



Ablemail Electronics

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AMI24-12-5P

DESCRIPTION

This unit is a water resistant switching type voltage converter intended for use on vehicles with hazardous loads such as petroleum with a 24V electrical system to power an independently isolated 12V supply of either polarity. This unit is based on the proven AMI24-12-5 with a higher isolation capability and approved 1K grounding resistor. The unit can deliver 5A continuous and 6A intermittent output load current and has output overload and over temperature protection with a fully automatic reset. The combination of switching converter and linear output regulator provides a low noise output closely regulated against variation of input voltage and changes in output load current. The unit provides total galvanic isolation of the 12V output from the 24V input. The unit is assembled in an aluminium extruded case and encapsulated in silicone rubber. This allows reliable operation in harsh vehicle environments and areas of high ambient temperatures.

STANDARDS

Meets IP Specification DOC - 1.92.1 600V DC test.

EMC

Type approved to 72/245/EEC as last amended by 95/54/EC.

INPUT VOLTAGE

24 Volt nominal vehicle supply (20-32V).

OUTPUT VOLTAGE

12V $\pm 5\%$
12V $\pm 30\%$ at extremes of temperature, load and voltage.

OUTPUT LOAD CURRENT

5A continuous 6A intermittent.

NO LOAD INPUT CURRENT

Maximum 130mA typical 80mA @ 24V input.

PROTECTION

Output overload and over temperature protection with fully automatic reset.

OPERATING TEMPERATURE

Maximum 70°C. Minimum -30°C

SIZE AND WEIGHT

Length: 95mm Height: 35mm Width: 84mm
402g

CONNECTIONS

200mm flying leads of thin wall auto cable.

24V Input

Positive red
Negative black

12V Output

Positive blue
Negative green

Ground green/yellow stripe

