45.



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### SPECIFICATIONS

ALTERNATOR STYLE: Large-case

REGULATION: External P-type

CASE CONSTRUCTION: Cast aluminum

FINISH: White powdercoating

COOLING: Bi-directional external fan, internal fan

MAXIMUM ROTATION SPEED: 6,500 rpm

MINIMUM REQUIRED BELT CONFIGURATION: Dual 1/2" vee; 8-groove serpentine

GROUND TERMINATION: Isolated ground terminal

TACH OUTPUT: Unrectified AC stator output

EXCITATION: Brushless, permanent coil

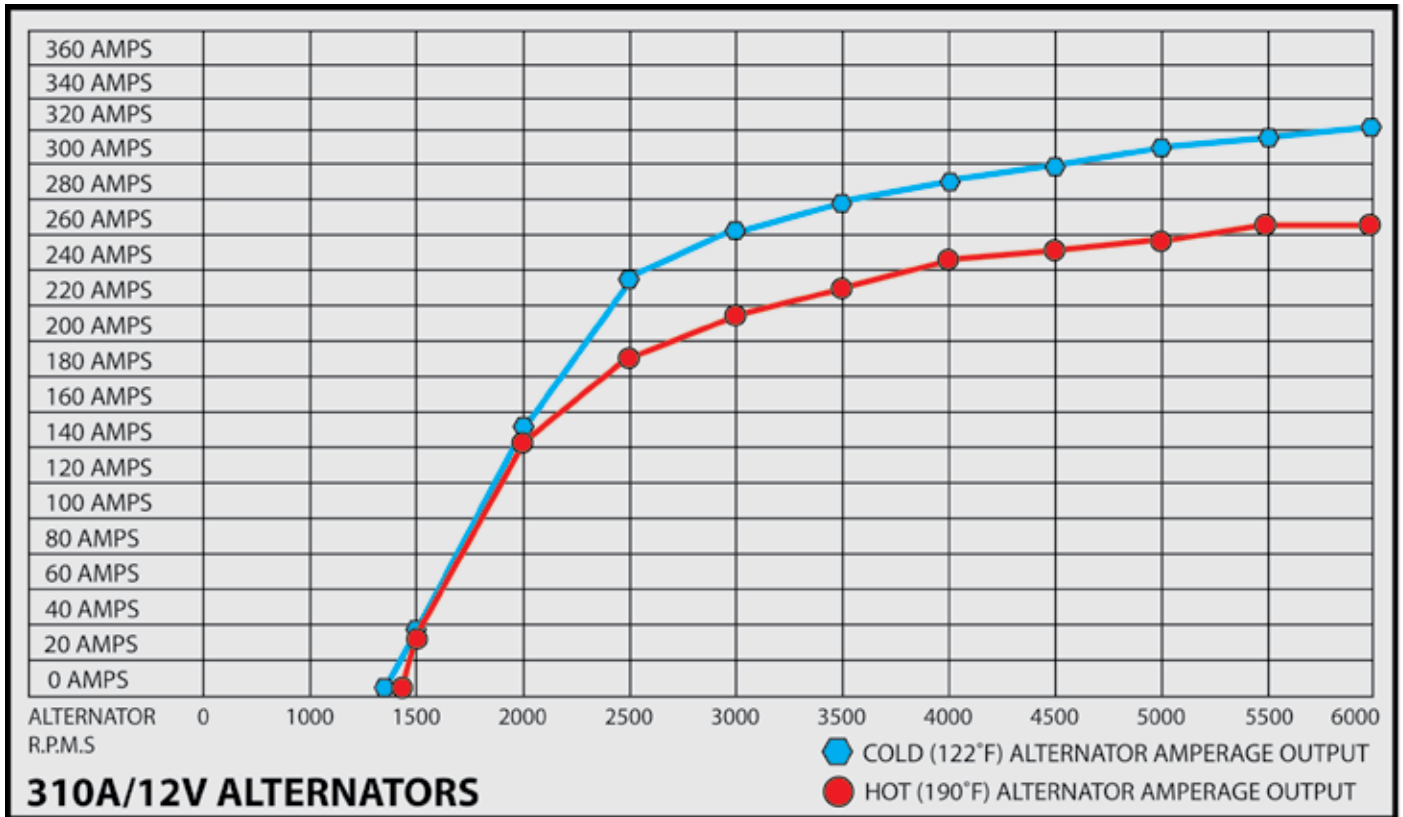
TENSIONING ARM: Offset from mounting foot, three mounting positions

