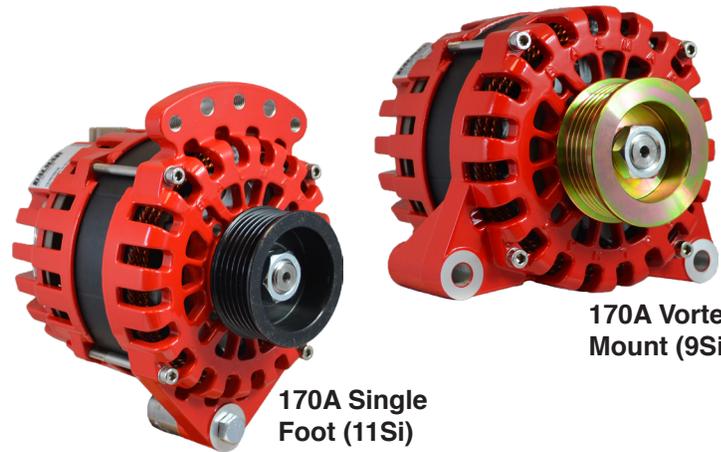


### XT-Series Alternators For WakeBoat and Inboard Gas Applications

- 170A in a Small Case Package
- Up to 110A at Idle Speeds
- Ideal for High Electrical Load Vessels
- Custom High Speed Bearings for Long Life
- Dual Fan Cooling, High Airflow Frame
- USCG Title 33, ISO 8846 and SAE J1171 Certified

**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.



170A Vortec Mount (9Si)

170A Single Foot (11Si)



Advanced Braided 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 stator achieves an industry-best 85% copper windings density, compared to 70% density for hairpin stator windings and 45% density for traditional s-wound stators. This design achievement results in a more efficient alternator which provides more power at low RPM, higher overall power and cooler operation.

Available XT-Series mounting styles are drop-in compatible for WakeBoat and other GM gasoline engine applications and include both 2" Single Foot (Delco 11Si Style) and Vortec (Delco 9Si Style) designs.

Over 60% of WakeBoat run times are at idle speed. Many high current electrical loads are engaged at idle, including ballast pumps, high-output stereo systems and multiple instrumentation loads. Standard alternators only produce about 30A-40A at idle speed, leaving these loads to be serviced by onboard batteries. Excessive draining causes battery sulfation and reduced lifetimes. Dealers report that AGM batteries which should last 5-7 years on these vessels are being replaced annually. The **XT-Series Alternator** produces over 100A at idle speed – ample power to service all electrical loads with power left over to top-off house batteries. The XT-Series pays for itself in reduced battery replacement costs in just one year!

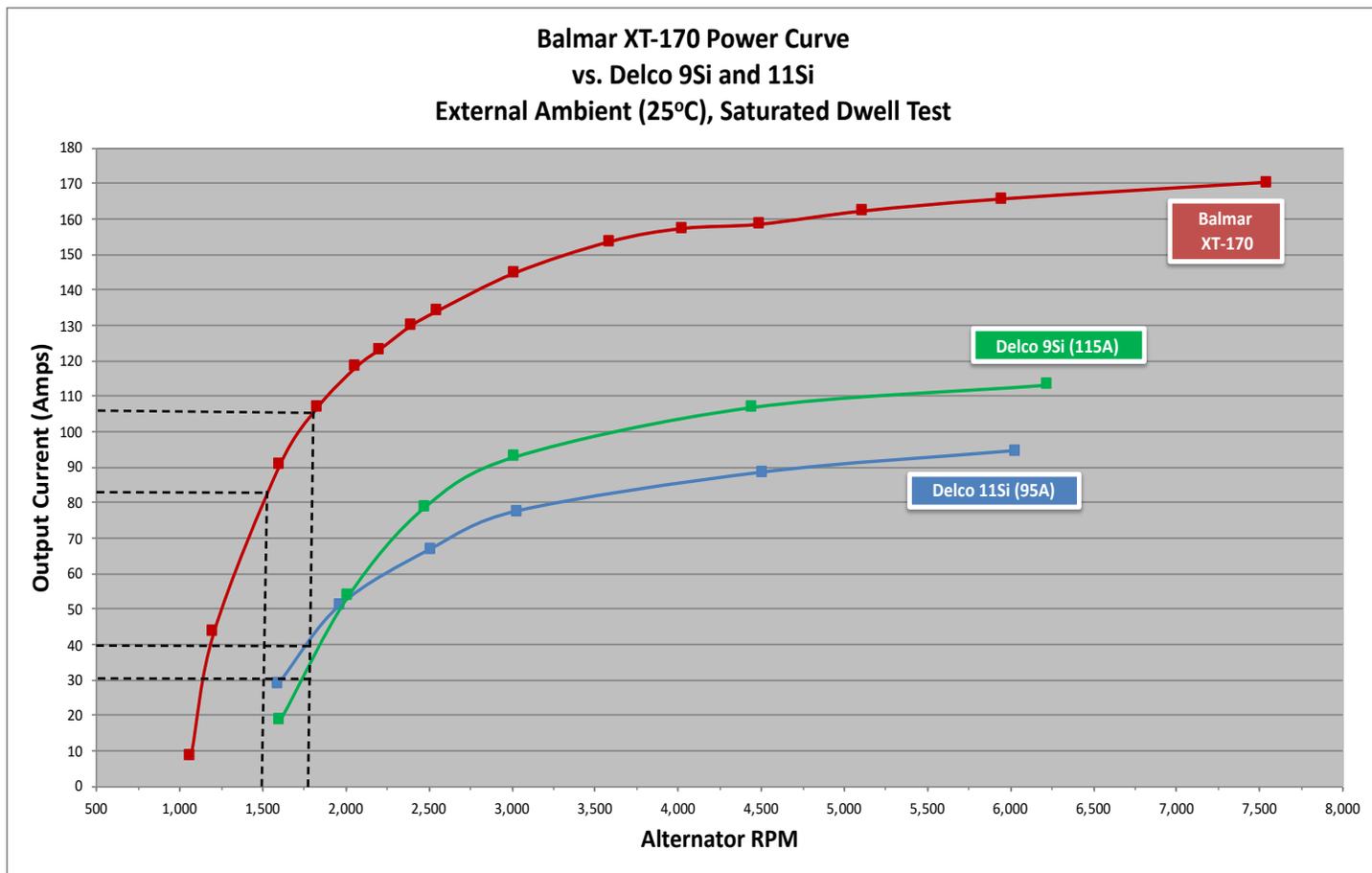
#### Ordering Information:

