

BALMAR 97-SERIES ALTERNATOR DATA SHEET

REVISED 08/24/10

Balmar's 97-Series, extra-large case alternators deliver the size and charging output required to support battery banks of up to 750 amp hours at 12 volts or 500 amp hours at 24 volts. These 12-volt and 24-volt alternators are engineered for use with external multi-stage voltage regulation, making it possible to tailor charging voltage to maximize safety and efficiency when replenishing a wide variety of battery types.

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.

Included in the 95-Series alternator family are: 150-amp/12-volt; 165-amp/12-volt; 210-amp/12-volt; and 140-amp/24-volt models. All models meet U.S. Coast Guard Title 33 standards for ignition protection.



SPECIFICATIONS

ALTERNATOR STYLE: Extra-Large Case

REGULATION: External P-type

CASE CONSTRUCTION: Cast aluminum

FINISH: White powdercoating

COOLING: Bi-directional external fan

DIODES: 6-positive, 6-negative; 50A/200V

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

GROUND TERMINATION: Case independent (isolated)

TACH OUTPUT: Unrectified AC stator outputs (3)

BEARINGS: Sealed ball bearing. Heavy duty radial (front). Heavy duty needle (rear)

TENSIONING ARM: 180° offset from mounting foot

AVAILABLE OUTPUTS: 165A/12V, 210A/12V, 140A/24V

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

IGNITION PROTECTION STANDARDS: USCG TITLE 33, CE, J1171, SAE 8846.

