

Setpoint & Ramp G123-820

Description

The G123-820 is a command signal generator that produces a sequence of ramped commands suitable for use as an input signal to a proportional valve, for open loop control of a cylinder or motor. Other applications include the provision of pre-set values for a closed loop control system. User supplied logic inputs select the four front panel set points, output polarity and ramp off.

The four front panel set point potentiometers and an externally connected analog input signal are summed, passed through to a polarity selector circuit and then to a ramp circuit, before being presented as an output signal to command the proportional valve or closed loop control system.

The ability to select any of the four set points and the feature of setting the ramp time, depending on output polarity and

direction of change of the ramp, make the G123-820 particularly versatile. An output deadband, that forces the output to zero when the ramp output is within ±4% of zero, is very useful for open loop applications.

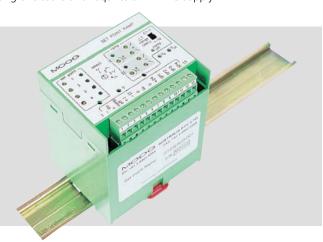
Front panel test points enable measurement of the four internal set points and the four ramp times. The ability to measure the potentiometer settings "off line", on the front panel, enables system set-up without the need to continuously cycle the process and eliminates the requirement for an additional test box. Once the values for a particular process are known, they can be used to set up all subsequent

The Setpoint & Ramp is housed in a compact DIN rail mounting enclosure and requires a 24V DC supply.

Features

- Four set points
- Four ramp times
- Auto sensing of appropriate ramp time setting
- **■** External analog input
- Ramp off input
- Control of output polarity
- Output deadband

- Output zero trim
- Test points to measure set points and ramp times
- Convenient and logically grouped front panel controls
- Compact DIN rail housing
- CE marked



Specifications

Analog input: Differential, 0 to ±10V

100k0hm input resistance Common mode, ±15V max.

Logic input level: On at 10V

> Off at 5V Max 28V 5.1mA @ 24V Set points 1 to 4

Logic input signals: Ramp off Mode I and II

0 to ±10V @ ±10mA max Analog output:

Short circuit and over voltage

protected

Output deadband: ±4% of full scale 0 to +10V, mode I Output polarity:

0 to -10V, mode II

0 to ±10V, mode I and II together

Ramp times for 10V change:

0.1 to 1S, 1 to 10S

trimpots:

Front panel test Selected set point, 0 to +10V Selected ramp, 0.1V/S or 1V/S points:

0V reference

Front panel Test point select

switches: ΔT ramp time range select,

0.1 to 1S and 1 to 10S

Front panel Set points 1 to 4 select – amber indicators: I mode select, positive output – amber

II mode select, negative output – amber

Ramp off select – amber Vs, internal supply – green

 $V_{1,0}$, +24V supply below +17V – red

Front panel Set points 1 to 4

Ramp I 🖊

Ramp I 🔪 Ramp II 🖊 Ramp II 🔪

Zero I Zero II **Supply:** 24V nominal, 22 to 28V

125mA @ 24V, max no. of front panel

LEDs on.

Mounting: DIN rail to EN50002

Housing IP40
Terminal block IP20

Temperature: 0 to +40°C

Dimensions: 90W x 75D x 107.5H

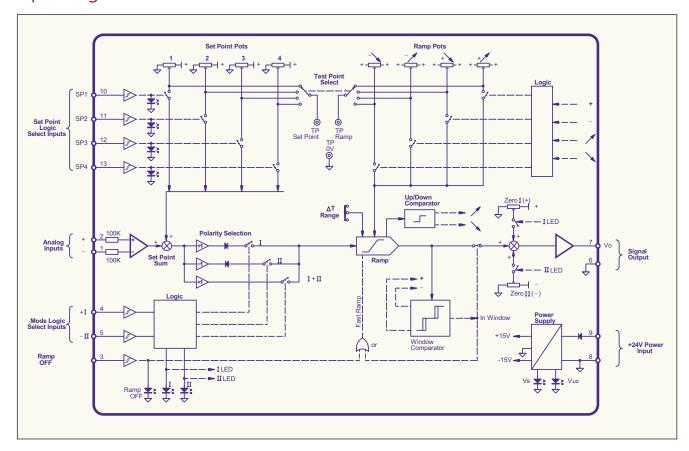
Weight: 257gm

CE mark: EN61000-6-3 emission

EN61000-6-2 immunity

C tick: EN61000-6-3 emission

Operating Details



Ordering Information

Setpoint & Ramp G123-820-001.

Special configurations can be provided.

Consult your Moog sales office to discuss details.

Internet Data

For detailed Application Notes and the latest version of this Data Sheet please refer to the Moog website www.moog.com/dinmodules



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