XT-Series Output	Power Take Off	Mounting	Alternator Part Number <sup>(1)</sup>	Standard Pulley
170 A	5.2 HP	1-2" Single Foot (11Si Typical)	XT-SF-170-IR	K6 (2.4" dia.)
		Vortec (9Si Typical)	XT-VT-170-IR	

<sup>(1)</sup> These Alternators contain single stage, internal regulators and are not appropriate for use with Balmar's multi-stage external regulators. Contact Balmar tech service for more details.

## Comparative Output Curves

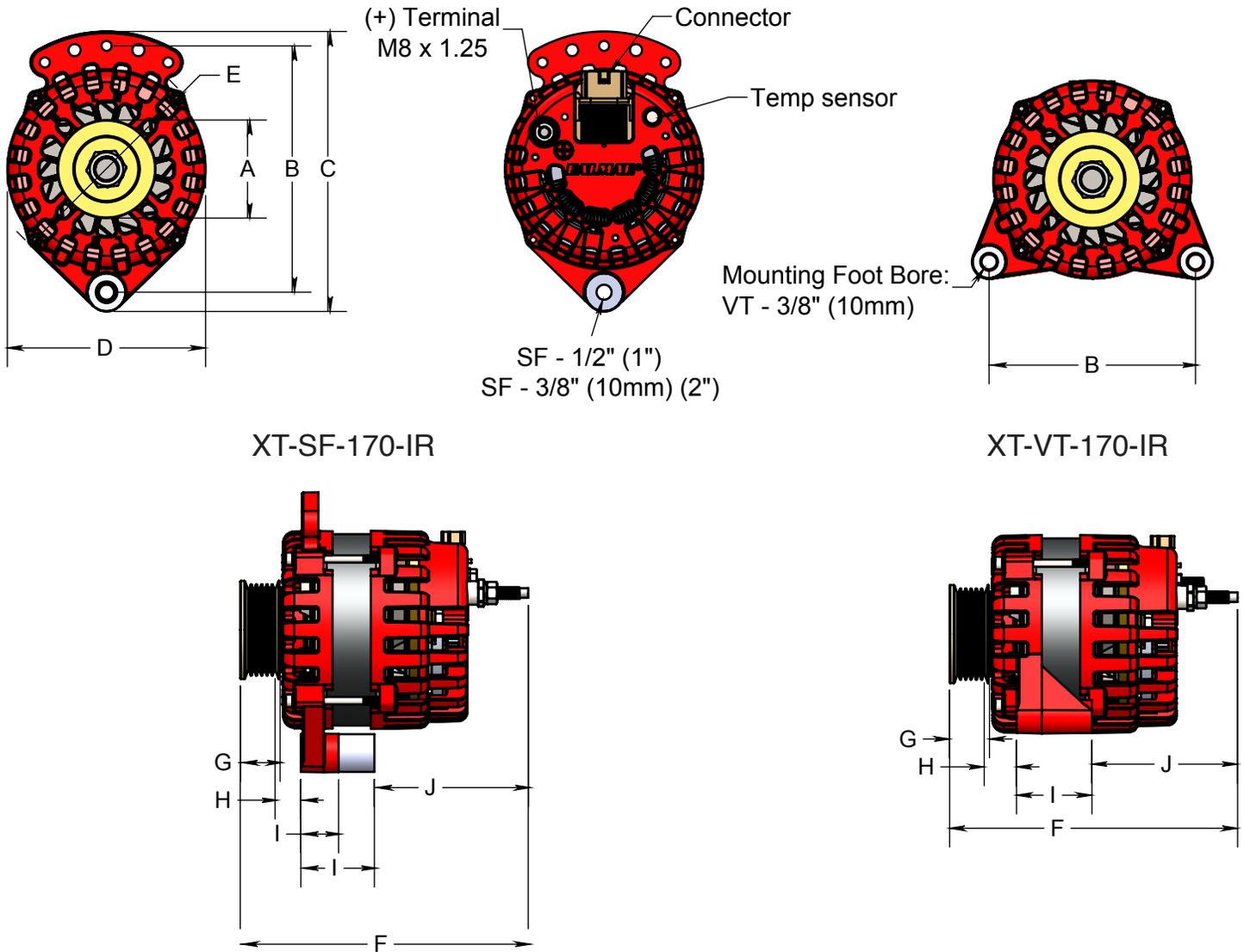
Alternator output is dependent upon a number of factors: battery condition and capacity, wire size, engine horsepower and RPM, battery temperature and alternator temperature. Of these factors, alternator speed and temperature are most important. Test voltages are set at 14.0V.



