

BALMAR 94-SERIES ALTERNATOR DATA SHEET

REVISED 06/08/09

Balmar's 94-Series, large case alternators deliver the size and charging output required to support battery banks of up to 800 amp hours at 12 volts or 400 amp hours at 24 volts. Designed expressly for use on diesel engines utilizing a 2" Delco-style single foot mount, 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 charging a variety of battery types.

Custom-wound rotor/stator combinations optimize output across the typical diesel powerband. Isolated ground provides sure continuity to system ground. Included in the 94-Series alternator family are: 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: 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

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

GROUND TERMINATION: Case independent

TACH OUTPUT: Unrectified AC stator output

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

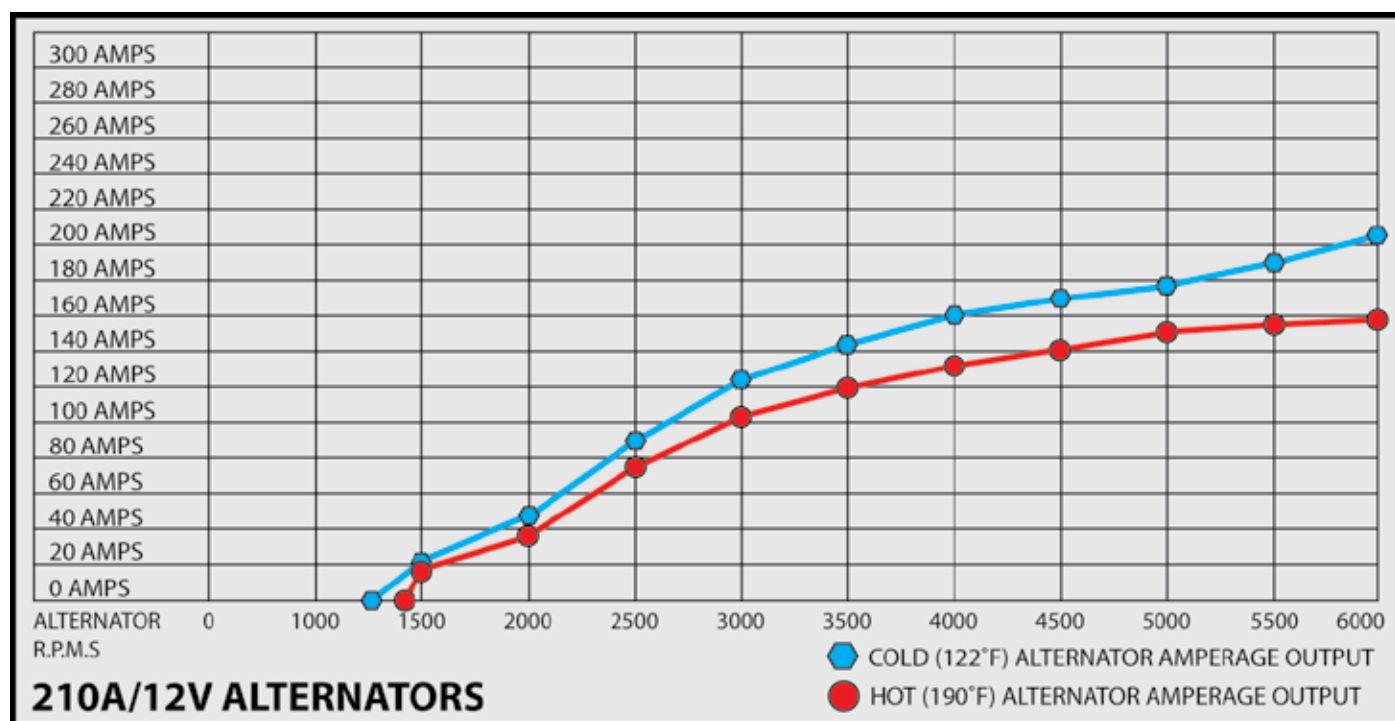
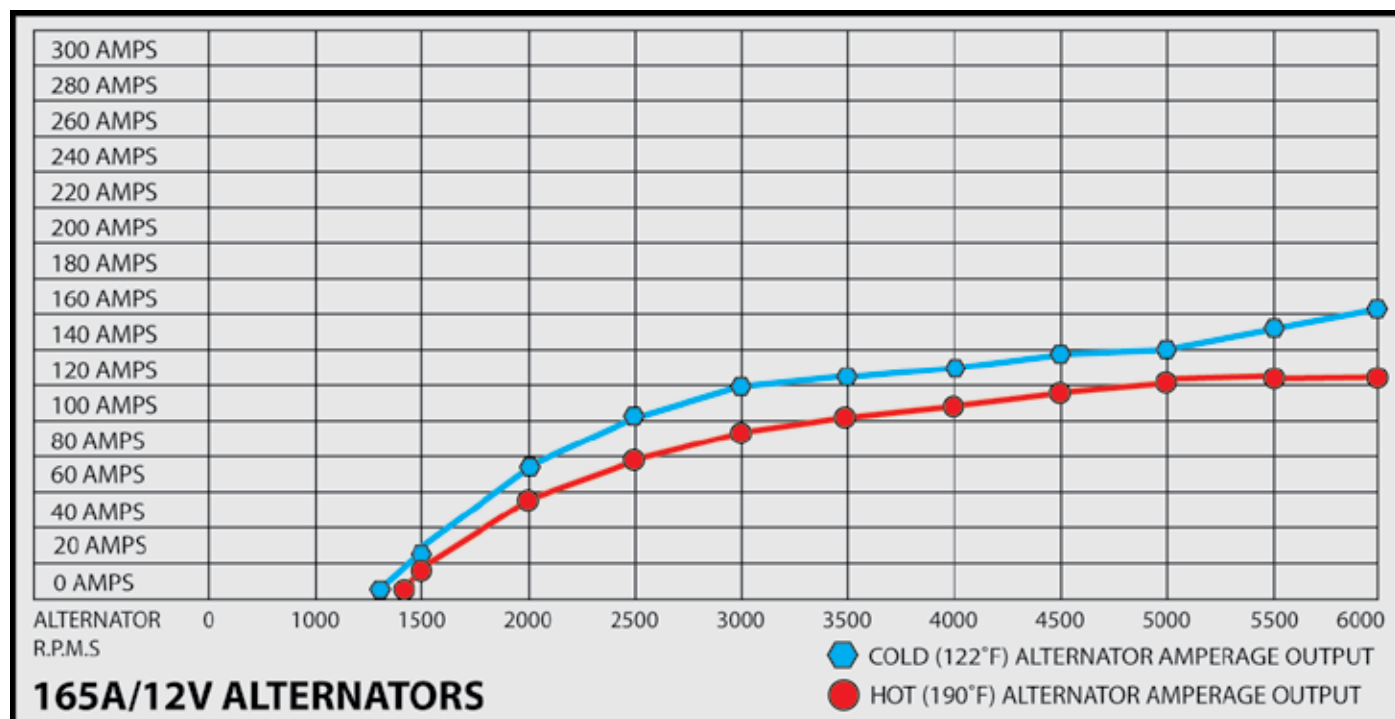
TENSIONING ARM: 180° offset from mounting foot