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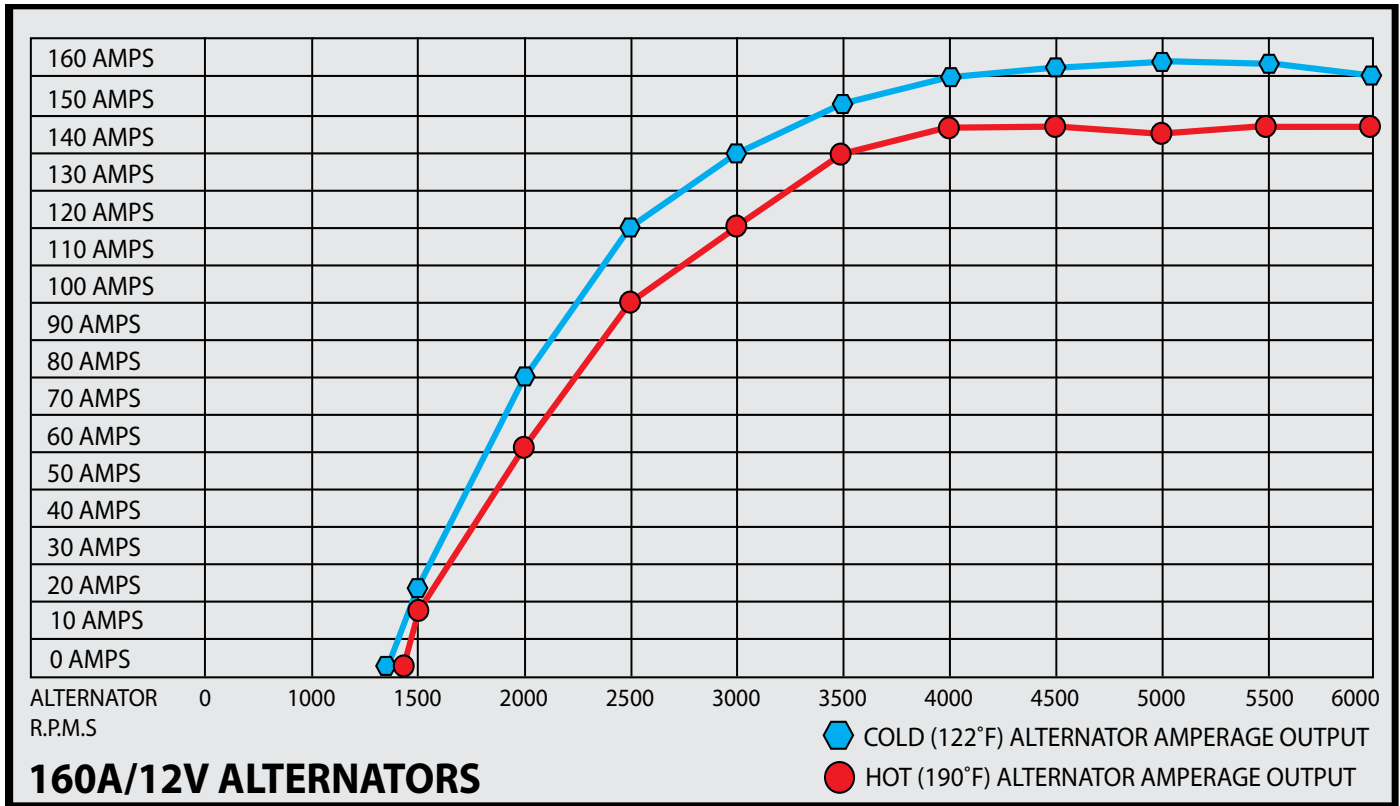
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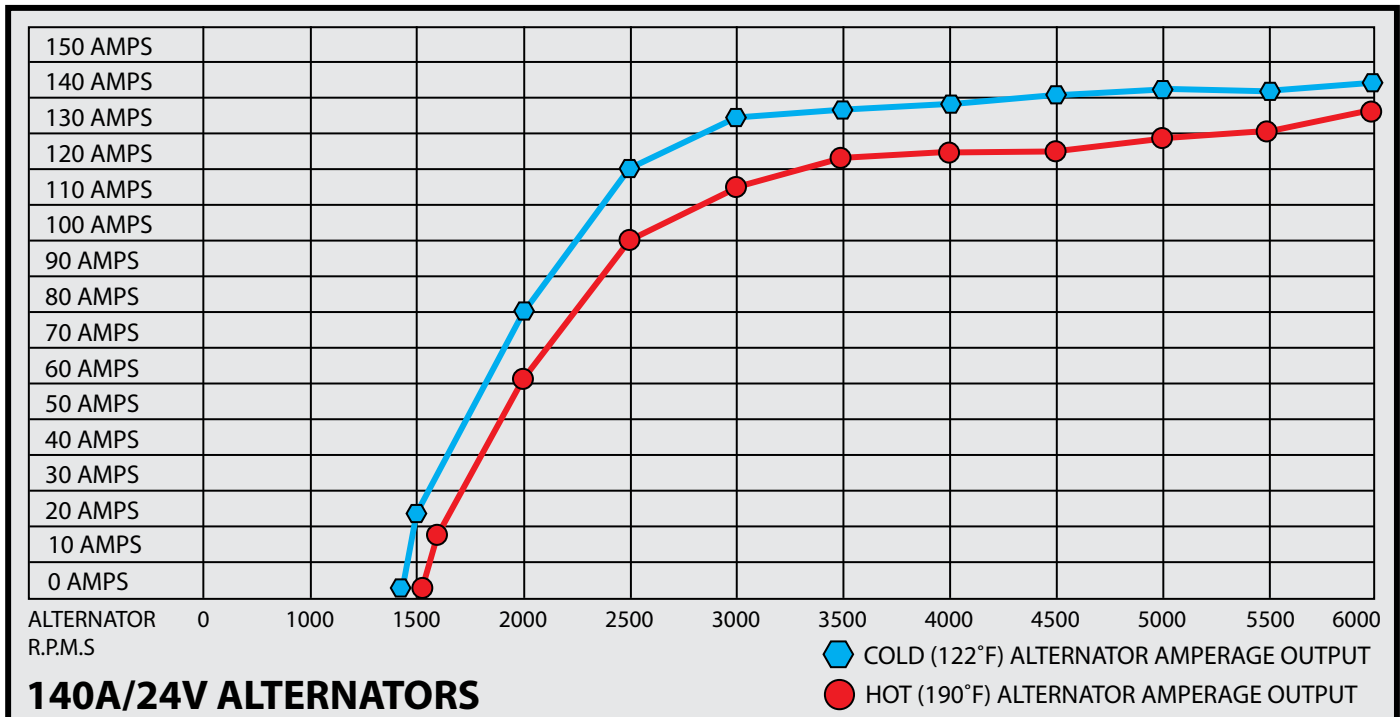
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OUTPUT CURVES - 160A (12-VOLT MODELS)



