## Using the car / vehicle engine as a generator

# DC BeltPower

The propulsion engine of a sailing, motor yacht or vehicle, is in general, equipped with an average sized alternator designed to charge the starter battery. These type of alternators are not powerful enough to charge the service battery. Furthermore, the charging voltage of the alternator is regulated to maintenance level which is not really conducive to fully and quickly charging an onboard battery. This imitation is solved with a WhisperPower BeltPower alternator. We recommend installing the DC BeltPower as a second alternator with the primary function being to charge the onboard battery, or even multiple battery banks





DC Beltpower 12 VDC | 90 A - Art. Nr. 60212091 24 VDC | 75 A - Art. Nr. 60224076 24 VDC | 110 A - Art. Nr. 60224111

#### **Features**

• Heavy duty 12 / 24 VDC alternator

via our WBI battery Isolator.

- Charge current 75 110 Amps
- High charge current even at low rpm
- ACR 3-step charge system ensuring fast and complete battery charge
- Automatic charge voltage adjustment to ambient temperature via sensor on battery
- Complete Plug and Play
- Brackets available to mount alternator (not included, advice on request)
- Different pulleys available

## Drawings available on our website

#### Benefits

- On average, engine doesn't need to run for longer than an hour to charge batteries
- The ACR voltage regulator ensures batteries are 100 % charged
- Thanks to a special way of winding the alternator, there is a high charge current even at low engine speeds
- The standard 12 / 24 VDC alternator can remain in place no need to alter the standard engine configuration
- Inverters up to 3 kW can be used in combination with the DC BeltPower (advice on request)
- A smart WhisperPower WBI battery Isolator can be used to charge up to 3 individual batteries
- Suitable for every engine type





Temp sensor 6 meter cable Art. Nr. 60201202



Automatic Charge Regulator 12 VDC - Art. Nr. 60115100 24 VDC - Art. Nr. 60115200



Cable harness

### **DC BeltPower**

Article Number 60212091 60224076  Enclosure type A B Charge current 90 A 75 A  Alpha Pro charge regulator standard standard standard  Charge voltage absorption 14.25 VDC 28.5 VDC 28.5 VDC  Charge voltage float 13.25 VDC 26.5 VDC 26.5 VDC  Cable length regulator / alternator 1.5 metre, oil resistant marine connection cable included as standard  Diameter double pulley Ø 73 mm Ø 88 mm Ø 88 mm  Belt section 2xA 2xA 2xA  Earthed Yes Yes Yes	10 A		
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Turn directions 2 2 2			
Weight 5.5 kg / 12.1 lb 10.1 kg / 22.3 lb 10.1 kg / 2	.3 lb		
Voltage regulation WP ACR voltage regulator included as standard with all models	WP ACR voltage regulator included as standard with all models		

#### DC BeltPower is available with the following pulleys

ART. NR.	PULLEY	SUITABLE FOR
60212001	Pulley Double V 5/8" 73.6 mm	For 12 VDC-90 A Alternator
60212006	Pulley Flat belt 7/8" 89 mm	For 12 VDC-130 A; 12 VDC-160 A; 24 VDC-75 A; 24 VDC-110 A; 24 VDC-150 A Alternator
60212002	Pulley Flat belt 5/8" 73.6 mm	For 12 VDC-90 A Alternator (optional)
60212005	Pulley Double V 7/s* 89 mm	For 12 VDC-130 A; 12 VDC-160 A; 24 VDC-75 A; 24 VDC-110 A; 24 VDC-150 A Alternator (optional)

#### **Automatic Charge Regulator**

Series	ACR   12 VDC	ACR   24 VDC
Article Number	60115100	60115200
GENERAL		
Nominal operation voltage	12 VDC	24 VDC
Temperature sensor	Yes, cable length 6 m	Yes, cable length 6 m
Cable harness	Yes, length 1.5 m	Yes, length 1.5 m
Connection plug regulator/alternator	WhisperPower Alternator	WhisperPower Alternator
Alternator type	WhisperPower, low voltage, brush type	WhisperPower, low voltage, brush type
ELECTRICAL		
Charge voltage - Absorption	14.25 VDC	28.50 VDC
Charge voltage - Float	13.25 VDC	26.50 VDC
Absorption Voltage range	13 - 15 VDC	27 - 31 VDC
Float Voltage range	13 - 13.9 VDC	26 - 27.8 VDC
Absorption time	0 up to 4.5 h	0 up to 4.5 h
Temperature Compensation	-30 mV / °C	-60 mV / °C
Rev counter input	Prepared	Prepared
Operation Temperature	-20 up to 80°C	-20 up to 80°C
SETTINGS/READ OUT		
Voltage settings	By trimmers on device	By trimmers on device
Time settings	By trimmers on device	By trimmers on device
Status read-out	LED's	LED's
COMMUNICATION		
Communication bus	WhisperConnect prepared	WhisperConnect prepared
ELECTRICAL		
Dimensions (W x D x H) in mm	117 x 27 x 120	117 x 27 x 120
Dimensions (W x D x H) in inches	4.60 x 4.72 x 1.05	4.60 x 4.72 x 1.05
Weight	0.4 kg	0.4 kg
Packaging dimensions (W x D x H) in mm	330 x 65 x 230	330 x 65 x 230
Protection Degree	IP65	IP65

Battery charging is accomplished in three automatic stages: BULK, ABSORPTION and FLOAT. Simple, automatic operation is made possible by the microprocessor which is the brain of the WP-ACR.



