

PANEL MOUNTED VARIABLE SPEED REGULATOR Part No. 919D2P

- * ALLOWS INFINITELY VARIABLE SPEED/OUTPUT TO BE SET ON d.c. MOTORS.
- * OPERATES FROM NON DIGITAL INPUTS FROM 6 - 15 VOLTS.
- * OUTPUT RELATIVE TO INPUT VOLTAGE.
- * PULSE WIDTH MODULATION (PWM) PROVIDES PROPORTIONAL OUTPUT CONTROL.
- * COMPACT ROBUST CONSTRUCTION FOR VERSATILITY AND RELIABLE SERVICE.
- * AVAILABLE AS PANEL MOUNTED (919D2P) OR DISCRETE (919D2) VERSIONS.

These are regulators with variable outputs designed to be used with miniature and sub miniature motors. Units can also serve as dimming devices in low voltage incandescent lighting circuits not exceeding 3 amps. Allows the motor/lamp to be powered from a d.c. source either battery or transformer rectifier (transformer rectifier must have a non digital output).

Both units employ PWM circuitry which varies the output pulse width to vary the motor speed/light output while maintaining a constant output voltage. PWM also assists in maintaining motor torque. Output may not zero motor speed in NO load conditions.

Specifications:-

Edge to edge frequency, minimum 1136Hz, max 1250Hz, average 1200Hz.

Mark to space varies the output.

Unit has a common positive circuit decoupled with a polarity protection diode. Unit switches the negative.

Inputs: 6 - 15v d.c.

Output: Relative to input.

Rating: 3 amps continuous (5 amps peak only)

Dims: 61 x 41 x 44mm. Weight: 32gms approx

INSTRUCTIONS

- (1) Drill 9.5mm hole in panel face to accommodate potentiometer shaft. Prepare suitable input and output leads with the appropriate connectors, noting that both input and output leads should be trimmed to 21cm to comply with EMC regulations.
- (2) Connect input and output leads as indicated on the rear of the unit (noting polarity). Remove knob, nut and metal washer, leaving the nylon spacer to act as an insulator. Insert spindle through the hole in the panel and re-assemble shaft components in reverse order. Turn speed control knob to full LHS Horizontal position (off position: see below).
- (3) Connect output leads to the appliance observing polarity. Connect the input leads to the power supply observing correct polarity, (either battery or full wave rectified transformer unit), and operate speed control as desired. Power supply must not be digital.
- (4) The unit has polarity protection and will not function if not connected correctly. It is designed to run at max 3 amps with a 5 amp peak current. In order to avoid overloading the unit, it is recommended that the positive input lead is fitted with a 3 amp fuse.

