

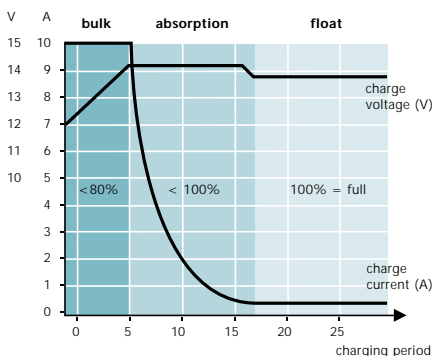


HIGH OUTPUT ALTERNATORS (ALPHA PRO)

3-stage regulators & alternators

Why a high output alternator is recommended

All inboard propulsion engines are fitted with an alternator as standard. The charge current is restricted to maintain a trickle charge for the starter battery and is not powerful enough to charge a service battery. The Mastervolt alternator in combination with the Alpha Pro 3-step regulator is designed to give a real charge to the house, radio or bowprop batteries, regardless of the technology (gel, wet or traction) of the battery. Multiple bank charging can be done without problems as the Alpha Pro regulator allows you to adjust all voltage settings that are required. Now the batteries can be charged quickly and completely even at low engine speed.



Robust design guarantees life time operation

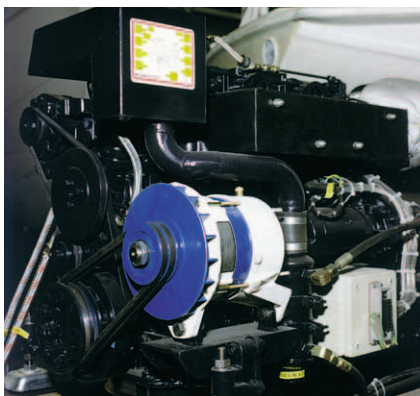
The enclosed brush design combined with a severe corrosion protection guarantees maintenance free use. The alternators are designed to operate in dirty environments with extreme high ambient temperatures. The bearings are made to last forever while the output current is at maximum in warm engine rooms. The Alpha Pro 3-step voltage regulator is supplied with a 1 meter cable connection – all prefab, easy to fit. The electronics are designed to operate in harsh marine or mobile circumstances and are completely sealed which guarantees an extended life time, even in humid environments.



Extended range

The alternators are provided in two versions: the small models have a smaller diameter allowing the lowest weight. The large frame versions are bigger and extremely powerful. Fitting an alternator is a job for a specialist: the installation parts (steel strips or brackets) are normally provided by the propulsion engine dealer or installer: brands like Volvo Penta, Perkins, Yanmar, Nanni and others can be fitted with an alternator in this way. All alternators are equipped with a double pulley which requires in most cases the ad-

on of a pulley or power take off at the engine – this should also be done by the engine supplier or installer. The Mastervolt alternators are bi-directional, fitted with metric output studs and are ungrounded. The guarantee period is 2 years with world wide service.



Typical installation example.

- FOR A COMPLETE CHARGE OF THE BATTERY WITHIN A SHORT ENGINE RUNNING TIME
- FAST CHARGING DUE TO OUR ADVANCED 3-STEP CHARGE REGULATOR (VOLTAGE ADJUSTABLE)
- HIGH CURRENT AT LOW RPM PROVIDES THE SHORTEST CHARGE TIME
- INCLUDES TEMPERATURE SENSOR
- REPLACES SMALL GENSETS WHEN COMBINED WITH A SINE WAVE INVERTER

ALPHA PRO: TECHNICAL SPECIFICATIONS

Model	Alpha Pro 12V	Alpha Pro 24V	Alpha Pro B 12V*	Alpha Pro B 24V*
Part #	45511000	45511200	45511400	45511600
Charge voltage – bulk	14.25V	28.5V	14.25V	28.5V
Charge voltage – float	13.25V	26.5V	13.25V	26.5V
Adjustability – bulk	13-15V	27-31V	13-15V	27-31V
Adjustability – float	13-13.9V	26-28.8V	13-13.9V	26-28.8V
Temp. compensation	30mV/°C	60mV/°C	30mV/°C	60mV/°C
Absorption time	4 hours, adjustable from 2 minutes to 4.5 hours			
Minimum PWM	tacho, minimal rev. counter, keep alive 6% PWM			
Regulation	negative with built-in trip-free diode			
Temperature sensor cable length	20 ft	20 ft	20 ft	20 ft
Dimensions hwxwd in inches	3.54x3.74x1.18	3.54x3.74x1.18	3.54x3.74x1.18	3.54x3.74x1.18
Casing	IP65	IP65	IP65	IP65
Weight	0.88 lbs	0.88 lbs	0.88 lbs	0.88 lbs
Connections	external faston for all models			
Connection cable	20 ft for all models			
Suitable for alternator type	Mastervolt/Prestolite	Mastervolt/Prestolite	Bosch	Bosch

* Alpha Pro B compatible with Bosch alternator.



Model 12/90,
part # 48012090.



Model 24/110,
part # 48024110.

PRODUCT OVERVIEW ALTERNATORS

Regulators are included in the package.

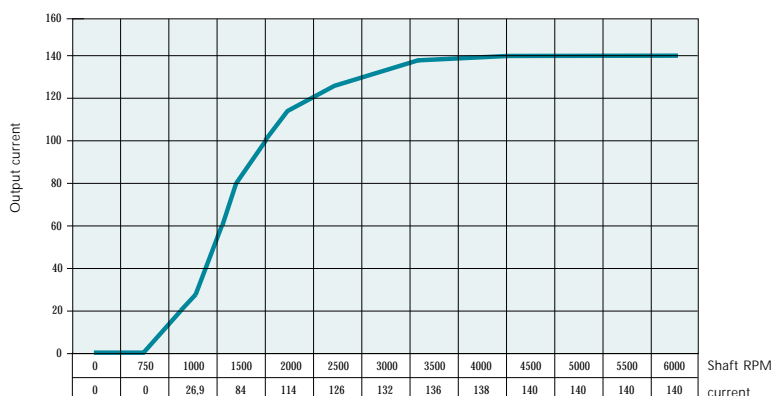
Model	12/90	12/130	24/75	24/110	24/150
Part #	48012090	48012130	48024075	48024110	48024150
Type enclosure	A	B	B	B	C
Charge current	90A	130A	75A	110A	150A
Charge voltage – absorption*	14.25	14.25	28.5	28.5	28.5
Charge voltage – float*	13.25	13.25	26.5	26.5	26.5
Adjustability - range	12-15	12-15	24-30	24-30	24-30
Charge regulator	Alpha Pro charge regulator, 3-stage				
Cable length regulator/alternator	marine connection cable, oil resistant, 5 ft				
Pulley diameter	ø 2.87"	ø 3.46"	ø 3.46"	ø 3.46"	ø 3.62"
Belt tread	2x	2x	2x	2x	2x
Temperature compensation	only available with Alpha Pro (via sensor on battery), not with Alpha				
Isolated from mass	yes	yes	yes	yes	yes
Direction of revolutions	both directions				
Weight	12 lbs	22 lbs	22 lbs	22 lbs	29 lbs
Mounting	3 positions: five to six, six o'clock and five past five				

* 0.2V higher with temperature sensor connected.
All alternators are fitted with pulleys for double belts.
Although lighter versions can operate with a single belt,
using a double belt drive is more reliable.



Alpha Pro: includes charge status indication LED's, potentiometer settings for voltage and other parameters, includes temperature sensor + cable.

Example 12V/130A alternator curve



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