OUTPUT CURVES - 140A (24-VOLT MODELS)



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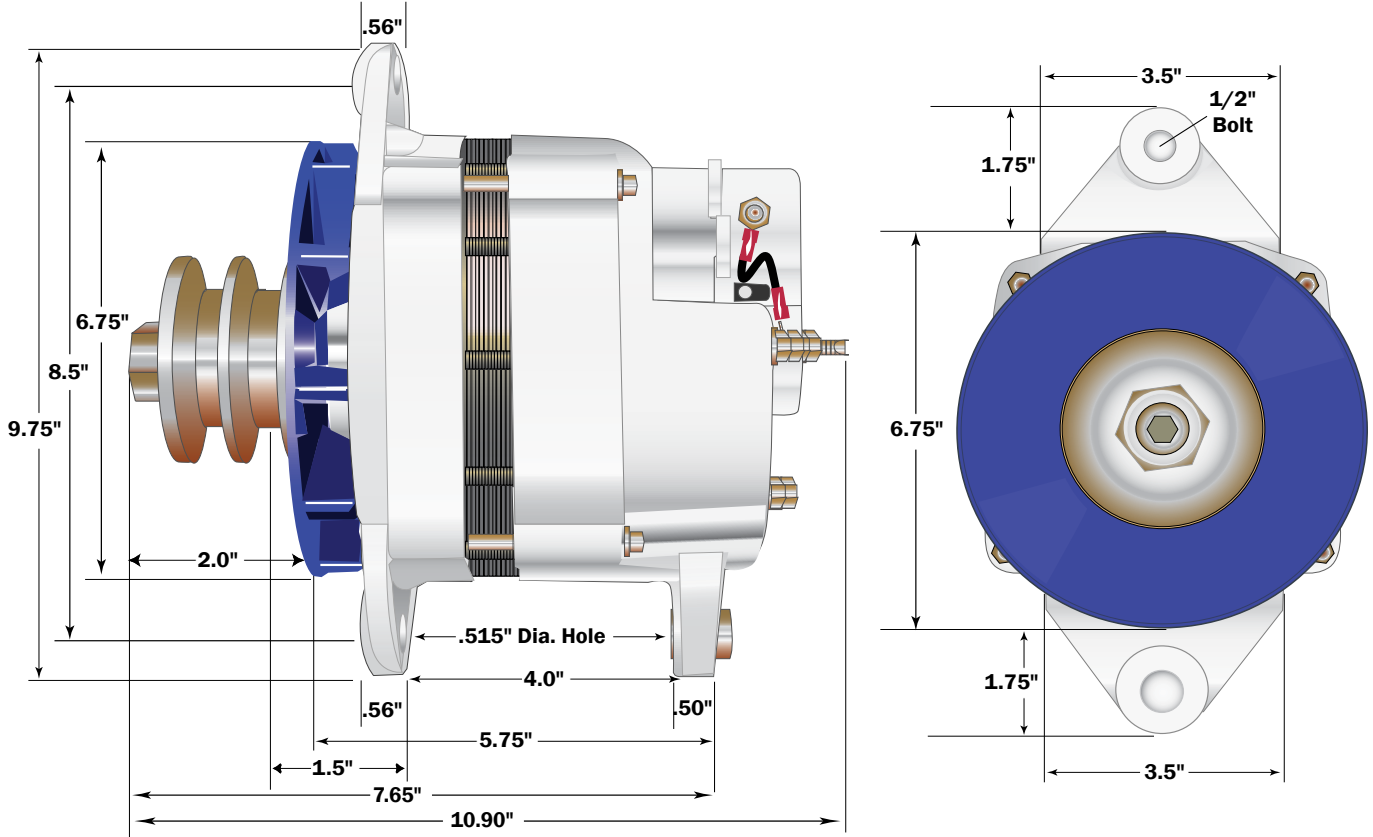
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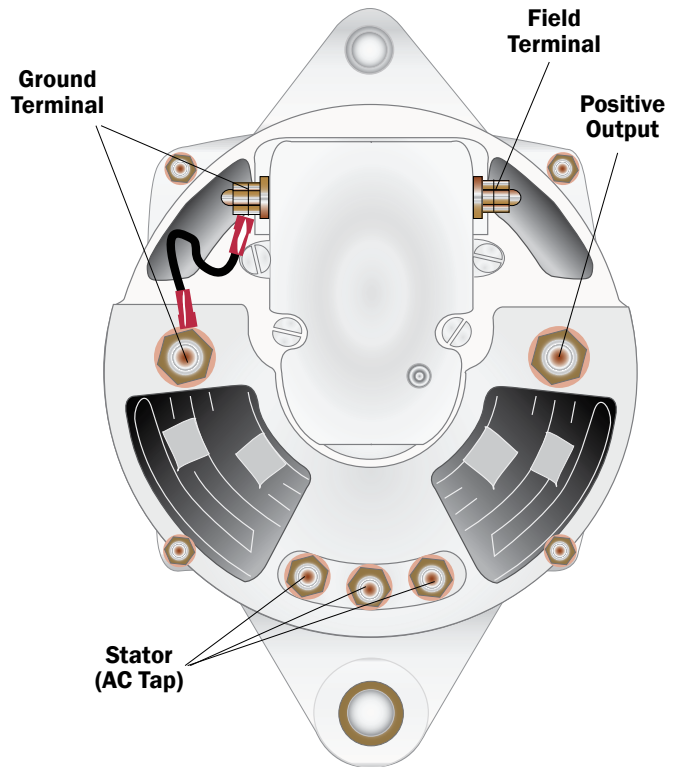
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ALTERNATOR DIMENSIONS



