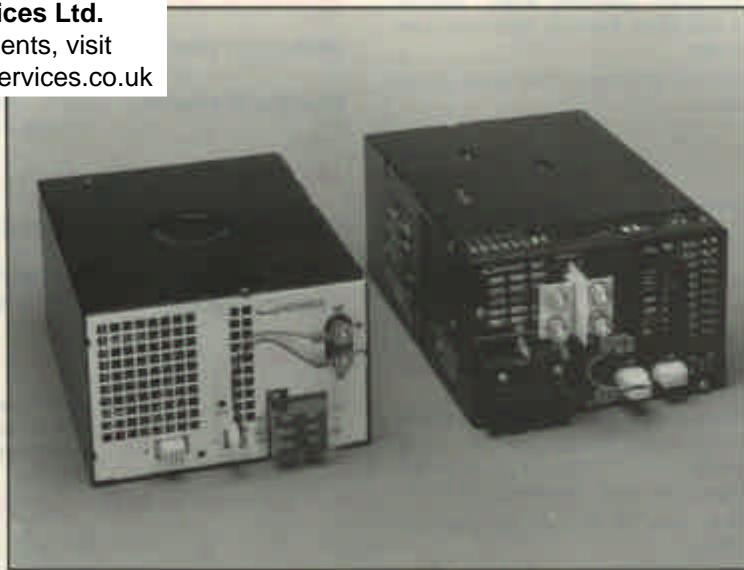


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MODELS AVAILABLE

Model Number	Output Voltage	Adjustment Range	Output Current	Output Power	Order Code
A1500/02	2V	1.5 - 2.5V	300A	600W	05924111
A1000/05	5V	4.5 - 5.5V	200A	1000W	05023000
A1500/05	5V	4.4 - 5.5V	300A	1500W	05924011
A1000/12	12V	11 - 16V	90A	1080W	05023300
A1500/12	12V	11 - 16V	125A	1500W	05924311
A1000/24	24V	18 - 31V	45A	1080W	05023400
A1500/24	24V	18 - 33V	65A	1560W	05924413
A1000/48	48V	45 - 58V	23A	1104W	05023500
A1500/48	48V	45 - 53V	35A	1680W	05924511
A1500/60	60V	56 - 83V	25A	1500W	05924611

INPUT SPECIFICATION

Input Voltage 88 - 132V a.c. on 115V tap, 176 - 264V a.c. or 249 - 373V d.c. on 230V tap.

Frequency A1000: 45 - 440Hz.
A1500: 47 - 63Hz.

Supply Type Single phase TN-S systems (as defined in IEC364), i.e. systems with a separate earth conductor which is directly connected to the neutral conductor at the source.

Efficiency Minimum 70% when loaded to maximum rated output power.

OUTPUT SPECIFICATION

Voltage Nominal output voltages and adjustment ranges are shown in the table of models above.

Current Recommended maximum continuous current ratings (I_{max}) are shown in the table of models above. All maximum current ratings, except as indicated below, are applicable over the full operating temperature range of the units.
Exceptions are: 50°C - 70°C derate by 2.5%/°C.

Power Units rated for full output power, nominal voltage, maximum current.

Combined Regulation

Static: 0.2% for worst case combination of 100% load change and either 88-132V or 176-264V line change.

Ripple and Noise

Measured differentially with a 30MHz band width. A1000: 1% or 50mV pk-pk, whichever is the greater. A1500: 2% pk-pk.

PROTECTION

Hold Up

All units have sufficient energy storage to ride through a missing mains cycle when supplying full rated output power. At low mains input, 198V hold up >25ms on A1000 range and >17ms on A1500 range; at nominal input, 240V hold up >65ms on A1000 range and >28ms on A1500 range.

Output Overvoltage

Standard on all units, latching circuit, recycle mains to reset.

Overcurrent Protection

Overcurrent protection is set for constant current operation as standard with automatic recovery upon removal of overload. Optional re-entrant or trip setting available to order.

Overtemperature Protection Shutdown operates when internal temperature exceeds maximum safe levels.

Fan Fail Inverter inhibited in the event of fan failure.

AUXILIARY FUNCTIONS

Remote Sense Available as standard.

Parallel Operation Current share $N + 1$ provided as standard, single wire connection between units with the same main output voltage.

External Voltage Programming The output voltage of all units is programmable by an external resistor or voltage source.

External Inhibit The output current of the unit may be inhibited by a logic signal. Only available on A1000 range when full signals are fitted. Standard on A1500.

External Shutdown Units may be shut down by a logic signal.

Marginate The output may be adjusted up or down by a relay contact. Available when full signals are fitted.

Power Fail Signal A logic output providing warning of failure due to loss of input.

DC OK Signal A logic output providing an indication of output presence.

Unit Healthy Green LED indicator and Output Up logic signal indicating normal operation of unit.

Current Monitor An analogue output providing a meter drive signal for output current monitoring. Available when full signals are fitted.

