

# 7-Series Alternators

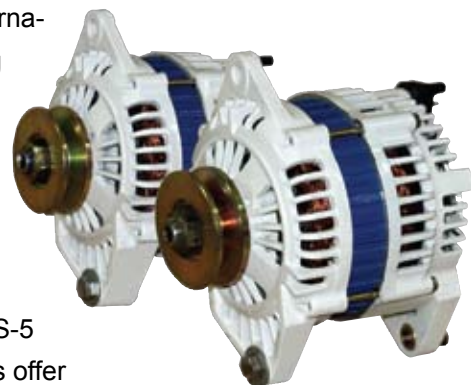


Balmar's 7-Series, dual internally fanned alternators are an ideal solution for improved charging performance on a wide range of marine gasoline or diesel engines.

Available in outputs ranging from 80-amp to 110-amps, 7-Series alternators support 12-volt battery banks of up to 500 amp hours. Designed for use with Balmar Max Charge or ARS-5 multi-stage voltage regulators, 7-Series models offer low cut in and rotate at speeds up to 18,000 rpm.

7-Series alternators are available in three mounting configurations; a 3.15" saddle mount that's typical of Yanmar engines, a single 1" Motorola style foot and 2" Delco style mounting foot.

Because of their ability to spin safely at high rotation speeds, 7-Series alternators are uniquely capable of supporting the demands of high performance marine engines -- so they are an excellent choice for use on wakeboard boats, ski boats and other trailer boats equipped with inboard gasoline engines, as well as most marine diesel engines, in applications where stereo systems, auxiliary lighting and other large electrical loads dictate larger capacity battery banks and charging systems.



## 7-Series Packages

Designed to eliminate the guesswork when selecting the best system for the job, packages include 7-Series alternator, multi-stage voltage regulator, alternator and battery temp. sensors.

70-YP-Series Packages		
<i>Packages for Yanmar and other 3.15" ID saddle style mounts (YP). Available with Balmar's ARS-5 or MC-614 voltage regulator.</i>		
Model	A/V	Reg.
70-YP-80-KIT	80/12	ARS-5
70-YP-110-KIT	110/12	ARS-5
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70-YP-MC-80-KIT	80/12	MC-614
70-YP-MC-110-KIT	110/12	MC-614
712-VUP-Series Packages		
<i>Packages for Volvo, Universal and other applications utilizing single 1" or 2" single foot (spindle) type mounts. Available with Balmar's ARS-5 or MC-614 voltage regulator.</i>		
Model	A/V	Reg.
712-VUP-80-KIT	80/12	ARS-5
712-VUP-110-KIT	110/12	ARS-5
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712-VUP-MC-80-KIT	80/12	MC-614
712-VUP-MC-110-KIT	110/12	MC-614

7-Series Alternator Models				
Model	Volts	Amps	Mounting Style	Alternator Profile
70-80	12	80A	3.15" I.D. Saddle (Hitachi Style)	
70-110	12	110A	3.15" I.D. Saddle (Hitachi Style)	
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71-80	12	80A	1" Single Foot (Spindle)	
71-110	12	110A	1" Single Foot (Spindle)	
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712-80	12	80A	2" Single Foot (Spindle)	
712-110	12	110A	2" Single Foot (Spindle)	

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# 7-Series Alternator Specifications

