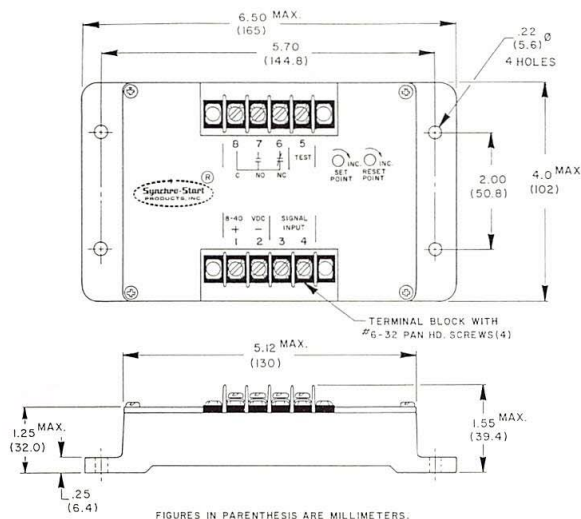
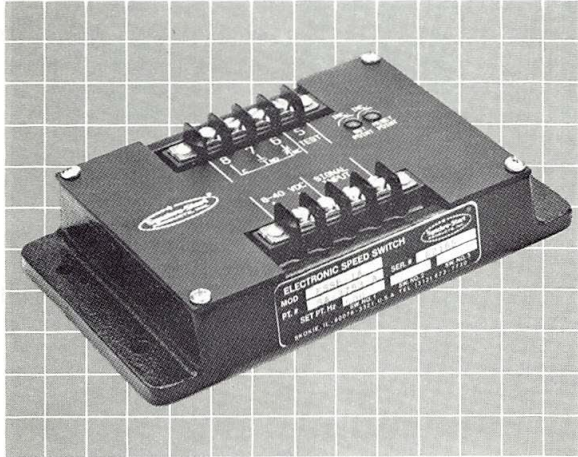


Synchro-Start ESSE1

Electronic Speed Switch

ESSE-1



The ESSE-1 is an economical single setpoint speed switch designed to monitor and control critical speed functions. Common applications include crank disconnect or overspeed protection on diesel engines, transmission shift inhibiting and power take-off protection.

Compact, rugged environmental packaging, built-in mechanical relay, 8-40 volt power input and adjustable set and reset switch point make the ESSE-1 suitable for a wide variety of speed-related applications.

FEATURES/OPTIONS

- Standard or Reverse Relay Logic
- Field Adjustable Set and Reset Switch Point
- High Noise Immunity
- Latch, Automatic, Manual or Adjustable Reset
- Reverse Polarity Protection
- Mini-Gen Signal Generator, Magnetic Pickup, Alternator or Ignition Coil for Signal Input
- Test Circuit (Trips at $67\% \pm 10\%$ of Setpoint)
- Potted for In-Field Reliability, Exposed Applications and Hostile Environments
- Field Selectable Setpoint Range and Reset (Latch or Automatic)

SPECIFICATIONS

ELECTRICAL

- Power Input**
8-40 VDC
- Power Supply Transient Protection**
900 volts for 100 Microseconds (Exponential Decay)
- Reverse Polarity Protection**
1000 VDC
- Maximum current**

	12 Volt	24 Volt
Operating	125 ma	140 ma
Standby	30 ma	45 ma
- Signal Input**
Minimum— 0.7 VRMS
Maximum— 130 VRMS
Impedance— 33K OHMS (Nominal)
- Relay Contact Ratings**
Resistance Load— 0.1 to 10 amps 28 VDC
Inductive Load— 0.1 to 8 amps 28 VDC
- Overspeed Response Time**
100 milliseconds Typical
- Setpoint Reset**
Automatic— 80% to 90% of Setpoint
Adjustable— (Variable Automatic)
25% to 95% of Setpoint
- Setpoint Stability**
For an input voltage range of 9V to 40V and for a temperature range of -10°C to $+85^{\circ}\text{C}$, the ESSE-1 shall typically be less than 1% or 8Hz., whichever is greater. The unit performs to -40°C .

MECHANICAL/ENVIRONMENTAL

- Operating Temperature**
 -40°C to $+85^{\circ}\text{C}$ (-40°F to $+185^{\circ}\text{F}$)
- Vibration**
4 G's from 20 to 500 Hz
- Shock**
4 Foot Drop Test
- Case**
—Cast Aluminum $\frac{1}{4}$ -inch Wall Thickness
—Potted Electronics for Environmental Protection
—Nickel Plated Terminals—Humidity and Salt Spray resistant
- Weight**
1.4 lbs. (0.6 kg.)