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

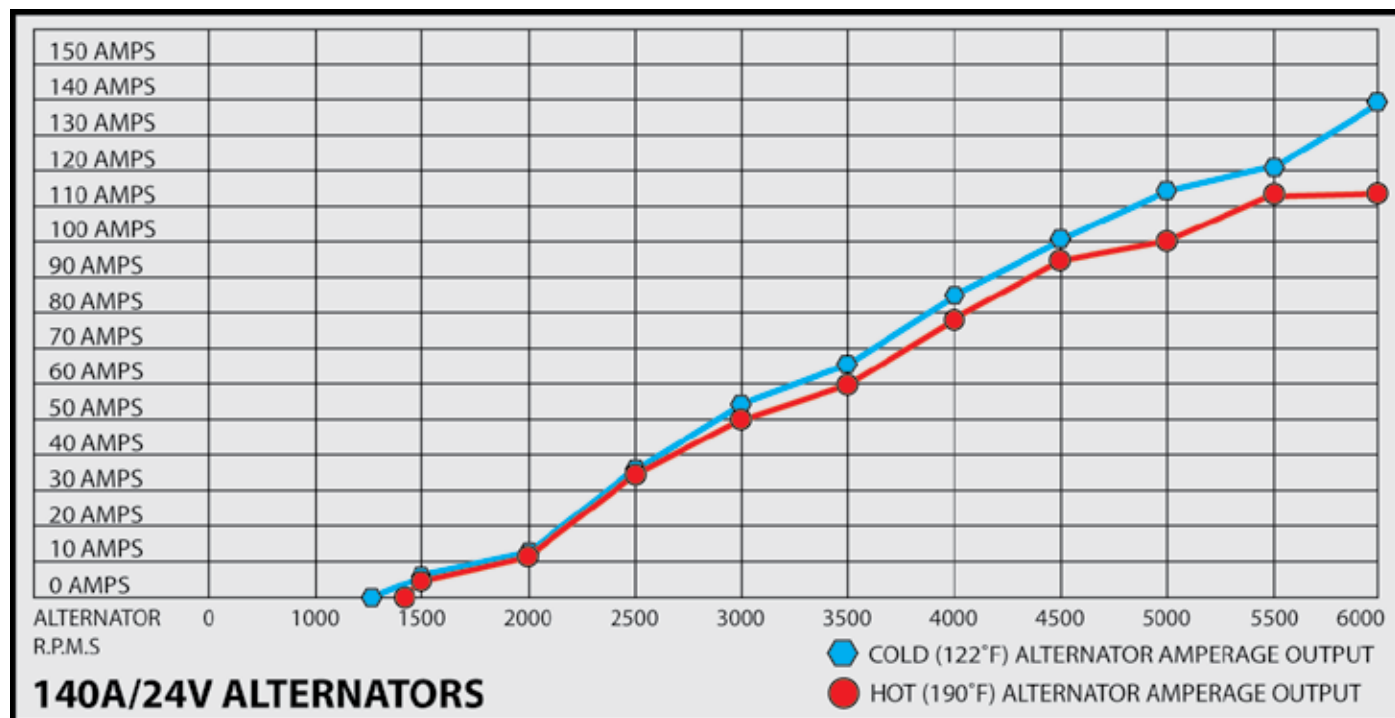
MOUNTING STYLE: Single foot, two-inch (Delco-style) mount

IGNITION PROTECTION STANDARDS: USCG TITLE 33

OUTPUT CURVES - 165A & 210A (12-VOLT MODELS)

