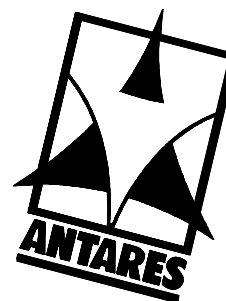


MICROPOWER INVERTER
Model 70183
Instructions for installation and use



UNPACKING

Pack contents:

- 1 Antares Micropower Inverter
- 1 Instructions for Installation & Use

APPLICATION

The micropower inverter is specifically designed to operate telecommunications apparatus for Lucent Technologies. It is not intended for use in any other applications.

IMPORTANT SAFETY INFORMATION

1. Please read and observe the installation instructions, which contain further safety information.
2. DC Input - It is essential that a correctly sized input DC supply cable is provided. Cables which are too small will overheat causing risk of fire.
3. AC Output - The AC output from the inverter must be treated as equivalent to normal mains, and wired in accordance with the appropriate regulations for mains circuits.
4. Protective Earthing Arrangements
In order to reduce the AC output terminal touch voltage, the inverter output is centre tap referenced to the output earth conductor. The output earth conductor is in turn, internally connected to the inverter case metalwork. The enclosure should be mounted on earthed metalwork. Note that the inverter embodies an electronic residual current trip for additional user protection.

INSTALLATION

Choosing a location

The micropower inverter is intended for use only within a telecommunications apparatus cabinet.

The unit must not be subjected to condensation, dust, or insect ingress. Locations subjected to high temperature or vibration must be avoided if performance and

reliability are not to be impaired. The inverter may be mounted in any orientation, but ensure that there is sufficient clearance around the unit to allow air to circulate without undue restriction.

Connections

**INCORRECT CONNECTION MAY CAUSE DAMAGE
PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY**

DC INPUT SUPPLY - DC power is supplied to the inverter via the grey two way cable. Each of the two 2.5mm² conductors are black insulated with the lead identification printed at intervals along each lead. The printing can be difficult to identify:

AC OUTPUT - The 230VAC output available at the flying lead with the IEC socket may be routed to the point of use using normal mains cabling, extension leads or multiple outlet socket strips. External protection devices are not necessary, as the inverter electronically protects against overload and earth fault conditions.

Mounting

Integral flanges are provided for mounting, and should be bolted to earthed metalwork. Mounting holes are 5mm in diameter, located as shown below:

OPERATION

The Micropower Inverter is fully automatic in operation making it very simple to operate.

No on/off switch is required; the inverter runs as soon as DC power is applied to the input.

Three panel lamps show the operating condition of the unit:

The green OUTPUT lamp illuminates when power is available from the output socket.

The red OVERLOAD lamp illuminates if the inverter's load is in excess of its rating, or if overheating occurs. The lamp will 'cycle' if a marginal overload condition exists, as the unit attempts to start the load. The lamp will remain on if a gross overload condition exists such as a short circuit and the power will be cut. Note that in some instances overload can occur due to extremely poor power factors, even though the power rating appears sufficient. Recovery is automatic, once the offending fault condition is removed.

The red PROTECTION lamp illuminates together with the OVERLOAD lamp if an external earth fault condition exists, activating the inverter's earth leakage trip. The earth leakage trip can be reset by cycling the input DC off and back on again.

The Micropower Inverter provides a regulated quasi sine wave AC output.

OUTLINE SPECIFICATIONS

Continuous output power	80W at 20°C
1 hour output power	100W at 20°C
5 minute output power	150W at 20°C
Frequency	50Hz, crystal controlled
Output voltage	230VAC \pm 6% (for input 42 to 60V, load 0 to 80 watts)
Output type	Regulated quasi sine
Output connection	Flying lead with IEC 320 style socket
Input voltage range	41 to 60 VDC, reverse polarity protected
Environment	-10°C to +45°C, 0 to 95% RH
Protection	Output overload & thermal protection

With the exception of the earth leakage trip, all protection mechanisms automatically recover when the offending condition is removed.

© 1999 Antares (Europe) Limited
Chiltern Hill, Chalfont St Peter, Gerrards Cross, Bucks. SL9 9UQ
Tel: 01753 890888 Fax: 01753 891260 e-mail: support@antares.co.uk web site
<http://www.antares.co.uk>