

BALMAR 6-SERIES ALTERNATOR DATA SHEET

REVISED 05/04/09

Light-duty 6-Series Alternators are engineered to replace most OEM alternators on a wide variety of marine gasoline and diesel engines.

Available in outputs ranging from 70-amp to 150-amp at 12 volts and 70 amps at 24 volts, 6-Series alternators provide a simple and effective tool for supporting upgraded battery systems and increased electrical loads.

6-Series alternators are available in three mounting configurations, which support four mounting styles; a 3.15" saddle mount that's typical of Yanmar engines, a 4" J-180 mount, and a single foot mount that's convertible to support 1" Motorola and 2" Delco style mounting configurations.



SPECIFICATIONS

ALTERNATOR STYLE: Small case, positive field excitation (p-type)

REGULATION: External p-type or internal fixed voltage regulator (See Smart Ready® Regulator Section)

CASE CONSTRUCTION: Ventilated cast aluminum / High-impact plastic rear cover

FINISH: White powdercoating

COOLING: Dual internal fans

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

TENSIONING ARM: Five position crown

AVAILABLE OUTPUTS: 70A/12V, 100A/12V, 120A/12V, 150A/12V, 70A/24V

MOUNTING STYLES: 3.15" I.D. Saddle (Model 60), 4" I.D. Saddle (Model 604), 1" / 2" Single Foot (Model 621)

GROUNDING: Dedicated terminal (case isolated). Stud dimensions: M8 x 1.25

POSITIVE OUTPUT: Threaded stud. Stud dimensions: M8 x 1.25

LAMP OUTPUT: D+ (low voltage / low current) Stud dimensions: 10 x 24

AC / STATOR OUTPUT: 12 pulse. Stator output wire included in pigtail plug.

INTERNAL VOLTAGE REGULATION: 14.1-volt (12V). 28.2-volt (24V). Single stage regulation.