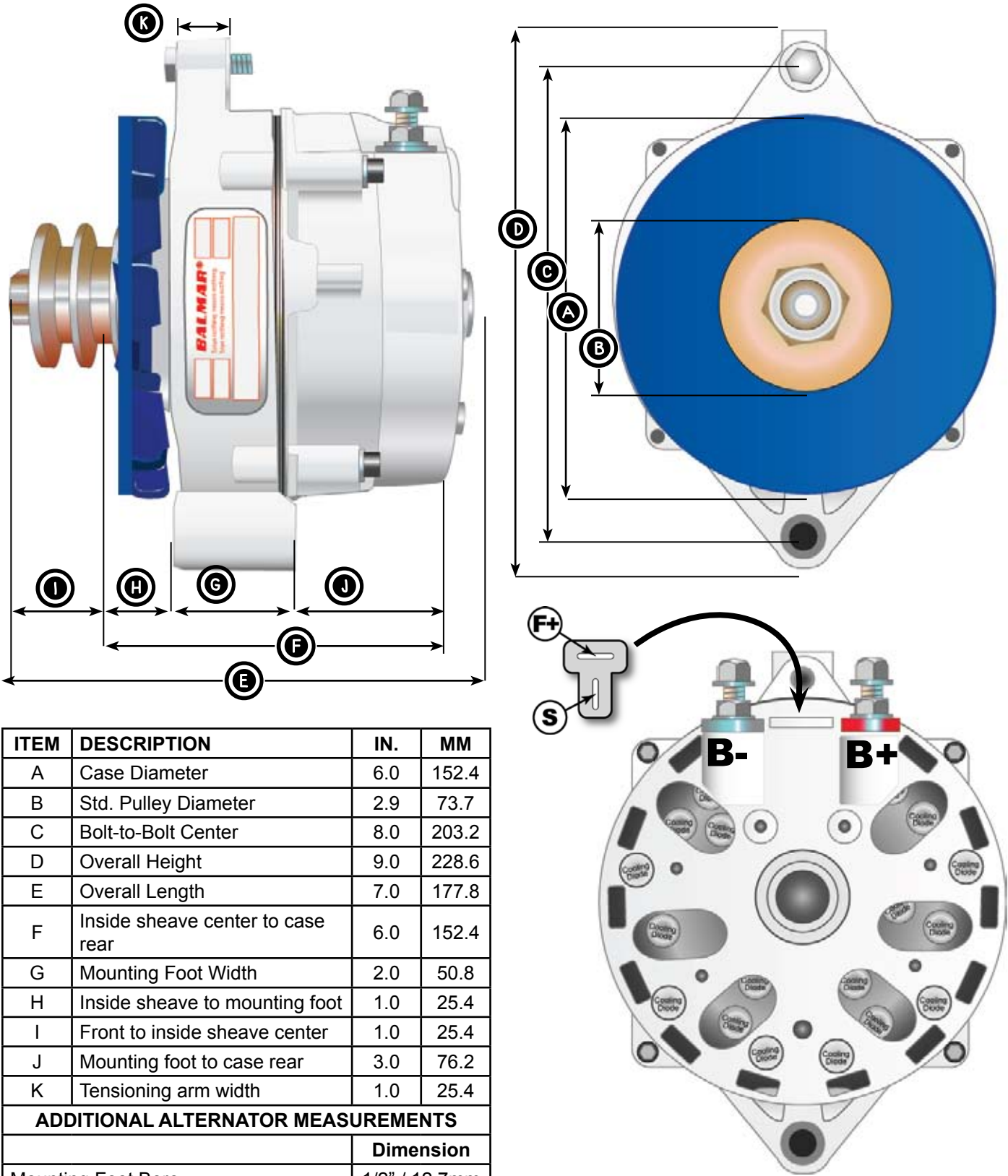


OUTPUT CURVE - 140A (24-VOLT MODEL)



PLEASE NOTE: 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.

ALTERNATOR DIMENSIONS



ITEM	DESCRIPTION	IN.	MM
A	Case Diameter	6.0	152.4
B	Std. Pulley Diameter	2.9	73.7
C	Bolt-to-Bolt Center	8.0	203.2
D	Overall Height	9.0	228.6
E	Overall Length	7.0	177.8
F	Inside sheave center to case rear	6.0	152.4
G	Mounting Foot Width	2.0	50.8
H	Inside sheave to mounting foot	1.0	25.4
I	Front to inside sheave center	1.0	25.4
J	Mounting foot to case rear	3.0	76.2
K	Tensioning arm width	1.0	25.4
ADDITIONAL ALTERNATOR MEASUREMENTS			
		Dimension	
Mounting Foot Bore		1/2" / 12.7mm	
Tensioning Arm Bore		5/16" / 7.9mm	
Positive Output Post		5/16" x 18	
Field Input Terminal		1/4" spade	
Ground Post		5/16" x 18	
Stator/Tach Output Terminal		1/4" spade	

TERMINAL CONNECTION LOCATIONS	
B+	Positive Output Terminal
S	Stator/Tach Output Terminal
F+	External Field Input Terminal
B-	Case Ground Terminal