

SPEED REGULATOR. PART NO: 919D2**FEATURES:**

- * Allows infinitely variable R.P.M. to be set on MFA/Como Drills 919D Series Gearboxes and Motors.
- * Operates from inputs of 6 - 15volt.
- * Output 0 - input voltage.
- * Pulse width modulation provides proportional output control.
- * Small - compact - robust construction for versatility and reliable service.
- * 12VDC (6V minimum 12V maximum), with typically less than 10% ripple at full load.

**SPECIFICATION:**

Min Input:	6 volts	Input & output cables 21cm
Max Input:	15volts	Insulated spade connectors fitted on input cables
Min Output:	0 volts	Dimensions: 34 x 27 x 18 mm
Max Output:	15 volts	Weight: 30g approx.
Loading:	3 amps continuous	
	5 amps peak only.	

Supply and output cables must be trimmed to 21cm to meet current EMC regulations. Edge to edge frequency, min 1136 Hz, max 1250 Hz, average 1200 Hz. Mark to space varies motor speed.

NOTE: The products optimum performance is at 12v d.c. Using lower voltages, although useful, will alter the products performance and consistency in operation.

PANEL MOUNTED VARIABLE SPEED REGULATOR. PART NO: 919D2P**FEATURES:**

- * Panel Mounted with external control knob.
- * Allows infinitely variable R.P.M. to be set on MFA/Como Drills. 919D, 927D, 918D (12v), 940D, 941D & 950D series gearboxes and motors.
- * 12VDC (6V minimum 12V maximum), with typically less than 10% ripple at full load.
- * Output near zero - near full supply voltage.
- * Pulse width modulated provides proportional output control.
- * Small - compact - robust construction for versatility and reliable service.

SPECIFICATION:

Min Input:	6 volts	Dimensions:	62mm x 41mm x 25mm (approx)
Max Input:	15 volts	Weight:	32g approx
Min Output:	0 volts		
Max Output:	3 amps		
Loading:	3 amps continuous		
	5 amps peak only		



24v version available

Supply and output cables must be trimmed to 21cm to meet current EMC regulations.

Edge to edge frequency, min 1136 Hz, max 1250 Hz, average 1200 Hz. Mark to space varies motor speed.

NOTE: The products optimum performance is at 12v d.c. Using lower voltages, although useful, will alter the products performance and consistency in operation.

PANEL MOUNTED BI-DIRECTIONAL VARIABLE SPEED REGULATOR. PART NO: 919D2PR**FEATURES:**

- * Forward & Reverse PWM Speed Regulator.
- * Easy installation - Unit panel mounted through 9.5mm hole. (Electrical connection via screw terminals).
- * 6 - 15v operation d.c. (from smooth non digital d.c. input).
- * Output 0 - near full supply voltage
- * Compact construction - board size 66 x 58mm

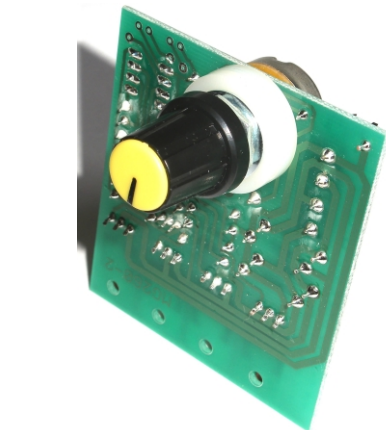
SPECIFICATION:

Edge to edge frequency 2KHz
 Linear output response
 12VDC (6V minimum 12V maximum), with typically less than 10% ripple at full load.
 Full 'H' bridge output drive
 Rating 3 Amps continuous, 5 Amps peak.
 Circuit provides approx 1/5th second breaking pause between directional changes.
 Weight: 39g

These are regulators with variable outputs designed to be used with miniature and sub miniature motors. Allows the motor to be powered from a d.c. source either battery or transformer recitifier (transformer rectifier must have a non digital output).

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

NOTE: The products optimum performance is at 12v d.c. Using lower voltages, although useful, will alter the products performance and consistency in operation.



