CAROTRON
Driven by Excellence
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Accel / Decel Module

Model ADM290-000

Model ADM290-000 Accel / Decel Module is designed to handle a variety of applications where Accel/Decel functions are required without isolation.

Inputs up to 10VDC maximum are acceptable sources. A +10VDC voltage output is available to allow the input signal to be sourced from a 1,000 to 10,000 ohm potentiometer. The Teach input allows the module to learn the minimum (0%) and maximum (100%) input levels.

A contact closure on the Ramp Enable input allows the output to ramp up (at a linear rate based on the Accel Time potentiometer) to the input level. An increase or decrease in the input signal will cause a corresponding change on the output based on the Accel and Decel Time potentiometers. When the Enable contact opens, the input signal is internally clamped to zero forcing the output to ramp down based on the Decel Time potentiometer.

Linear acceleration/deceleration times can be individually adjusted from 1 to 60 seconds. The S Curve potentiometer provides for a gradual change in the linear acceleration/deceleration rates. The S Curve adjustment allows for a 0 to 5 second setting. A contact closure on the Ramp Reset input immediately clamps the output to minimum. Internal jumper J2 allows the selection of a voltage or current output. A 100% signal input will produce 10V or 20mA. A 0% signal input will produce an output level defined by the Bias potentiometer. This allows for industry standard output levels of 0 to 10V, 0 to 20mA, and 4 to 20mA. Onboard EEPROM is used to back up the calibration values during a power loss.

Electrical Specifications

D.C. Power Input

- 24 VDC ±10%, 60mA max, internally fused

+10VDC Reference Output

- 10MA max

Signal Input

- Range: 0-10VDC
- Input Impedance: 10^{12} Ω

Potentiometers

- Turns: 15

Temperature Range

- 0-55º C

Signal Output

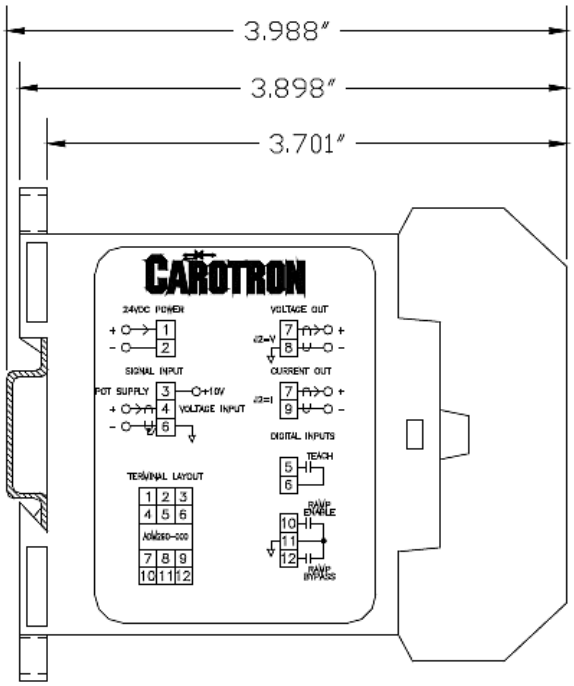
- **Voltage Output**

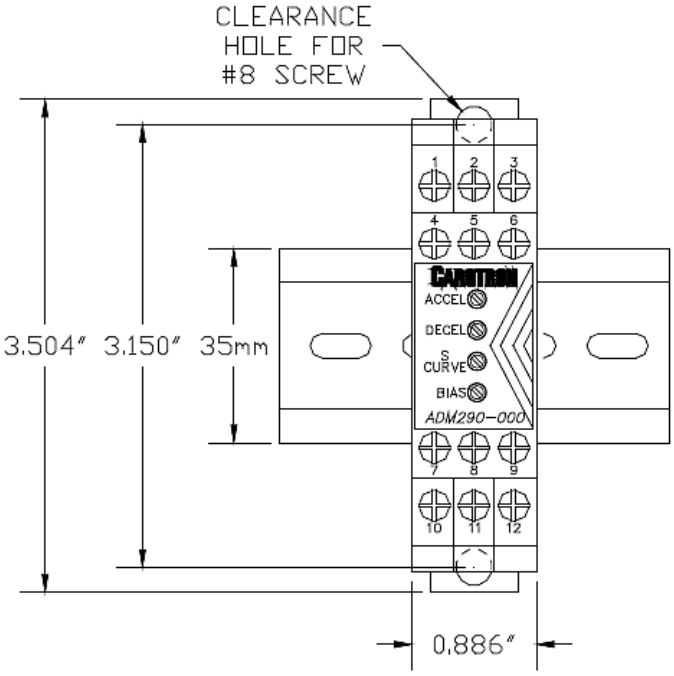
Selected by position V on J2. This circuit allows the output to source a voltage level of up to +10 VDC into a minimum resistance of 600 Ohms. If resistance is too low, output linearity may be affected.

- **Current Output**

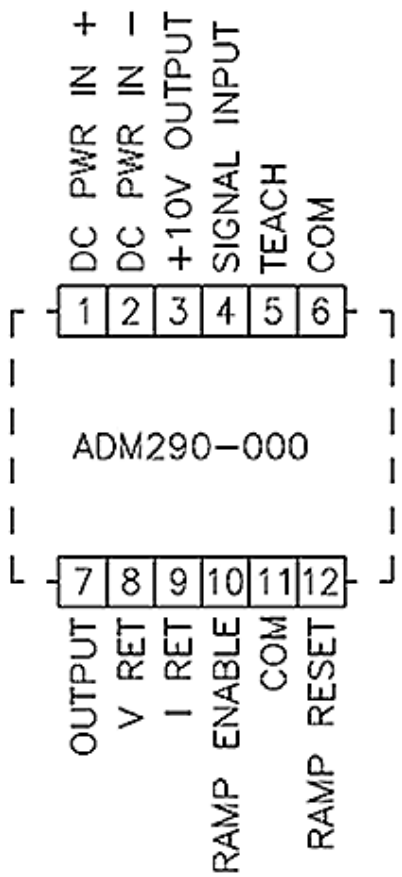
Selected by position I on J2. This circuit allows the output to source a regulated current up to 20mA into a maximum resistance of 500 Ohms. Using the BIAS pot, the output can source a 4 to 20mA signal.

Physical Dimensions





General Connections



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Physical Specifications
3.504” H x 0.886” W x 3.898” D
Shipping Weight: 2 lbs.

View or download the complete Accel / Decel Module Instruction Manual (1061-0A) from www.carotron.com .

CAROTRON
Driven by Excellence
D.C. DRIVES, A.C. INVERTERS,
SOLID STATE STARTERS, SYSTEM INTERFACE
CIRCUITS AND ENGINEERED SYSTEMS

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