NORMAL / MAXIMUM OPERATING TEMPERATURE: 180°F/82°C / 225°F/108°C

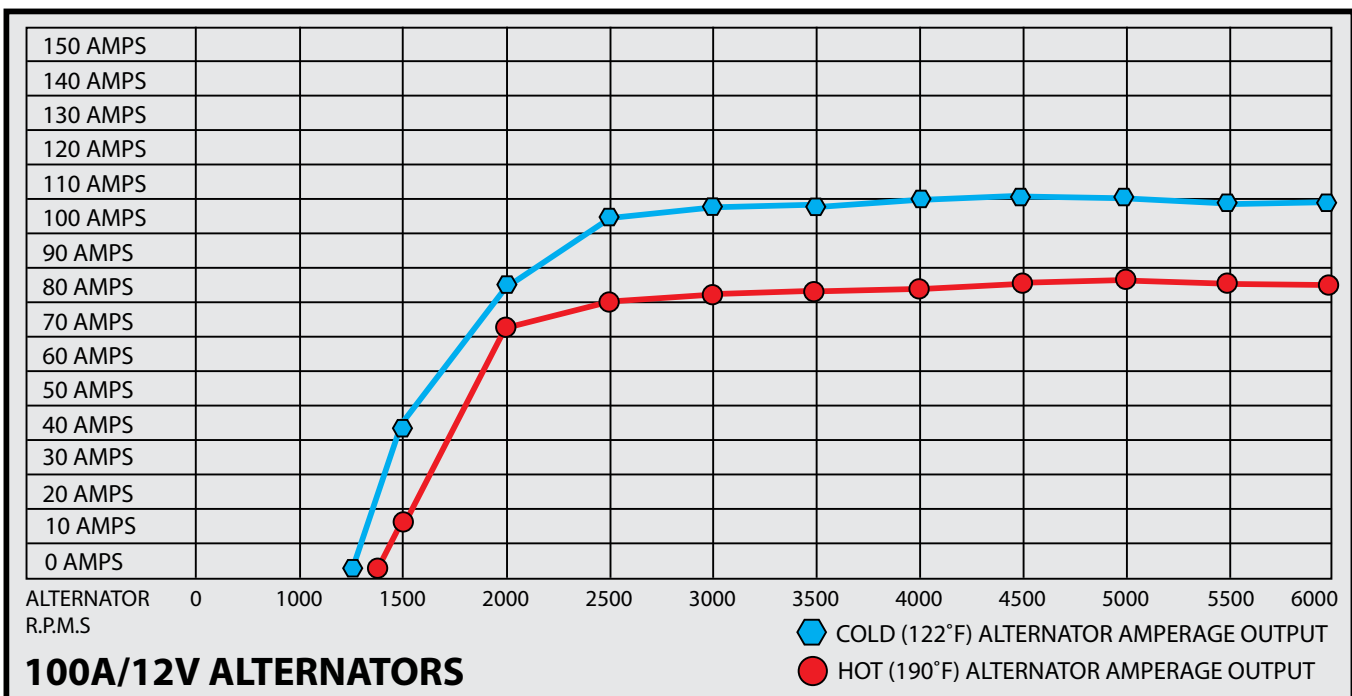
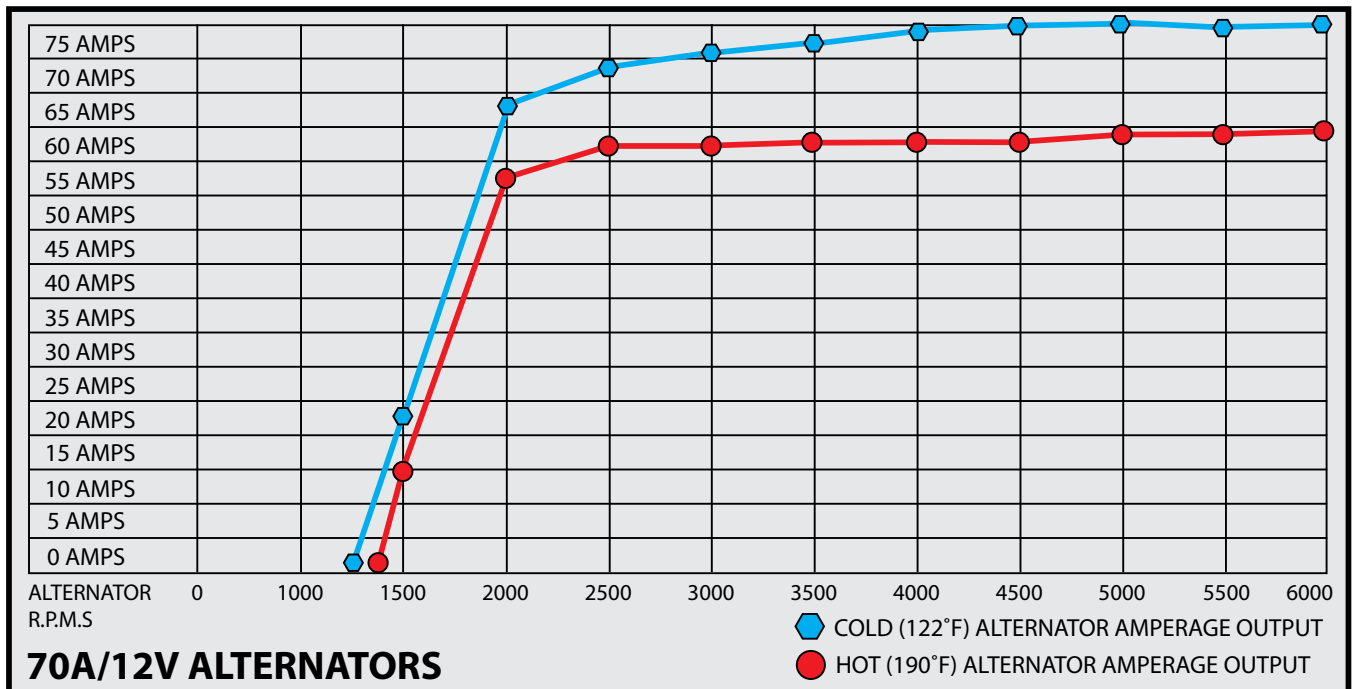
LOW RPM CUT-IN / MAXIMUM OPERATING RPM: 1320rpm / 15000rpm