Indicators A green LED indicator is provided for 'Output Up'. The A1500 range is also provided with red LED's for 'Overvoltage Trip' and 'Overtemperature Trip'.

ISOLATION

Primary to Secondary All units provide 2.5kV isolation between primary and secondary circuits. Creepage and clearances to VDE0806, IEC435 and BS6301.

ELECTROMAGNETIC COMPATIBILITY

Exported Noise All units meet the requirements of BS800/1977; VDE0871 Class A; FCC/20780/15J.

MECHANICAL SPECIFICATION

Mechanical Format All units are supplied fully enclosed with integral fan as standard.

Mounting Orientation Units may be mounted in any orientation.

ENVIRONMENTAL CONDITIONS

Operating Temperature 0 to 70°C. See current and power ratings in output specifications for any deratings required above 50°C.

Operating Humidity 0 to 85% R.H. non-condensing.

RELIABILITY

MTBF 79,900 hrs. for A1000, 77,000 hrs. for A1500, both at 25°C ground benign according to MIL HBK 217E.

INTERNATIONAL SAFETY STANDARDS

All units have been tested by the following approval bodies to the standards listed and have been approved as being compliant with these standards or with the relevant sections of those standards.

Standard	Approval
A1000:	
BABT	BS6301 1982 Amd 1-5; BS6484 1984; SITS83/02/C.
CSA	CSA950 in application.
UL	UL1950 in application.
A1500:	
BABT	BS6301.
CSA	CSA950 in application.
UL	UL478; File E63469.

More detailed information is available on these units from your local sales office or agent. Please refer to the beginning of this catalogue for your local contact.

ORDERING INFORMATION

To order Refer to table of models available or contact your nearest Farnell Advance sales office.

POWERMAG A1000 RANGE OUTLINE DRAWING

External Dimensions and Mass

203(8) x 127(5) x 280(11), 7.3kg (16 lb)

Connectors

The following connectors are provided on the power supply:

Input 3 screw terminal block, Beas Ltd. type T72303C-49.

Output 2 studs, M8 x 12Lg.

Input Voltage Selector 3 screw terminal block, Beas Ltd. type T72303C-49.

Auxiliary Functions

J1 unit: 6 way Molex

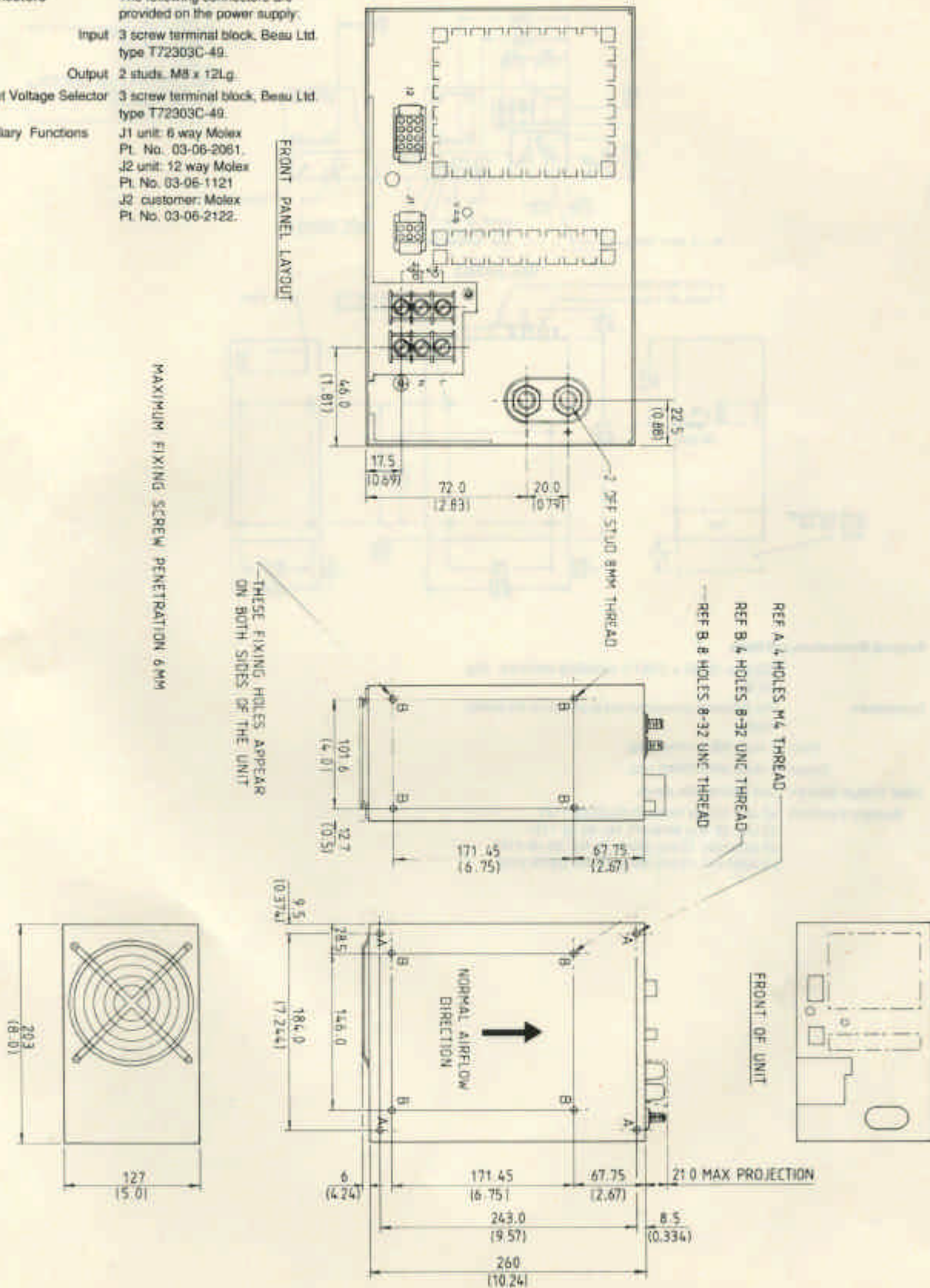
Pl. No. 03-06-2061.

