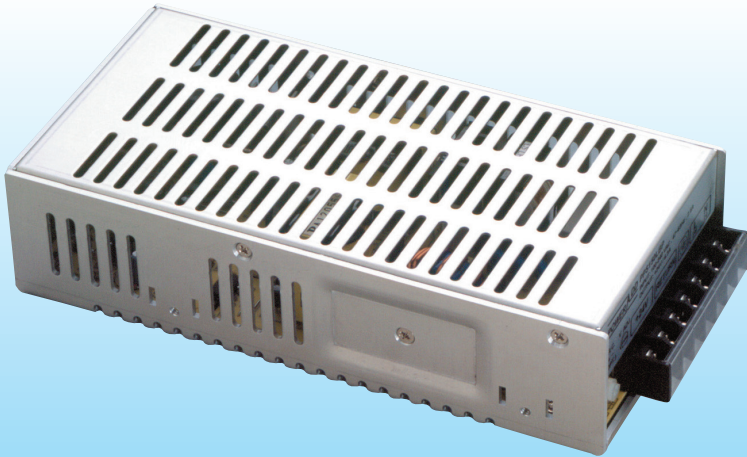




M 8737 (12V) & M 8776 (24V) 150W Switchmode Power Supply



Operating Instructions

INTRODUCTION

Switchmode power supplies as compared with traditional linear transformer power supplies are light weight, smaller and more efficient.

This convection air-cooled power supply is supplied in a vented steel cabinet to aid in thermal dissipation. This enclosure has exposed 240V input terminals.

Features:

- Active Power Factor Corrector (PFC) – enables the most efficient delivery of electrical power through this type of device.
- Screw terminals for inputs and outputs
- Wide operating input voltage 90 - 264V a.c., 47 - 63Hz
- Excellent output regulation from no load to full load
- Overload and short circuit protection
- Built-in EMI filter to reduce electromagnetic noise
- EMC approved

Applications:

Telecommunications; Computer peripherals / LAN and hub; Testing and industrial equipment; Medical instruments; Business machines

Connection Details:

Power supply connection to terminals is as described in Fig. 1 (page 4).

WARNING! Because this device has exposed live terminals, for safety reasons it **MUST** be installed within a secondary earthed cabinet by a suitably qualified person. Furthermore, if this device is anticipated to operate at close to maximum power for extended periods, and / or in situations where the ambient temperature is likely to be high according to the operating limits stated in the specifications, then it is highly recommended that a suitably rated fan, capable of blowing minimum 17CFM of forced air cooling across the device, be installed as part of the secondary enclosure. This is to combat the effects of overheating and ensure the durability and safe operation of the device. Also take note of the Derated Power vs Temperature graph in Fig. 2.

NOTE: Altronics offer a range of enclosures, cases, and air-cooling fans that would be suitable for a secondary cabinet. See our catalogue or website.

M 8737 - 12V

Output Voltage Adjustment:

This has been factory set to 12V. Note the output voltage regulation is designed to be adjusted from 11.64V to 12.36V. The adjustment trimpot (located next to the connection terminals) may allow for higher voltage (say to 13.8V), but the unit is NOT designed to be used at this voltage.

M 8776 - 24V

Output Voltage Adjustment:

This has been factory set to 24V. Note the output voltage regulation is designed to be adjusted from 23.28V to 24.72V. The adjustment trimpot (located next to the connection terminals) may allow for higher voltage (say to 26.4V), but the unit is NOT designed to be used at this voltage.

SPECIFICATIONS

Input range: 90 - 264 VAC, universal
Frequency: 47 - 63Hz
Inrush current: 40A Typ. Cold start @ 25 C, 115VAC
Efficiency: 65% - 80% typical at full load
EMI filter: FCC Class B conducted, CISPR 22
Class B conducted, EN55022 class B conducted
Line regulation: +/- 0.5%

OUTPUT:

Maximum power: 150W (with 17cfm air flow)
Maximum current: M 8737, 12.5A @ 12V
M 8776, 6.25A @ 24V
Hold-up time: 10ms at full load and 115 VAC nominal line
Overload protection: Fused 5A 250V M205 Slow Blow
Ripple/Noise: +/- 1% Max. @ full load (Optional +/- 0.5% per inquiry)
Overvoltage protection: Main output 20% to 40% above nominal output