ITEM	DESCRIPTION	IN.	MM
A	Case Diameter	6.75	152.4
B	Std. Pulley Diameter	2.9	73.7
C	Bolt-to-Bolt Center	8.5	195.5
D	Overall Height	9.75	228.6
E	Overall Length	10.9	220.9
F	Sheave center to front foot	1.0	27.9
G	Front Foot Width	.56	14.2
H	Inside front to rear foot	4.0	104.1
I	Rear foot (including spacer)	.75	19.0
J	Mounting foot aft of alternator	3.25	19.0
K	Sheave center to front foot	1.1	27.9
L	Front Foot Width	.56	14.2
ADDITIONAL ALTERNATOR MEASUREMENTS			
		Dimension	
Mounting Foot Bore		1/2" / 12.7mm	
Tensioning Arm Bore		5/16" / 7.9mm	
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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BALMAR 98-SERIES ALTERNATOR DATA SHEET

REVISED 05/15/09

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.



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

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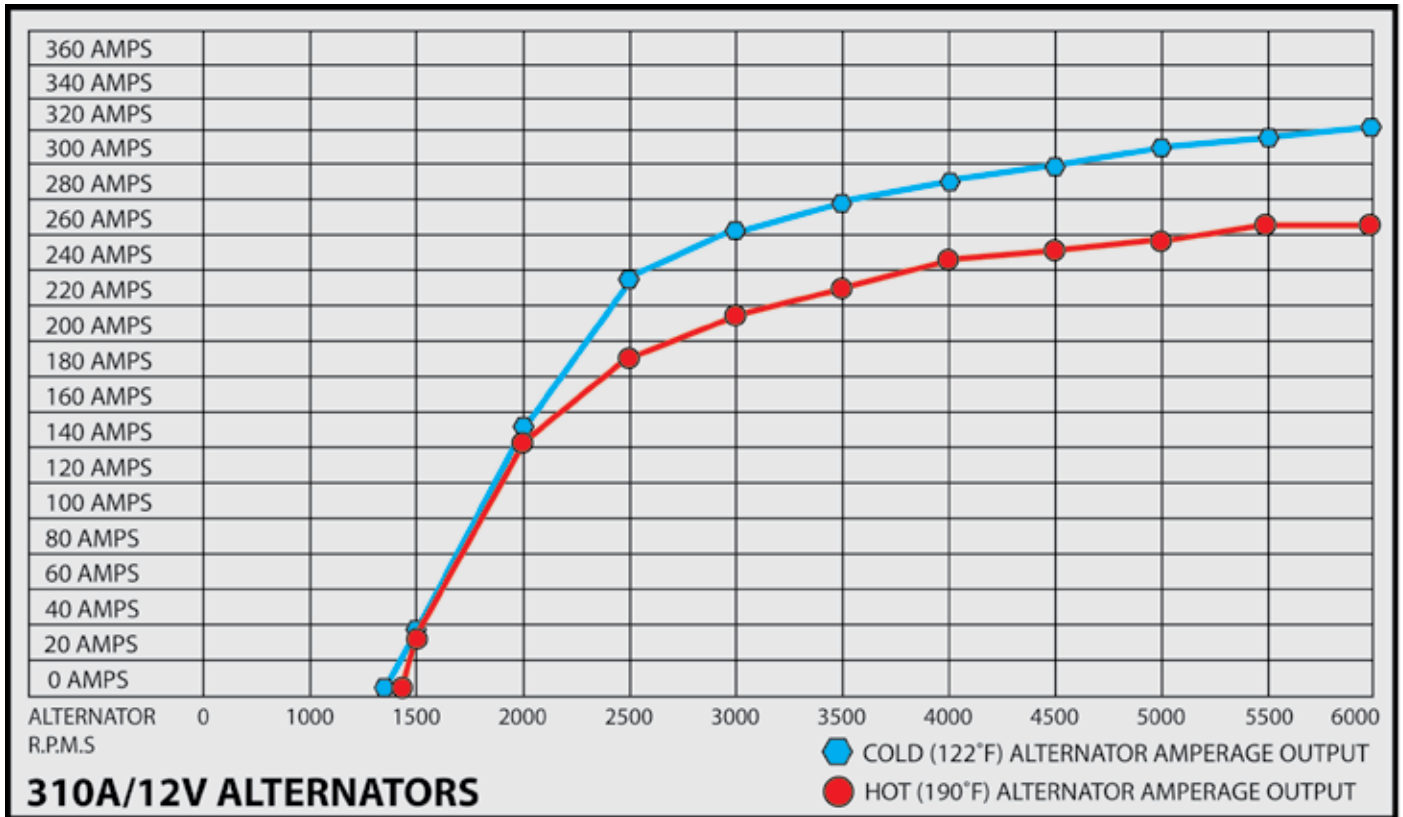
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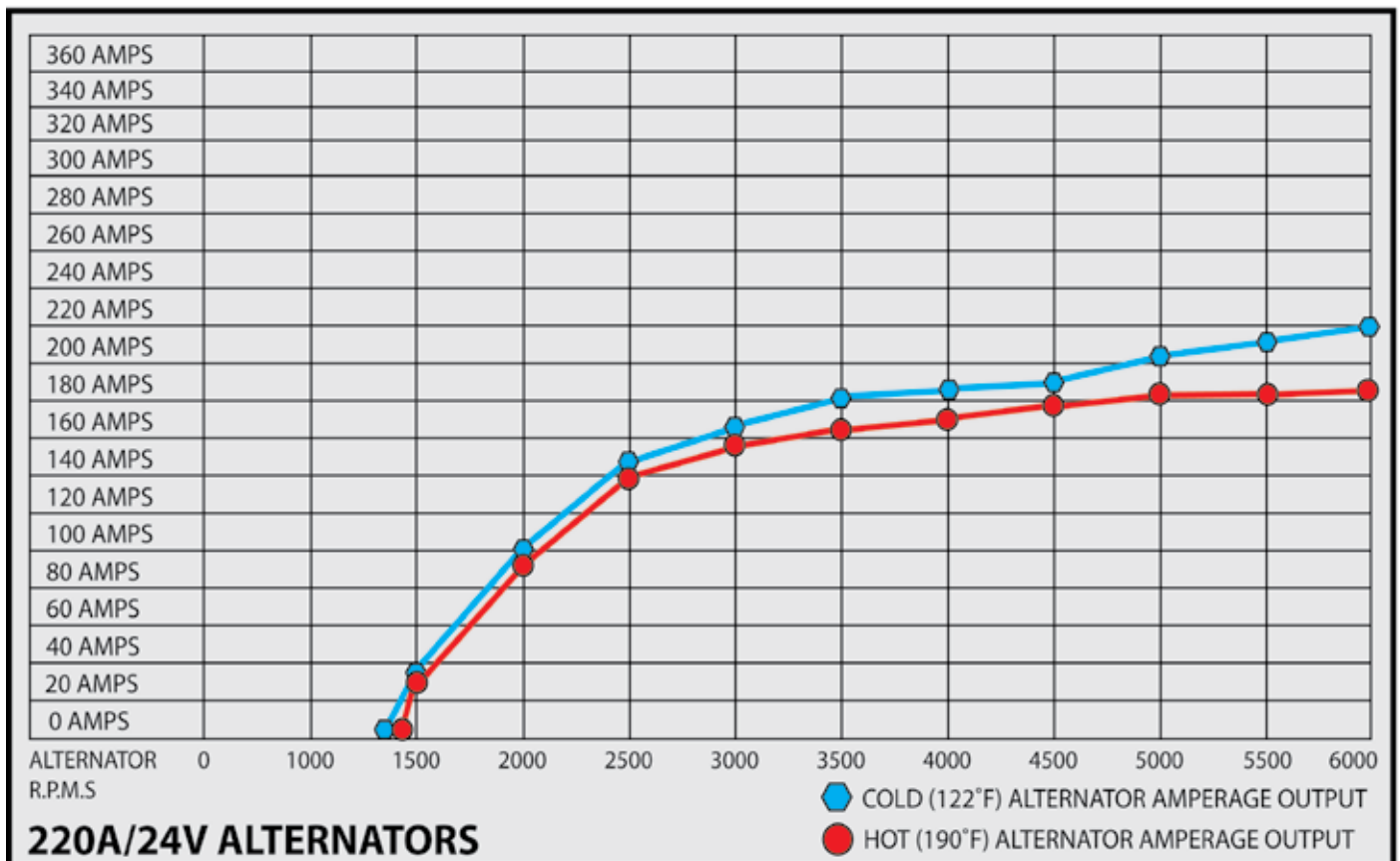
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OUTPUT CURVE - 310A (12-VOLT MODEL)



