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MODELS AVAILABLE

Model Number	Input Voltage	Nominal Voltage	Adjustment Range	Output Current	Cooling	Dimensions
MMG5-5	92 – 132V a.c. 176 – 264V a.c.	5V	4.5 – 5.5V	0 – 5A	Convection	160 x 33.9 x 88mm 6.30 x 1.33 x 3.46 in.
MMG12-2.5		12V	10.8 – 13.2V	0 – 2.5A	Convection	
MMG15-2		15V	13.5 – 16.5V	0 – 2A	Convection	
MMG24-1.4		24V	21.6 – 26.4V	0 – 1.4A	Convection	

INPUT SPECIFICATION

Input Voltage	176 – 264V a.c. on 230V tap. 92 – 132V a.c. to special order only.
Frequency	47 – 440Hz.
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% 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, nominal output voltage and 120V –10% or 240V –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.

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.

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 VDE0805; EN60950.
 CSA C22.2 #234 Level 3.
 BABT EN41003

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 required model:

Model Number	Order Code
MMG5-5	05025150
MMG12-2.5	05025250
MMG15-2	05025350
MMG24-1.4	05025450

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SINGLE OUTPUT AC-DC

OUTLINE DRAWING

All dimensions are given in mm (inches).