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

IGNITION PROTECTION RATED: USCG Title 33, ISO J1187, SAE 8846, CE

WARRANTY: One year limited (see 2009 Balmar Product Guide for details)

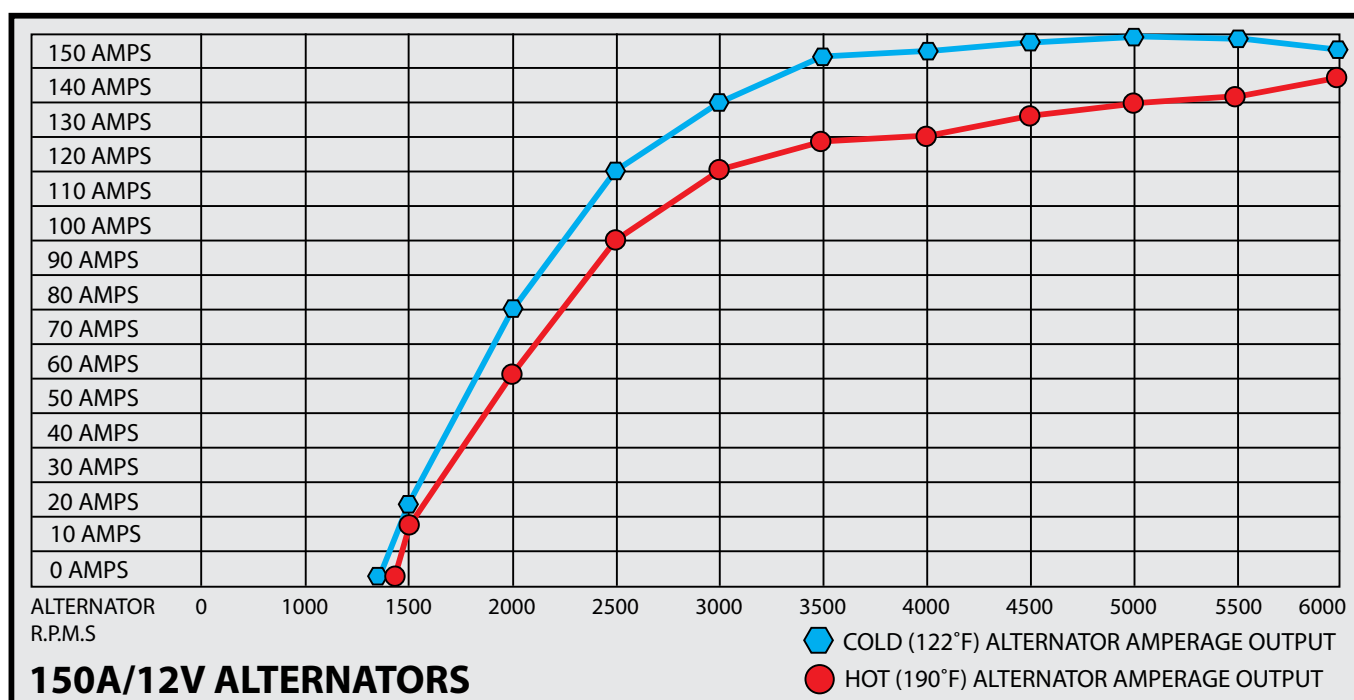
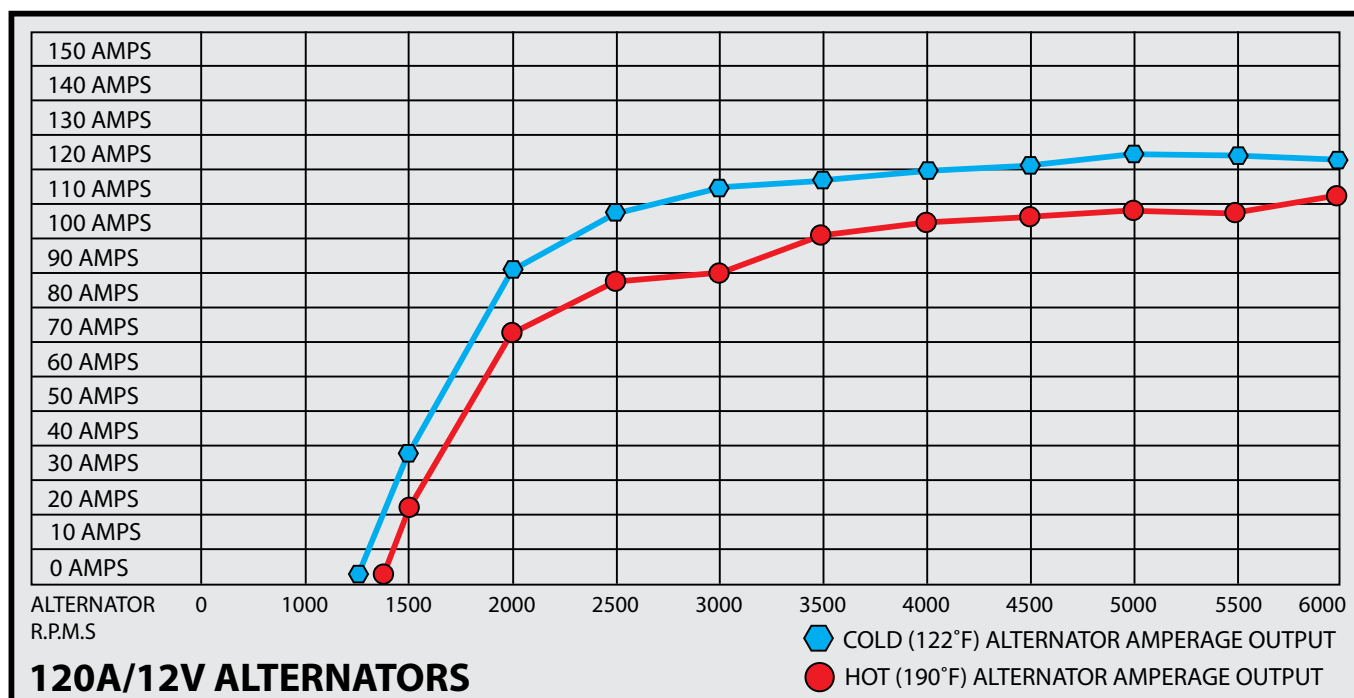
OUTPUT CURVES - 70A/12V & 100A/12V