OUTPUT CURVE - 220A (24-VOLT MODEL)



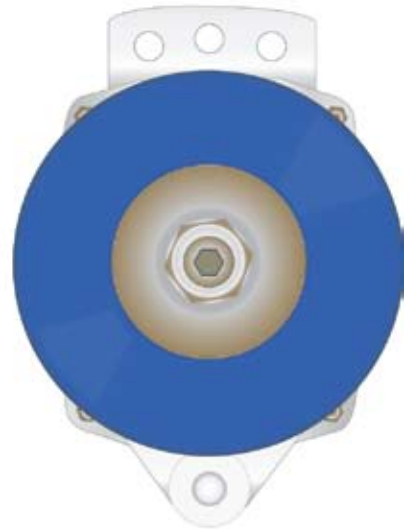
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ITEM	DESCRIPTION	IN.	MM
A	Case Diameter	6.0	152.4
B	Std. Pulley Diameter	2.9	73.7
C	Bolt-to-Bolt Center	7.7	195.5
D	Overall Height	9.0	228.6
E	Overall Length	8.7	220.9
F	Sheave center to front foot	1.1	27.9
G	Front Foot Width	.56	14.2
H	Inside front to rear foot	4.1	104.1
I	Rear foot (including spacer)	.75	19.0
J	Mounting foot aft of alternator	.75	19.0
K	Overall length (150A only)	1.0	25.4
L	Sheave center to front foot	1.1	27.9
M	Front Foot Width	.56	14.2
N	Inside front to rear foot	4.1	104.1
O	Rear foot (including spacer)	.75	19.0
P			
ADDITIONAL ALTERNATOR MEASUREMENTS			

		Dimension
Mounting Foot Bore		1/2" / 12.7mm
Tensioning Arm Bore		5/16" / 7.9mm
Positive Output Post		
Field Input Post		
Ground Post		
Stator/Tach Output Post		
TERMINAL CONNECTION LOCATIONS		
1	Positive Output Terminal	
2	Ground Terminal	
3	Field Input Terminal	
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5	D+ (Lamp) Terminal	

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