**ENGINEERED CONTROL SOLUTIONS** 





# E-381

### **Description**

The E-381 is a robust controller with multiple configuration possibilities. This device can be used in gas or diesel applications and 12 or 24 volt systems. The controller has up to 2 speed sets as well as overspeed protection. These speed sets can be enabled by setting the respective pins "high" (12V/24V). Engine configuration can be done using simple gain and speed set pots. EMI shielded versions of the controller are also available. This controller is conformally coated and mounted in a rugged enclosure.

### Features

High impact plastic case Diesel or gas control Power supply 12/24VDC Speed band +/- 0.3% at ambient temp Temperature stability +/-1.5%

Speed range 3:1

2 Speed Sets

Gain, derivative, and integral adjustments

Speed input (mag pickup, ignition, transformer)

Optional overspeed protection

**Optional EMI protection** 

Mounting attitude: any (Vertical recommended)

Functionally tested

## **Specifications**

#### Mechanical

Operating Temp -30 to 85° C -22 to 185° F Weight 1lb

#### Power

Supply Voltage12V or 24VPower Consumption5WExternal Fuse Required7.5A

#### Speed Sensor

Mag Frequencyup to 10kHzDIS Frequencyup to 4HzVoltage100V

#### Governor

Max Current	4A
Speed Set	
Threshold	8V



### <u>Wiring</u>

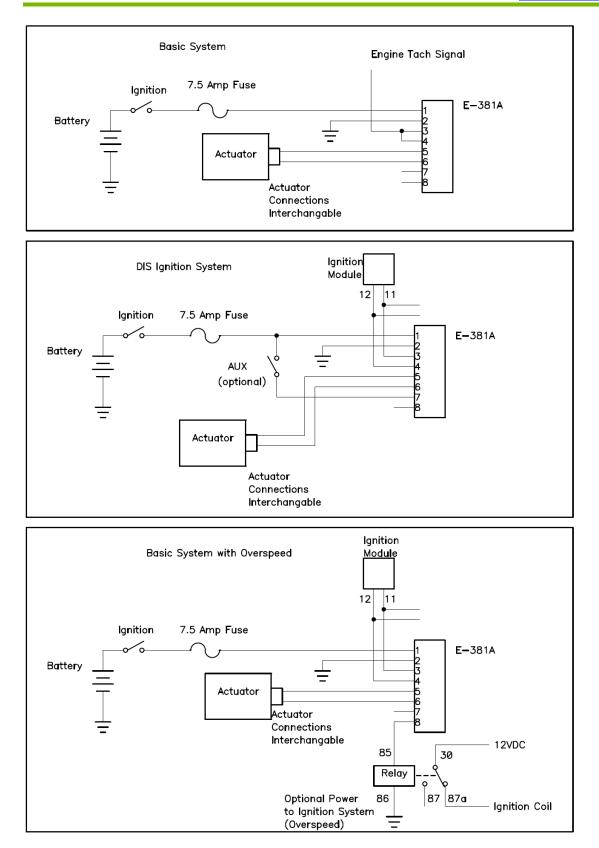
Pin	Description
1	+12/24V Power
2	Ground
3	Speed Sensor +
4	Speed Sensor -
5	Governor (polarity insensitive)
6	Governor (polarity insensitive)
7	Speed set
8	Overspeed / Ignition

#### E-381 Electronics--Adjustment locations

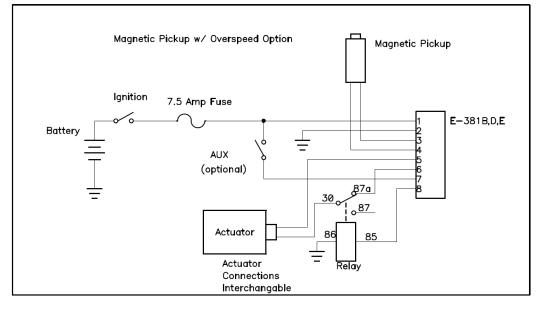
- P1. Aux-speed
- P2. Gain
- P3. Integral
- P4. Speed-set
- P5. Overspeed
- P6. Derivative

PRECISION GOVERNOR	S
<b>P3</b>	P6
P2	
P1 E-381 Electronics	sAdjustment locations

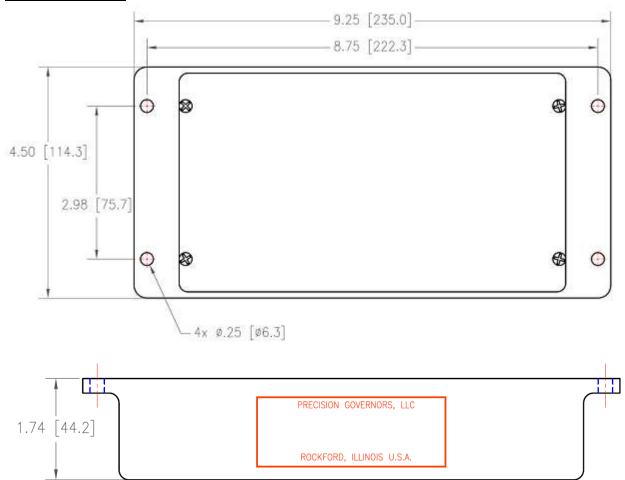








### **Dimensions**





# **Reference**

Model	Part #	Description
Α	9362	Distributor or 4 cylinder DIS input
В	9334	Magnetic Pickup, gas or diesel
С	9337	50/60 Hz transformer input
D	9456	EMI shielded, diesel ONLY, magnetic pickup genset 24 Volts
E	9469	Magnetic pickup, diesel only, Optimized performance for diesel engine control