J2 unit: 12 way Molex

Pl. No. 03-06-1121

J2 customer: Molex

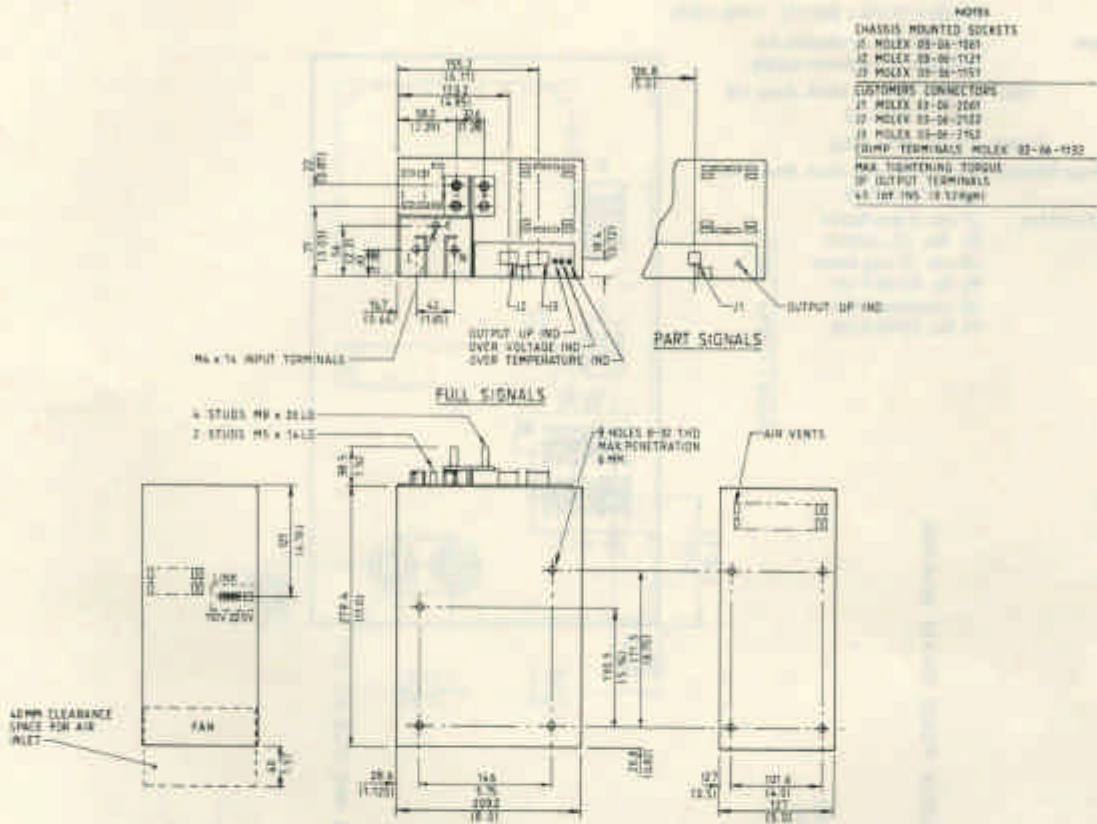
Pl. No. 03-06-2122.



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POWERMAG A1500 OUTLINE DRAWING

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External Dimensions and Mass

203(8) x 127(5) x 279(11) excluding terminals. 9kg (20 lb).

Connectors

The following connectors are provided on the power supply:

- Input 3 studs M5 x 14mm long.
- Output 4 studs M8 x 20mm long.

Input Voltage Selector Link behind side panel.

- Auxiliary Functions**
- J2 unit: 12 way Molex Pt. No. 03-06-1121.
 - J3 unit: 15 way Molex Pt. No. 03-06-1151.
 - J2 customer: 12 way Molex Pt. No. 03-06-2122.
 - J3 customer: 15 way Molex Pt. No. 03-06-2152.