RECOMMENDED PULLEYS

Model Number	Belt Type	Belt Size	Pulley Diameter	Pulley Bore
61-0010	Single Deep Vee	3/8" to 1/2"	2.7"	17 mm
61-0020	Dual Deep Vee	3/8" to 1/2"	2.7"	17 mm
1281	Serpentine	Six Groove	2.6"	17 mm
61-0060	Dual Deep Vee	3/8" to 1/2"	2.7" (For Yanmar 6CX)	17 mm

OUTPUT CURVES - 120A/12V & 150A/12V

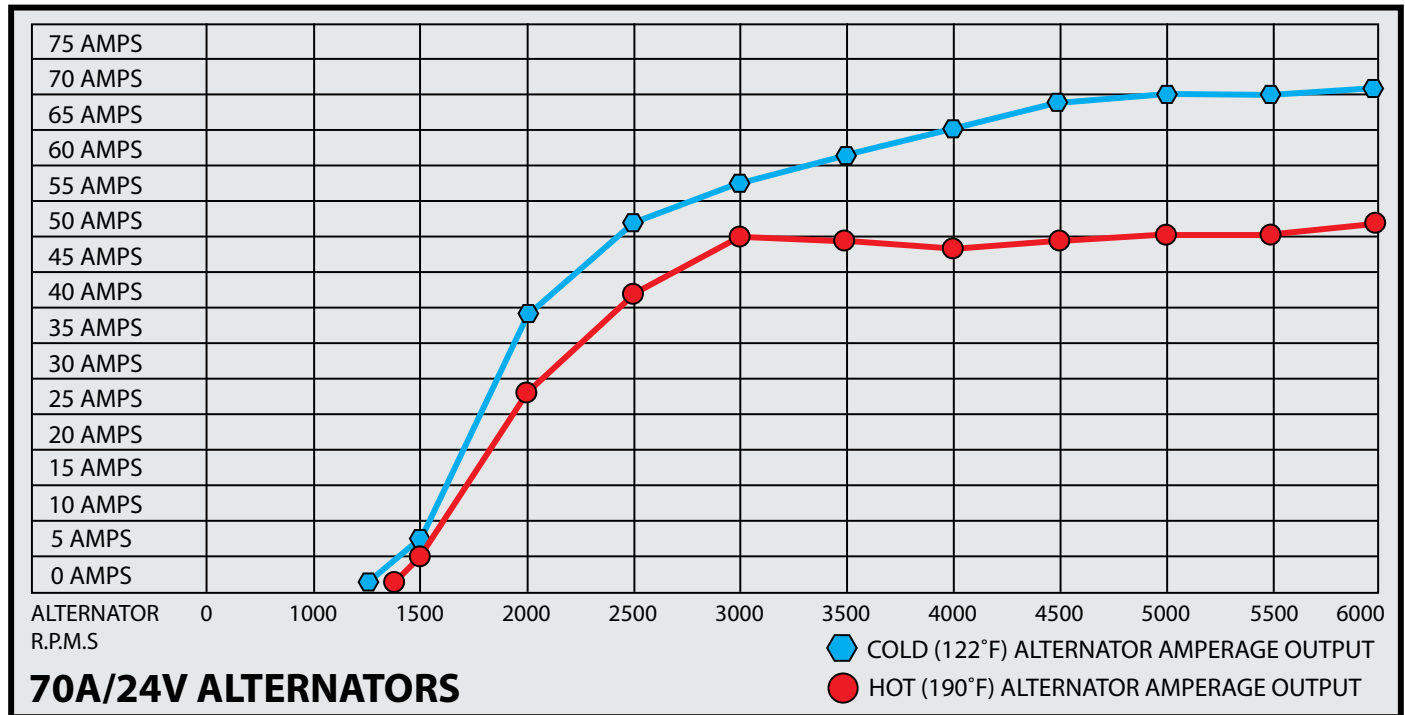


SMART READY® INTERNAL REGULATION

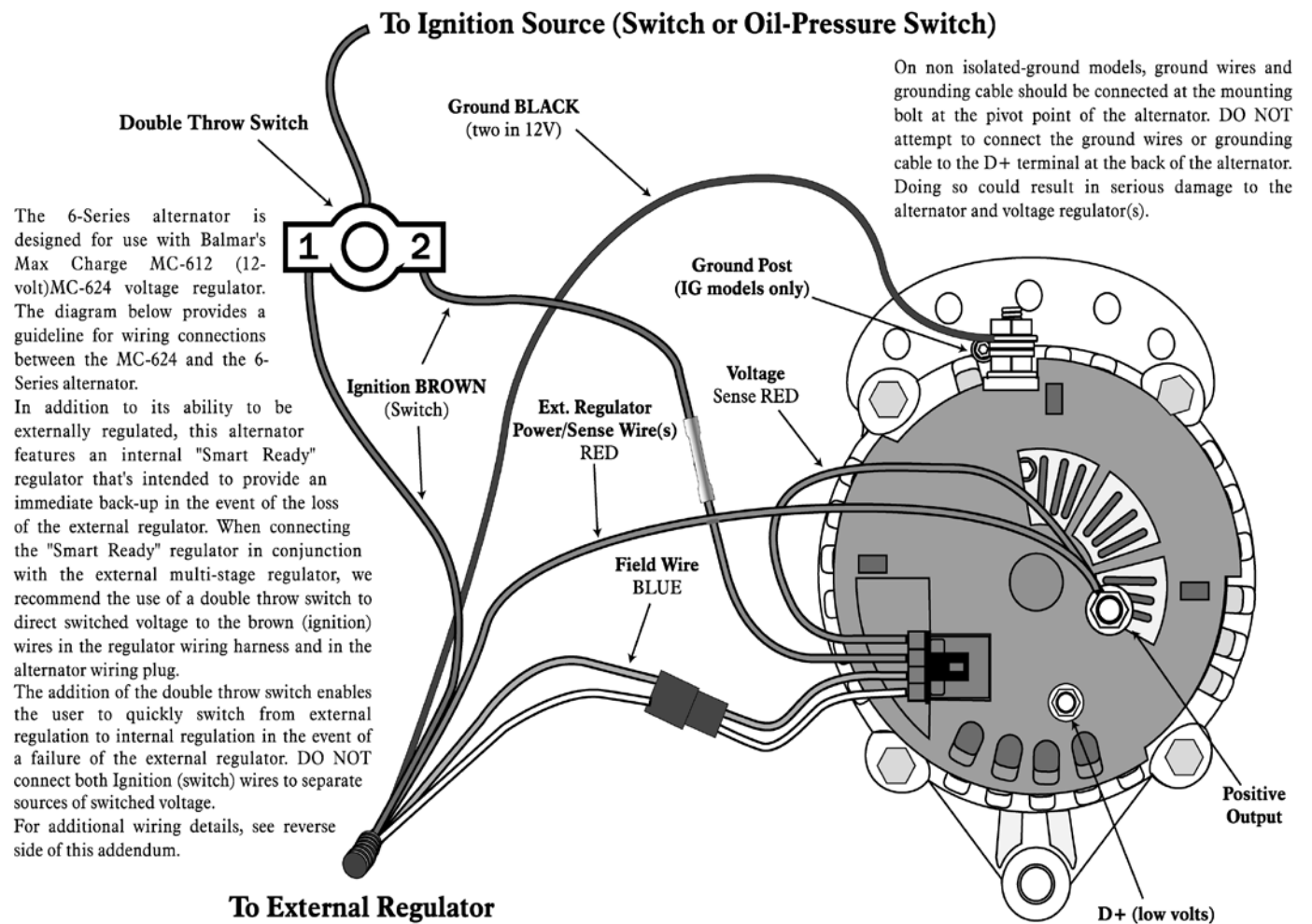
Small case 6-Series alternators are uniquely constructed with Smart Ready® Internal regulation to provide two options for operation. Used alone, the 6-Series alternator can deliver higher output than standard factory alternators with the simplicity of basic, single-stage regulation.

When used in conjunction with a Balmar multi-stage voltage regulator, the 6-Series alternator can provide larger flooded deep cycle, gel, AGM and spiral wound battery banks with the intelligent charging characteristics required to provide battery care in league with smart shorepower chargers.

