All in One Box Electric transformers Voltage Stabilizers Frequency converters

RV Transformer/Frequency Converters

53 Chandos Place Covent Garden London WC2N 4HS

www.rvtransformers.com

Electronic variable AC power supply Frequency converter 50/60Hz RVT32SP/50DP

USER AND MAINTENANCE INSTRUCTIONS

REV.3.01



Warning the weight of this product exceeds 38Kg



BEFORE USING THIS EQUIPMENT PLEASE CAREFULLY READ THE MANUAL



USE OF THIS EQUIPMENT IS FOR SKILLED PERSONNEL ONLY



DO NOT OPEN THE EQUIPMENT. FOR ANY ASSITANCE PLEASE CALL THE TECHNICAL SERVICE



WARNING: DANGEROUS VOLTAGE IS PRESENT INSIDE THE EQUIPMENT. DISCONNECT FROM THE POWER SOURCE BEFORE OPENING/REMOVING THE CASE. INSTALLATION MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN. USE ONLY INSULATED AND PROFESSIONAL TOOLS.

Warning: this handbook refers to the model for network voltage of 230V+N. For other countries, under the same characteristic, stabilisers are supplied with rated voltage 220V or 240V. Check that the rated voltage on the specification plate of the apparatus conforms to the voltage of the country of use.

Common Sense

- Before using this product you should be aware of the limitations and differences in available power in Europe compared to the USA.
- Most plug-in points around Europe offer around 10-amps as an average. Very few offer 16amp.
- So the available power to your RV is considerably less than the 50 amps supply available on campsites in the US.
- As soon as you plug into your chosen site, your vehicles battery charger will try and take all of the available supply. As soon as you add (turn on) another appliance the circuit will be overloaded which in most cases cause the fuse to trip.
- Battery chargers are the single most common cause of initial circuit overload.
- You should try and add appliances one by one and let things settle down. Do not expect to be able to pull up, plug in and then have both air conditionals working. The supply just won't support this demand.
- Think before you plug in and use another appliance! It's wise to turn the air conditioning off before putting the hair dryer on!
- By following these simple rules your RV transformer will supply your vehicle with the correct power so that your 120v appliances will operate correctly and without any problems.

VARIABLE AC POWER SUPPLY – FREQUENCY CONVERTER RV32SP/50DP

1. ELECTRICAL CONNECTION

Access to the input/output wiring blocks is obtained by removing the metal lid.



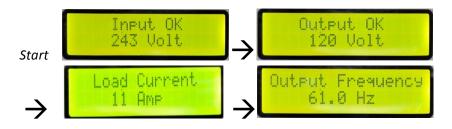
Output Block L:N:E Input Block L:N:E

Earth Terminals are required for the safety of the user and of the electrical equipment connected to the power supply.

Please ensure that the unit is mounted in a dry, <u>well-ventilated</u> location and is firmly secured in place in an upright position (as shown below). Fixing bolts are provided.



1. INITIAL START UP



During the initial start-up the system will run its own internal software check, which will normally take, between 2 and 5 seconds.

During the start up the unit will cycle from *Input OK 240v* → *Output OK 120v* → *Load Current** → *Output Frequency 60Hz

The unit will be ready for operation almost immediately (2 to 5 seconds after switching on)

Should the voltage on the supply side drop to a level outside of the operating parameters of the unit, one of the 4 fault lights will be illuminated. When the supply/issue is resolved the unit will operate as normal. The initial self-check will run each time the unit is started.

*Voltage / Hertz display values may vary & fluctuate. This is perfectly normal.

3. PROTECTIONS

The product is electronically protected against overload, short-circuit and over-temperature. This is designed to avoid irreversible internal damage to the product. Should the internal temperature of the unit reach 60°C+ the converter will cease to function and will turn itself off. Over-temperature LED or Overload LED (where fitted) will illuminate to indicate the fault.

It will be necessary to remove the cause of the fault to avoid a continuous power (on/off) cycle, which could cause internal damage to the unit.

If the unit will not re-start and all of the parameters are within the operating limits, then the unit will need to be tested by a qualified technical service engineer.

If the input voltage is over or under the limits shown in the technical characteristics, the unit will cease to function. The unit will automatically try to restart providing the voltage returns to within the specified parameters.

If the current being drawn on the output side of the unit is higher than the maximum rated output current, the unit will continue to function but may temporarily shut down until the amperage being drawn is reduced back to within the operating limits.

4. RESET AFTER OVER/UNDER VOLTAGE or OVERLOAD or OVER-TEMPERATURE

After an extreme over/under voltage incident has occurred and the unit has ceased to function, a manual reset may be required as follows: Off / wait 15 seconds / On (most models now have an automatic reset)

After an over-temperature incident of > 60°C the unit will usually shut down and then should automatically reset itself and restart when the internal heat sink temperature reaches < 60°C

If an amperage overload causes the unit to shutdown, a reset may be required please ensure that the amperage demand is reduced to below the rated value.

5. TECHNICAL SPECIFICATION

Rated power:

Input voltage:

Any Input from 190 TO 267Vac Single Phase Acceptable
Input frequency:

50 Hz
Output voltage:

120Vac single-phase ±1%
Output frequency:

60Hz ±0.01%
Output current (at 120Vac):

28 Amps
Output max current:

42 Amps

Unit size: mm. 300 x 300 x 400
Weight: kg. 38
Mains connection: terminal blocks
Load connection: terminal blocks
Cooling: Air Flow/Internal fan

GUARANTEE

This guarantee is offered as an extra benefit and does not affect your legal rights.

The Company guarantees all RV Transformers products for one year against faulty material or workmanship. If any part is found to be defective in this way within the first twelve months from the purchase date, we or our authorised service agents will replace, or at our discretion, repair that part without any charge for materials or labour, provided that the appliance has been used only in accordance with the instruction provided with each unit and that it has not been connected to an unsuitable electricity supply, or subjected to misuse, neglect or damage, or modified or repaired by any person not authorised by us.

The correct electricity supply voltage and frequency is shown on the rating label on the product. This guarantee is normally available only to the original purchaser of the product, but the company will consider written applications for its transfer.

Should any defect arise in any RV Transformers products and a claim under the guarantee become necessary, the product should be carefully packed and returned to your local service agent. This copy of the guarantee should be attached to the appliance. Guarantee is applied only if the equipment is returned to us at your expense. No technical intervention may be claimed for any reason at the place of installation under the guarantee.