## XT-Series Alternator Specifications

<b>Alternator Style:</b> Small Case, Internally Regulated	<b>Mounting Styles:</b> XT-VT Series: Vortec Style XT-SF Series: 1" or 2" Single Foot (Spindle)
<b>Regulation:</b> Internal N-Type	
<b>Cooling:</b> Dual Internal Fans	<b>Positive Output:</b> Threaded Stud Stud Dimensions: M8 x 1.25
<b>Bearings:</b> Sealed, Motor Quality Bearings, Heavy Duty Radial (front & rear). 18,000 RPM Continuous Rating	<b>Grounding:</b> Case Ground, Auxiliary Threaded Stud Dimensions: M6 x 1.00"
<b>Case Construction:</b> Ventilated Cast Aluminum	<b>AC/Stator Output:</b> None
<b>Finish:</b> Red Power Coat	<b>Diodes +/-:</b> 6 Positive, 6 Negative; 50A Rated, 24V Avalanche
<b>Tensioning Arm Mount:</b> XT-SF Series: Five Position Crown (3x: M8 x 1.25, 2x: 8mm)	<b>Internal Voltage Regulation:</b> 14.7 Volts (12V systems)
<b>Mounting Foot Bore:</b> XT-VT-Series: 2x 10mm (3/8") XT-SF-Series 1 inch: 1/2", SF-Series 2 inch: 10mm (3/8")	<b>Low RPM Cut-In:</b> 1,300 Alternator RPM Max <b>Max Alternator RPM:</b> 18,000 rpm
<b>Ignition Protection Ratings:</b> USCG Title 33, SAE J1171, CE, ISO 8846	<b>Normal Operating Temperature:</b> 180°F / 82°C <b>Max Operating Temperature:</b> 225°F / 108°C

**XT-170-Series Dimensions**



XT-SF-170-IR

XT-VT-170-IR

ITEM	DESCRIPTION	IN.	mm
A	K6 (serpentine) Pulley Dia.	2.42	61
B	Mounting Hole (VT)	5.47	138
	Mounting Hole (SF)	6.53	166
C	Overall Height	7.43	188
D	Case Diameter	5.26	134
E	Mounting Ear to Mounting Ear	5.70	144
F	Overall Length w/ K6 Pulley	7.76	197
G	K6 Pulley Width	1.30	33

ITEM	DESCRIPTION	IN.	mm
H	First Groove to Mounting (SF)	0.85	21.6
	First Groove to Mounting (VT)	0.85	21
I	Foot Thickness (SF) 1"	1.00	25
	Foot Thickness (SF) 2"	1.95	49
	Foot Thickness (VT)	2.00	50
J	Foot to (+) Terminal (SF) 1"	5.03	127
	Foot to (+) Terminal (SF) 2"	4.08	103
	Foot to (+) Terminal (VT)	3.86	98