**Alternator Style:** Small case, positive field excitation (p-type)

**Regulation:** External p-type

**Case Construction:** Ventilated cast aluminum

**Finish:** White powdercoating

**Cooling:** Dual internal fans

**Bearings:** Sealed ball bearing. Heavy duty radial (front). Heavy duty radial (rear)

**Available Outputs:** 80A/12V, 110A/12V

**Mounting Styles:** 3.15" I.D. Saddle (Model 70), 1" Single Foot (Model 71), 2" Single Foot (Model 712)

**Mounting Foot Bore:** 8mm or 10mm (Model 70), 1/2" (Model 71), 3/8" (Model 712)

**Grounding:** Case Ground. Stud dimensions: M8 x 1.25

**Positive Output:** Threaded stud. Stud dimensions: M8 x 1.25

**AC/Stator Output:** 12 pulse.

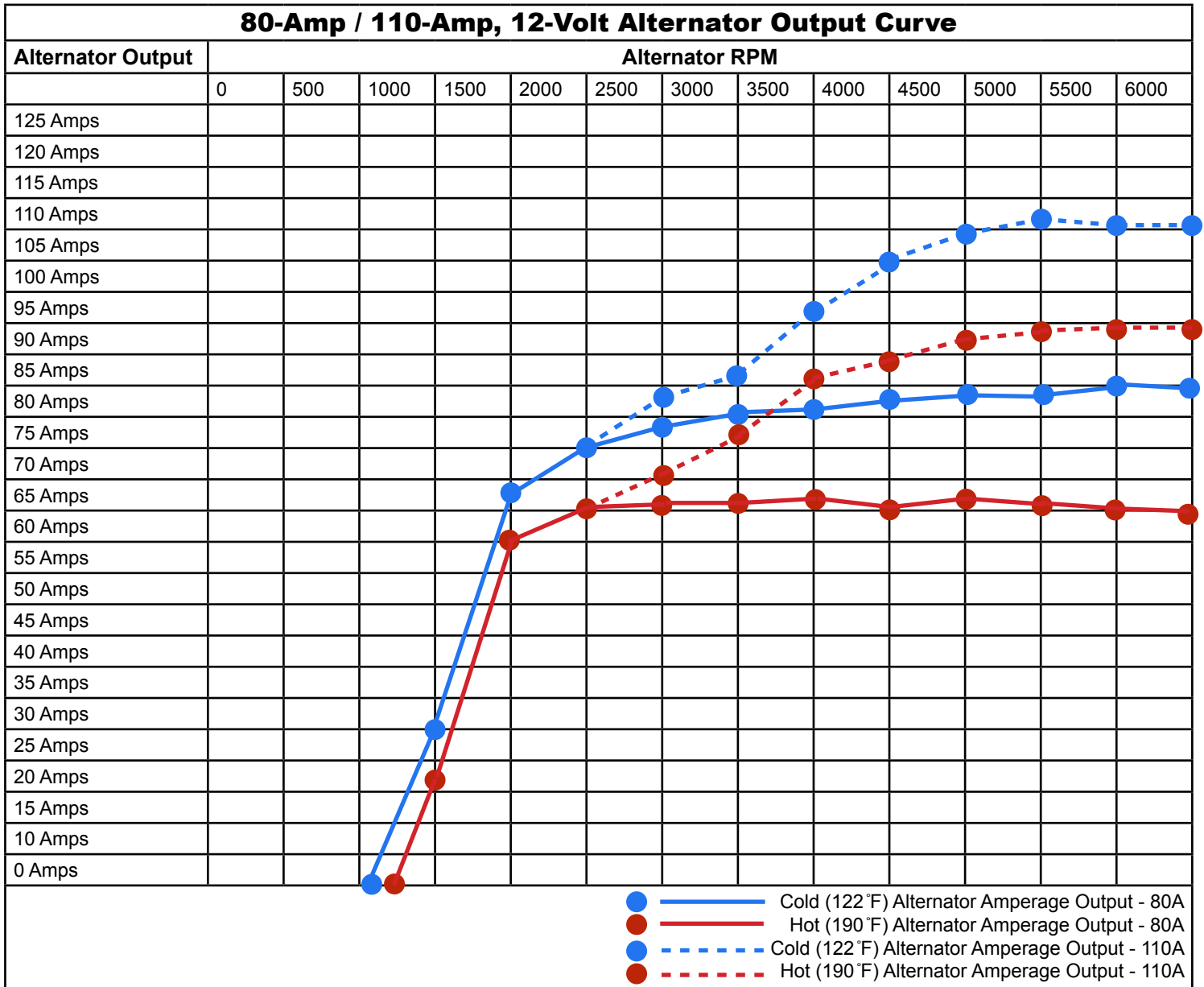
**Normal/Maximum Operating Temperature:** 180°F/82°C / 225°F/108°C

