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SUMMARY SPECIFICATION

Model Number	Input Voltage	Nominal Voltage	Adjustment Range	Output Current	Cooling	Dimensions
MMG5-10	92 – 132V a.c. 176 – 264V a.c.	5V	4.75 – 5.25V	0 – 10A	Convection	165 x 70 x 88mm 6.50 x 2.75 x 3.46in.
MMG12-5		12V	11.4 – 12.6V	0 – 5A	Convection	
MMG15-4		15V	14.25 – 15.75V	0 – 4A	Convection	
MMG24-2.5		24V	22.8 – 25.2V	0 – 2.5A	Convection	

INPUT SPECIFICATION

Input Voltage 176 – 264V a.c. on 230V tap. 92 – 132V a.c. on 115V tap.
 Frequency 47 – 65Hz (400Hz to special order).
 Supply Type Single phase TN-S systems (as defined in IEC364).
 Efficiency Typically 65% – 75% when loaded to maximum rated output power.

OUTPUT SPECIFICATION

Voltage Nominal output voltages and adjustment ranges are shown in the summary specification above.
 Current Recommended maximum continuous current ratings (I_{MAX}) are shown in the summary specification above. All maximum current ratings are applicable up to 50°C. From 50°C to 70°C derate maximum current by 2.5%/°C.
 Combined Regulation 0.1% V_{NOM} maximum for a worst case combination of 0 – 100% load change and either 198V to 264V or 99V to 132V line change.
 Ripple and Noise Less than 0.2% V_{NOM} r.m.s. over a 2MHz bandwidth. Typically 1% V_{NOM} pk-pk over a 30MHz bandwidth.

PROTECTION

Hold Up Units will ride through a missing mains cycle when delivering full rated current. Hold up >28ms at full rated current, V_{NOM} +5% and 115V–10% or 220V–10% input.
 Output Overvoltage Set at 125% ±5% on 5V units, 120% ±5% on 12V units, 115% ±5% on 15V and 24V units.
 Output Overcurrent All units are protected against output overload conditions.

AUXILIARY FUNCTIONS

Remote Sense Available on all units.
 Parallel Operation All units shown are suitable for operation in parallel with other MMG units of the same output voltage.
 External Voltage The output voltage is programmable by an external resistor.

ISOLATION

Primary to Secondary Reinforced insulation to 3kV a.c. r.m.s. for one minute. Complete units are tested to 1.5kV a.c. between input and output with all output terminals connected together and connected to earth

Secondary to Earth Units are tested to 500V a.c. r.m.s. from output to earth, with all output terminals connected together.

ELECTROMAGNETIC COMPATIBILITY

Exported Noise All units meet the requirements of BS800 part 3; VDE 0871 Class A; VDE 0875 Curve N.

MECHANICAL SPECIFICATION

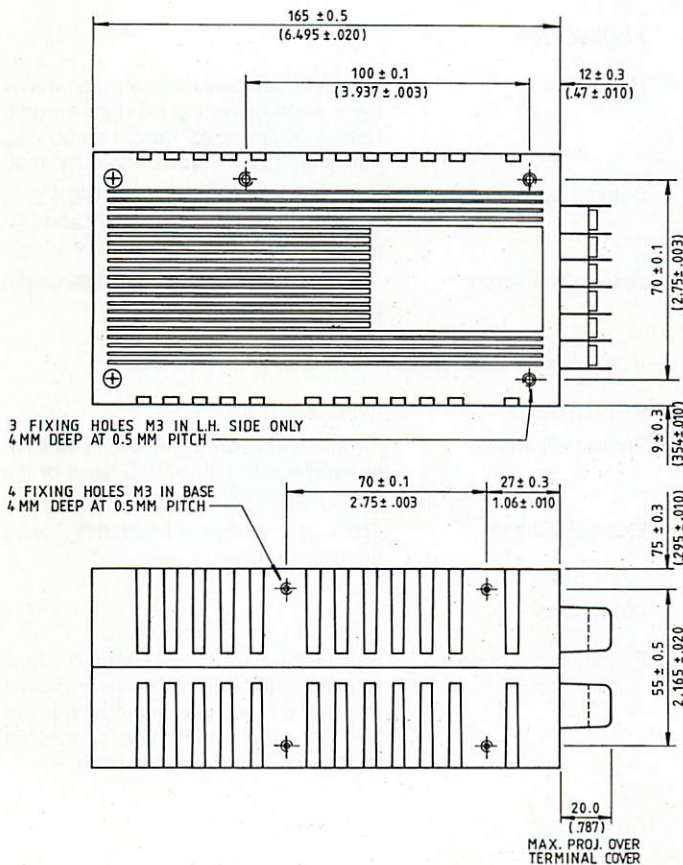
Mechanical Format All units are supplied fully enclosed.
 Mounting Orientation MMG range units may be mounted in any orientation with forced cooling but, if convection cooled, they must be mounted to allow air convection through the slotted cover.
 Ventilation and Cooling There should be blown or free air convection cooling over the whole surface of the unit.

ENVIRONMENTAL CONDITIONS

Operating Temperature -10°C to $+70^{\circ}\text{C}$. See output specifications for any deratings required above 50°C .
 Operating Humidity 0 - 90% R.H. non-condensing.

OUTLINE DRAWING

All dimensions are given in mm (inches).



RELIABILITY

MTBF 111,700 hrs. 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 those standards or with the relevant sections of those standards.

CE marked to the Low Voltage Directive

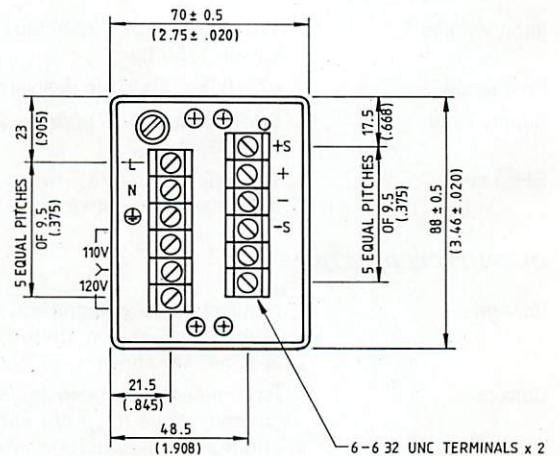
UL UL1950.
 VDE EN60950; VDE0805
 CUL C22.2 #234.

For more detailed information on these units please contact your local sales office or agent.

ORDERING INFORMATION

To order specify the order code for the model number required:

Model Number	Order Code
MMG5-10	05025520
MMG12-5	05025620
MMG15-4	05025720
MMG24-2.5	05025820



External Dimensions and Mass

165 (6.495) x 70 (2.75) x 88 (3.46), 1kg (2.2 lb).
Fixings Two sets of M3 ISO standard threaded inserts are provided. One set of 3 in the left side panel, one set of 4 in the base.
Connectors The following connectors are provided on the power supply:
 Input Beau terminal 72000 series connectors.
 Output Beau terminal 72000 series connectors.
Input Voltage Selector Link provided on input connector.
Auxiliary Functions Link provided for internal/external programming on output connector.