SAFETY APPROVAL

UL 1950 / cUL
Optional CSA 22.2, LEVEL 3 (COMPLY WITH)
TUV EN60950
Optional UL 2601(EMI Class A) (COMPLY WITH)
EMI & EMC
FCC part 15, Class B
CISPR 22 / EN55022, Class B
VCCI, Class 2
CE, EN61000-3-2 (Class A) and-3;
EN61000-4-2, -3, -4, -5, -6 and -11

ENVIRONMENTAL

Operating temperature: 0 to 50 C ambient;
derate each output at 2.5% per degree from 50°C to 70°C (see Fig.2)
Electromagnetic susceptibility: Designed to meet IEC 801 -2, -3, -4, -5, Level 3
Humidity: Operating; non-condensing 5% to 95%
Vibration: 10 - 55 Hz at 1G 3 minutes period, 30 minutes along X, Y and Z axis
Storage temperature: 40 to 85° C
Temperature coefficient: +/- 0.05% per degree C
MTBF demonstrated: > 100,000 hours at full load and 25 C ambient conditions
Dimensions: 199L x 99W x 50H

POWERTRAN® M 8737 & M 8776 150W Switchmode Power Supply

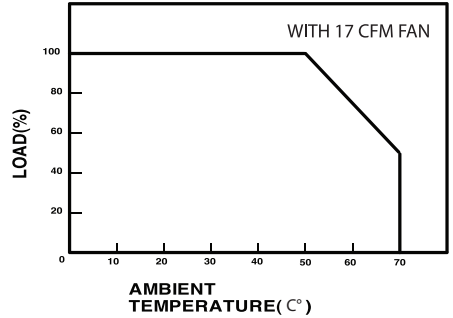
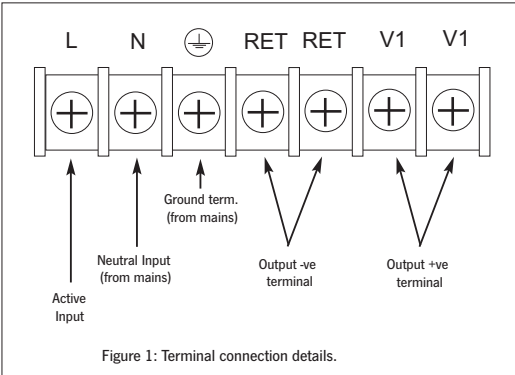
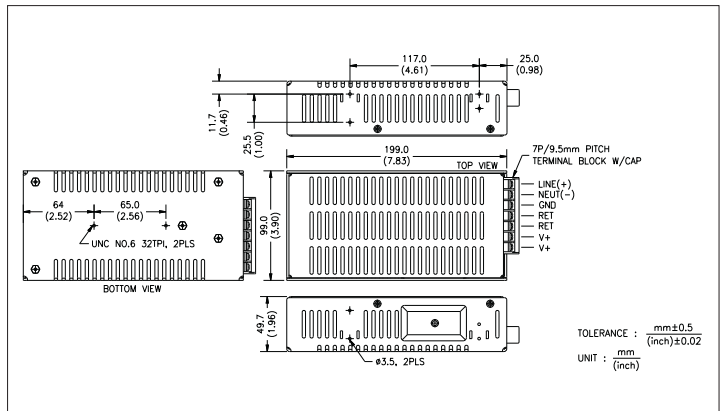


Figure 3. Casing Dimensions



CAUTION

This appliance is not intended for use by persons (including children) with reduced physical, sensory and mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not play with the appliance.

Disclaimer:

For repair or service please contact your place of purchase.

Note: Under no circumstances should you attempt to repair the player yourself or via a non-authorized Altronics service centre as this will invalidate the warranty!

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found.

NOT FIELD SERVICEABLE.

Distributed by:

Altronic Distributors Pty. Ltd.
 Perth, Western Australia.
 Phone: 1300 780 999 Fax: 1300 790 999
 Internet: www.altronics.com.au