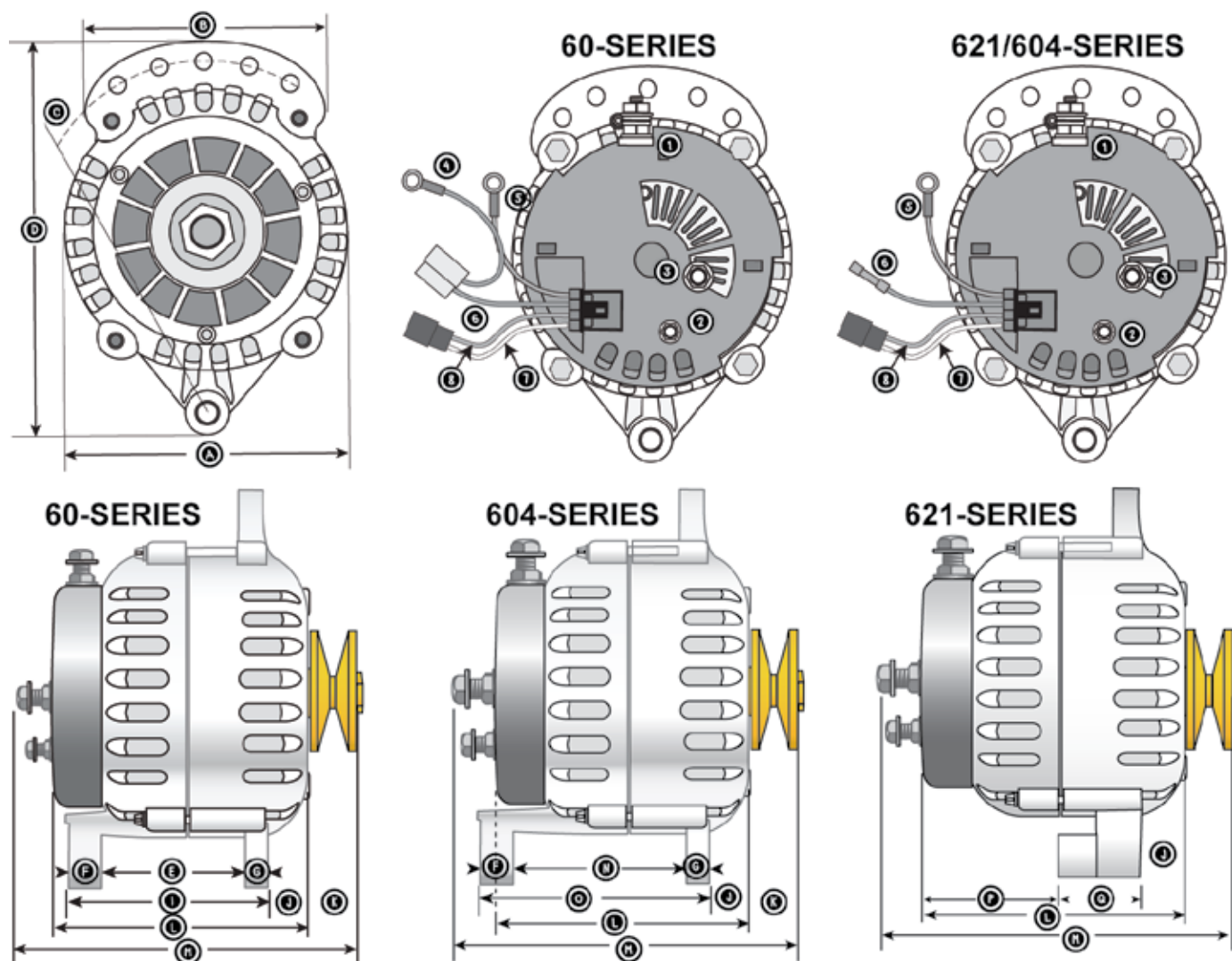
OUTPUT CURVES - 70A/24V



SMART READY® SUGGESTED WIRING DIAGRAM



6-SERIES ALTERNATOR DIMENSIONS



ITEM	DESCRIPTION	IN.	MM
A	Case Diameter	5.7	144.8
B	Crown Width	4.5	114.3
C	Bolt-to-Bolt Center	6.5	165
D	Overall Height	7.3	185.4
E	60-Series Saddle Width (ID)	3.15	80
F	Rear Foot Width (+ Bushing)	.75	19
G	Front Foot Width	.55	14
I	Mounting Saddle Overall	4.45	113
J	Front Foot to Case Front	.5	12.7
K	Case to Pulley Front (Sgl.)	1.25	31.75
L	Case Length Front-to-Back	5.1	129.6
M	Length Overall	6.6	167.6
N	604-Series Saddle Width (ID)	4.0	101.6
O	Mounting Saddle Overall	5.3	134.6
P(1)	Case Rear to Foot (2" Foot)	2.6	66

ITEM	DESCRIPTION	IN.	MM
P(2)	Case Rear to Foot (1" Foot)	3.6	91.4
Q(1)	Foot Width (With Spacer)	2	23.4
Q(2)	Foot Width (No Spacer)	1	12.7
M(2)	Overall Length (Dual Pulley)	7	177.8
TERMINAL CONNECTION LOCATIONS			
1	Isolated Ground Terminal		
2	Lamp (D+) Circuit Terminal		
3	Positive Output Terminal		
4	Lamp Wire (60-Series Only) (BLUE) Not Used		
5	Internal Regulator Sense Wire (RED)		
6	Internal Regulator Ignition Wire (BROWN)		
7	Stator/Tach Output (WHITE)		
8	External Regulator Field Input (BLUE)		

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.