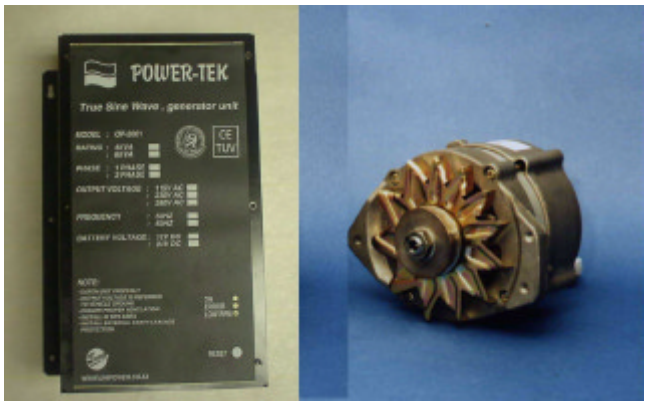
POWER-TEK

Product Specification

Model : 4kW -Power_Tek Sine wave, Generator Only unit



Control module :

Operating voltage	:	12V or 24V (Check module)
Size	:	245x150x350 mm
Weight	:	11 Kg
Loom		5 Meter , Newpreen cable
Temp range	:	0 – 40 C
Output Voltage	:	See Table
Power factor	:	0.6 Lagging to 1
Duty Cycle	:	100 %
Control	:	Microprocessor PWM
Waveform	:	Sinewave
Distortion	:	<4%

Alternator:

Type (1)	:	Bosch 90A (Turbo)
Configuration	:	Single leg or 2 leg
Size (1)	:	165x205x150mm
Weight (1)	:	5..5 Kg
Alternator speed	:	2000 to 11000 RPM
Suggested operating	:	6000RPM- 8000RPM
Rating	:	as per graph

MODEL	VOLTAGE (V)	CURRENT A (Continuous)	FREQUENCY (Hz)	BATTERY CHARGING
PT2001-GO-12V –230-4KW	**230**	**16**	**50**	**N.A.**
PT2001-GO-24V- 230-4kW	**230**	**16**	**50**	**N.A.**
PT2001- GO-12V-115-4kW	**115**	**29**	**60**	**N.A.**
PT2001- GO-24V-115-4kW	**115**	**29**	**60**	**N.A.**

TEST CONDITIONS :

a) Ambient temperature 25 C
b) Alternator and CM temperature 25 C
c) Alternator driven with twin V belt 13mm Belts
d) Alternator RPM controlled with a 22kW variable speed induction motor.
e) Battery voltage kept constant for tests 12V = 14.1V and 24V = 28.2V
f) Maximum alternator speed = 10000 RPM
g) CM – mounted upright for ventilation.
h) Loom length = 5M.
i) Test done with load of unity power factor
j) High voltage test done on 220v output

NOTE : *OUTPUT IS REFERENCED TO GROUND*

Output wave form : Pure Sinewave
Distortion < 4%
EMI CE / TUV Complaint (under testing 03/2001, prelim reports available)

It remains the right of the manufacturer to modify specifications without prior notice. Please visit website at WWW.Unipower.co.za or email to powerele@iafrica.com for an updated spec sheet

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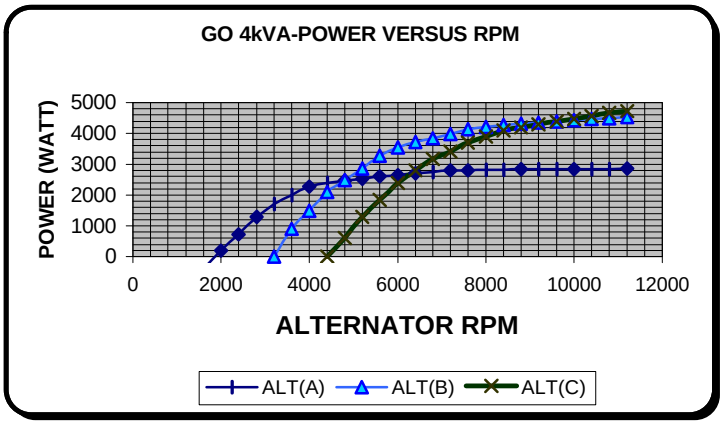

ALTERNATOR WINDING TYPES :

Type A : Output starting at 3000 RPM – high top Power
Type B : Output starting at 2000 RPM – low top Power
Type C : Output starting at 4000 RPM – high top Power

Control Technique:
Output Voltage is fixed frequency Sinewave signal. Low RPM with load will shit unit down into overload.

Fan belt requirements:
For continuous high load applications Alternator must be installed with double 13mm V fan belt. **OR** 8 GROOVE PULLEY AND FANBELT

Overload ratings :
Typical 50% for up to 30 seconds

Plug Ratings:
No Plug output supplies
Only wire leads of length 1M x 4mm diameter, External connection assembly required – Optional DB box is available on request

Earth Leakage:
No Earth leakage unit supplied, External mounting required

Displays :
Green Led - ON
Red Led - Overload
Amber - Control

Temperature Power de-rating :
CM & Alternator: Approx. 40W/K

Display – description:
a) Green Led , Unit
b) RED, CM overloaded
c) RED Flashing, CM overheat
d) RED and Amber flashing, Alternator overheat
e) Amber on , Alternator not Turning
f) Amber Flashing , Unit in V/Hz mode, thus load is more than alternator can supply at RPM
g)

Protection:
- Overload
- CM overheat
- Alternator overheat
- In Line fuse to Alternator for alternator overheat

Fan for CM internal cooling

Operating ambient Temp :
CM :0 - 40 C
Alternator : - 30 – 90 C

POWER ELECTRONICS