**Low RPM Cut-In/Maximum Alternator RPM:** 1320rpm / 15000rpm

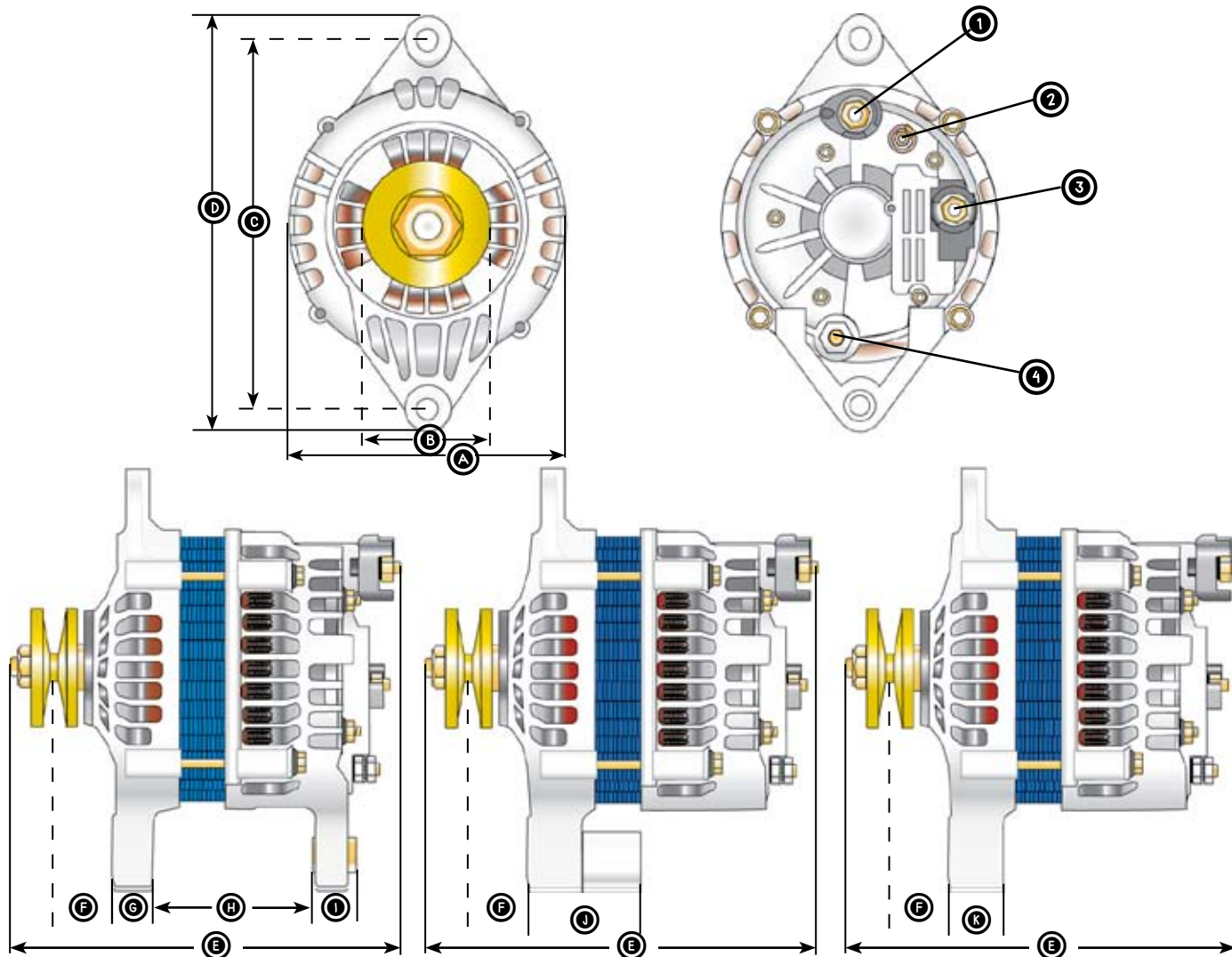
**Diodes +/-:** 3 (positive), 3 (negative); 50-amp rated

**Ignition Protection Rating:** USCG Title 33, ISO J1187, SAE 8846, CE

**80-Amp / 110-Amp, 12-Volt Alternator Output Curve**



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ITEM	DESCRIPTION	IN.	MM
A	Case Diameter	5.25	133.4
B	Std. Pulley Diameter	2.7	68.6
C	Bolt-to-Bolt Center	6.7	170
D	Overall Height	7.4	188
E	Overall Length	7.6	193
F	Front Foot To Sheave Center	1.0	25.4
G	Front Foot Width (70-Series)	.55	14
H	Inner Saddle Width (70-Series)	3.15	80
I	Rear Foot Width (70-Series)	.75	19
J	Mount Foot Width (712-Series)	2.0	50.8
K	Mount Foot Width (71-Series)	1.0	25.4

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.

ADDITIONAL ALTERNATOR MEASUREMENTS	
	Dimension
Mounting Foot Bore (70-Series)	8 or 10 mm
Mounting Foot Bore (71-Series)	1/2" / 12.7mm
Mounting Foot Bore (712-Series)	3/8" / 9.5 mm
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	Stator/Tach Output Terminal
3	External Field Input Terminal
4	Case Ground Terminal

# Balmar

18930 59th Ave. NE, Arlington, WA 98223 Phone: 360-435-6100, Fax: 360-435-3210, E-Mail: balmar@balmar.net

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