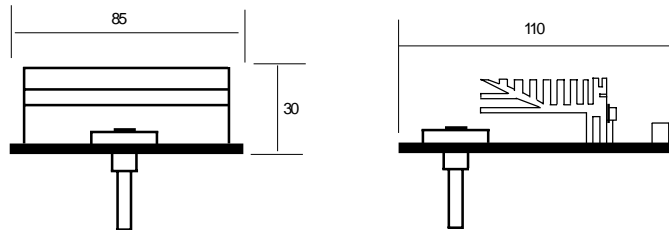
**PANEL MOUNTED BI-DIRECTIONAL (12A) VARIABLE SPEED REGULATOR.
PART NO: 919D3PR**

The 919D3PR uses pulse width modulation (PWM) to allow smooth, efficient bi-directional control of DC motors and other devices. The output is fully adjustable from 0 to 12 volts DC* and can supply currents of up to 12Amps continuously.

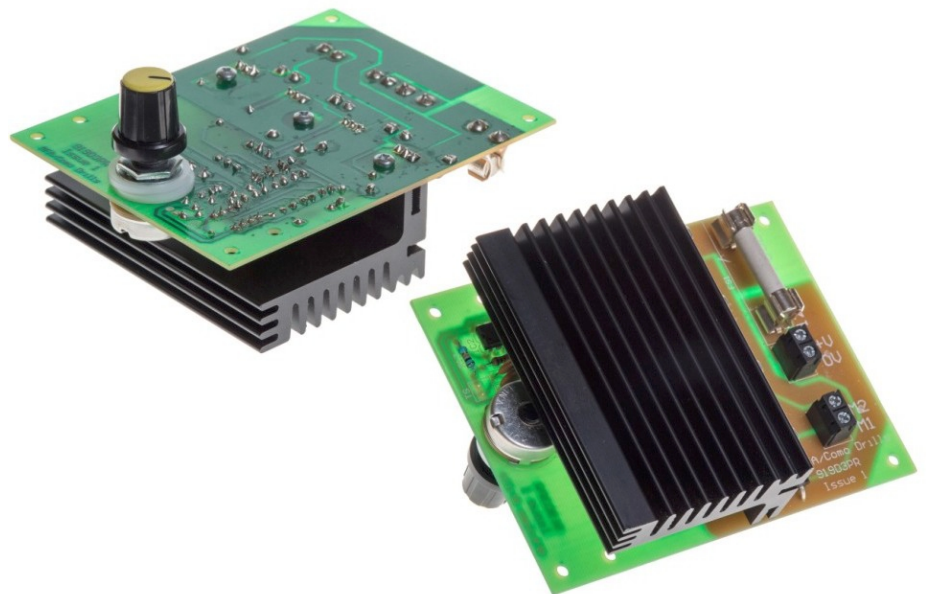
FEATURES:

- * Smooth bipolar (+ or -) output control up to 12A DC continuous.
- * Incorporates overcurrent and accidental supply-reversal protection. Additional thermal protection option available.
- * Soft start feature reduces the in-rush current when first energised from the DC supply.
- * Simple screw-in terminal blocks for supply and motor connections.
- * Easy installation by panel mounting or screw fixing. Control knob & insulating washers included.
- * 0 - near full supply voltage.

* Depending on the supply voltage and load characteristics.

**SPECIFICATION:**

Nominal supply voltage:	12V DC (12V minimum to 15V maximum) with typically less than 10% ripple at full load.
Output current:	12A maximum continuous, 16A maximum non-continuous.
PWM repetition frequency:	1kHz +/- 5%
Operating temperature:	0 deg. to 40 deg. C (normal) 0 deg. to 60 deg. C (with reduced output current above 40 deg. C)
Storage temperature:	-10 deg. C to 70 deg. C.
Relative humidity:	≤ 80% (non condensing).
Fuse:	12A fast acting (type F). 6.3mm x 32mm ceramic cartridge.
Dimensions:	110mm x 85mm x 30mm.
Weight:	160g.



This specification is subject to change in accordance with the policy of MFA Como Drills Ltd to strive for continuous improvement. You should contact MFA Como Drills Ltd before you make purchase if you are concerned that variations to the specification could affect the ability of the product to satisfy your requirements.