

6-Series Alternators

Designed for Recreational Applications

- Balmar's Top Selling Alternator Line
- 70A, 100A, 120A and 150A Versions
- Patented Smart Ready® Technology
- Dual Fan Cooling
- High Airflow Frame
- Maximum RPM: 12,000
- USCG Title 33, CE, ISO 8846 and SAE J1171 Certified
- Ideal for Modest Charging Upgrades

Balmar **6-Series Alternators** deliver high-output performance in a compact, small-case package and are available in all four common mounting configurations (see page 6).

While all Balmar's high-output alternators are designed and recommended for use with our multi-stage voltage regulators, the 6-Series Alternator utilizes Balmar's Smart Ready® Technology. If battery loads are relatively small and your engine is running frequently, the alternator's internal regulator may be sufficient to support your electrical needs without external regulation. If your vessel utilizes larger deep-cycle battery banks or the engine's duty cycle is less frequent (as is the case in most sailing applications), the 6-Series Alternator combines and works seamlessly with Balmar's ARS-5 Voltage Regulator or Max Charge Voltage Regulator.

Purchased either individually or as a charging kit, 6-Series Alternators can solve a multitude of charging problems at a reasonable price. All kits come with alternator, regulator and two temperature sensors.



Smart Ready® 6-Series

Charging Kit

6-Series Output	Power Take Off	Mounting ⁽³⁾	Individual Alternator Part Number ⁽¹⁾	Alternator Kit with ARS-5 Regulator ⁽¹⁾⁽⁴⁾	Alternator Kit with Max Charge Regulator ⁽¹⁾⁽²⁾⁽⁴⁾	Altmount® Pulley Kit Required?
70 A	2.8 HP	1-2" Spindle	621-70-XX	621-VUP-70-XX	621-VUP-MC-70-XX	No
		3.15" Saddle	60-70-XX	60-YP-70-XX	60-YP-MC-70-XX	
100 A	4.0 HP	1-2" Spindle	621-100-XX	621-VUP-100-XX	621-VUP-MC-100-XX	
		3.15" Saddle	60-100-XX	60-YP-100-XX	60-YP-MC-100-XX	
120 A	4.8 HP	1-2" Spindle	621-120-XX	621-VUP-120-XX	621-VUP-MC-120-XX	Yes, If Dual Vee or Serp is Not Present See Page 11
		3.15" Saddle	60-120-XX	60-YP-120-XX	60-YP-MC-120-XX	
150 A	5.2 HP	1-2" Spindle	621-150-XX	621-VUP-150-XX	621-VUP-MC-150-XX	
		3.15" Saddle	60-150-XX	60-YP-150-XX	60-YP-MC-150-XX	
70 A, 24V	5.6 HP	1-2" Spindle	621-24-70-XX	-	621-VUP-24-70-XX	
		3.15" Saddle	60-24-70-XX	-	60-YP-24-70-XX	

(1) "XX" Pulley Designations: "SV" = 1/2" Single Vee, "DV" = 1/2" Dual Vee, "K6" = K6 Serpentine, "J10" = J10 Serpentine.

(2) A Max Charge Regulator Kit is required for 24 volt, Dual-Alternator or Twin Engine Applications.

(3) Additional 6-Series mounting styles (J-180 and Vortec) are available and shown on Page 30.

(4) All Dual Foot Yanmar Kits include 6-0020 mounting kit.



XT-Series & AT-Series Alternators Designed for Recreational Applications

- 170A or 220A in a Small Case Package
- Up to 140A at Idle Speeds
- Patented Smart Ready® Technology (XT-Series Only)
- Dual Fan Cooling, High Airflow Frame
- Ideal for Large Battery Banks
- USCG Title 33, CE, ISO 8846 and SAE J1171 Certified

AT-Series and the **New** XT-Series Alternators from Balmar bring together the latest innovations in alternator design to deliver incredible charging power in a compact, Marine-friendly package.



Advanced Braided Stator



Hairpin Stator



Traditional S-Wound Stator

The **New XT-Series 170A Alternator** family features a state-of-the-art, braided wire stator design to generate exceptional output in the smallest possible area. The XT-Series produces slightly more power than our previous AT-Series 165A design and operates 5°-10°C cooler. In addition, we've added Balmar's Smart Ready® internal regulator technology to provide an additional level of fault tolerance for cruising boaters. Available XT-Series mounting styles have been expanded to include the "Vortec" 9Si design found on many GM gasoline engines.

The **AT-Series 220A Alternator** family features a hairpin-wound stator design which uses densely wound square copper wire to generate up to 220A at 3,000 engine rpm. Hairpin-wound stators feature 96 slots - compared to 36 slots in a traditional S-wound stator - allowing the hairpin-wound stator to develop superior electromagnetic energy and efficiency to other traditional stator designs.

XT-Series and **AT-Series Alternators** may require a Tachometer Signal Stabilizer (Part No. 15-TSS) if your current tachometer is not adjustable. **XT-Series** and **AT-Series Alternators** should only be used in Dual Vee or Multi-Groove Serpentine belt configurations. Balmar's growing range of **Altmount® Serpentine Pulley Conversion Kits** shown on page 11 support all **XT-** and **AT-Series Alternators**.

XT / AT Series Output	Power Take Off	Mounting	Individual Alternator Part Number ⁽¹⁾⁽³⁾	Alternator Kit with Max Charge Regulator ⁽²⁾	Altmount® Pulley Kit Required?
170 A	5.2 HP	1-2" Spindle	XT-SF-170-XX	XT-SF-170-XX-KIT	Yes, If DV or Serpentine is Not Present
		3.15" Saddle	XT-DF-170-XX	XT-DF-170-XX-KIT ⁽⁴⁾	
		Vortec	XT-VT-170-K6	XT-VT-170-K6-KIT	
220 A	6.0 HP	1-2" Spindle	AT-SF-200-XX	AT-SF-200-XX-KIT	
		3.15" Saddle	AT-DF-200-XX	AT-DF-200-XX-KIT ⁽⁴⁾	
		4" Saddle	AT-DF4-200-XX	AT-DF4-200-XX-KIT	

(1) "XX" Pulley Designations: "DV" = 1/2" Dual Vee, "K6" = K6 Serpentine, "J10" = J10 Serpentine.

(2) Kit Includes AT-Series Alternator, Max Charge Regulator (MC-614-H) and Temperature Sensors (MC-TS-A, MC-TS-B).

(3) The AT-Series Alternator may require a Tachometer Signal Stabilizer (Part No. 15-TSS) if your current tach is not adjustable.

(4) All Dual Foot Yanmar Kits include 6-0020 Mounting Kit.