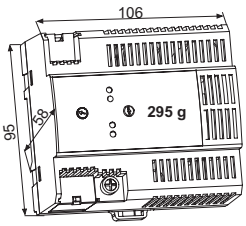
RoHS 2002/95/EC

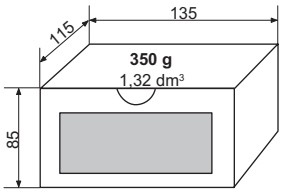
5V TO 24V REMOTE-SENSING ALE2902M

PROGRESS

PRECISE : Switching power supply offering a ripple <3mV rms.
UNIVERSAL : 12 settings in 2V steps with ±1V adjustment range.
COMPLETE : 12 or 24V lead-acid battery charger function and remote sensing.
PRACTICAL : Charger position and status indicators.
PROTECTED : against short circuits and reverse polarity.

60 WATTS
5V to 29V
2,5A to 24V
3,5A to 12V
4A to 5V
battery charger 12V or 24V





Specifications

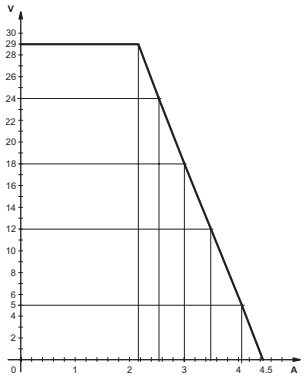
Voltage
- Floating outputs on spring terminal block with levers for 2,5mm2 (AWG12) wires.
- Output voltage : adjustable from 5 to 29V by 12 position switch, and fine adjustment
  switch positions : 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 Volts.
  fine adjustment range : ± 1 Volt, whatever the switch setting
  12 and 24V lead-acid battery charger positions identified by two LED indicators
- Accuracy : ±1%
- Regulation :
  < 30mV at 5V and < 20mV at 29V,1 for a load change from 0 to 100%.
  <1mV at 29V 2,1A and < 4mV at 5V 4A for a line change from 190V to 264V.
- Ripple : < 3mV rms including :
  < 3mV peak to peak of the 100kHz signal
  < 4mV peak to peak of the 100kHz signal
  < 10mV peak to peak of switching transients
- Hold-up time : 25 ms at half load and 12 ms at full load. (190V line input)
- Indicators : Green LED indicator : "power supply operating"
  Yellow LEDs indicator : "12V and 24V battery charger position"
  Red LED indicator : "status, output fuse broken" or "overheat"
  The yellow LEDs also indicate battery-backed operation.

Current
- Max I : 4,2A in short circuit condition
  4A to 5V, 3,5A to 12V, 2,5A to 24V and 2,1A to 29V

Battery charger
- Rated capacity of the lead-acid batteries with elctrolyte free :
  35 Ah for 12 V and 20 Ah for 24 V.
- Minimum capacity of the lead-acid batteries sealed :
  10 Ah for 12 V and 7 Ah for the 24V.
  (In all the cases, to refer to the note of the batteries manufacturer)

Remote sensing
- Correction of the voltage drop in the wires (4 wires method)
- Input on disconnect scribe terminal blocks for 2,5mm2 wires (AWG12)
- Correction : Max 3V (1,5V per wire)
- Ripple : <30mV for a load change from. 0 to max.

Power
- A linear function of voltage from 60W to 20W (29 to 5 Volts).



Protection
- Against short circuit, by current limit.
- Against overcurrent on primary circuit, by fuse.
- Battery reverse polarity protection by output fuse.
- Against overtemperature, by thermal shutdown.
- Cover on input output terminal block.

Other specifications
- Safety : Class II, SELV output, complies with EN 60950.
- EMC : Complies with EN 61000-6-2 and EN 61000-6-4.
- Protection level : IP 30.
- Operating temperature : from -25 to +60°C ; derating : 1W/°C from +40°C
- Input voltage : 190 to 264 Volts, 50 / 60 Hz.
- Mains input : spring terminal block with levers for 2,5 mm² (AWG 12) wires.
- Power consumption : 71W max.
- Dielectric strength : 3000V from input to output.
- Presentation : modular polycarbonate case (6 x 17.5mm) screenprinted.
- Mounting : Clips package integrated in modular case for DIN rails profile 35x7,5mm or 35x15mm.
  Removable wall mouting integrated to the case for 4mm screws.