AVAILABLE OUTPUTS: 310A/12V, 220A/24V

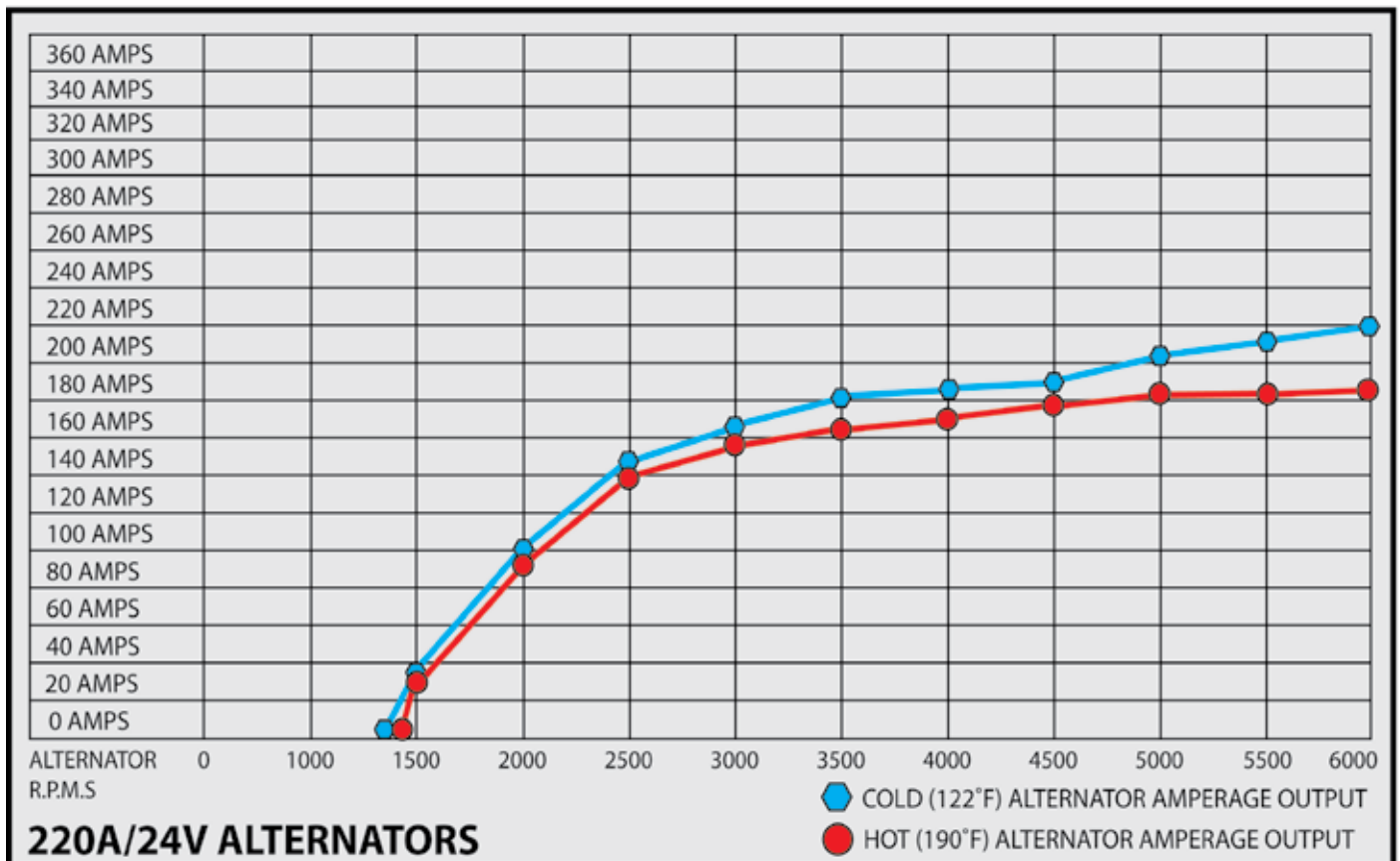
MOUNTING STYLE: 4" I.D. saddle mount (J180-style).

IGNITION PROTECTION STANDARDS: USCG Title 33, CE, SAE 8846 and ISO J1171

## OUTPUT CURVE - 310A (12-VOLT MODEL)



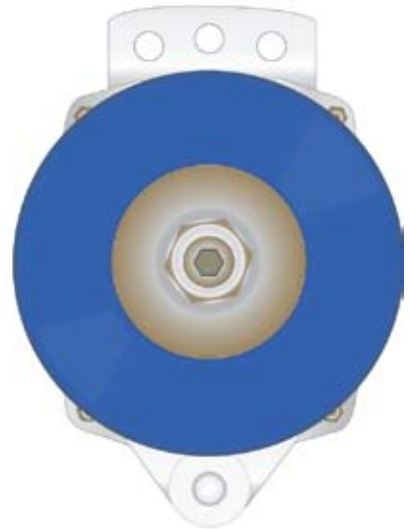
## OUTPUT CURVE - 220A (24-VOLT MODEL)



**PLEASE NOTE:** Measurements provided are believed to be correct at the time of publication. Diagrams shown are for illustrative purposes and are not designed to be used for engineering. Please contact our Customer or Technical Services departments or see our 2009 Product Guide for additional information.



**Older Models**



**Current Model**



**NOTE:** Positive output posts are common on current 98-Series Models

ITEM	DESCRIPTION	IN.	MM
A	Case Diameter*	8.25	210
B	Std. Pulley Diameter	2.9	74
C	Bolt-to-Bolt Center	8.25	210
D	Overall Height	9.6	244
E	Overall Length	11	279
F	Sheave center to front foot	1.1	28
G	Front Foot Width	.58	15
H	Saddle width (inside dim.)	4.1	104
I	Rear foot (including spacer)	.75	19
L	Sheave center to front foot	1.1	28
M	Fan Type (Internal)	Bi-Directional	
N	Fan Type (External)	Bi-Directional	
O	Stator Pole Count	14	

*Note: Alternator case is not cylindrical. Measurement is based on a corner-to-corner distance.*

ADDITIONAL ALTERNATOR MEASUREMENTS	
	Dimension
Mounting Foot Bore	1/2" / 12.7mm
Tensioning Arm Bore	5/16" / 7.9mm
Positive Output Post	3/8" - 16
Field Input Post	#10 - 24
Ground Post	3/8" - 16
Stator/Tach Output Post	#10 - 24
TERMINAL CONNECTION LOCATIONS	
1	Positive Output Terminal
2	Ground Terminal
3	Field Input Terminal
4	Stator/Tach Output Terminal
5	D+ (Lamp) Terminal

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