# ELECTRONIC SPEED SWITCH FOR DIESEL/GAS ENGINES

The **ECU®-SS20** is a state of the art electronic speed switch. It is designed for rugged system use and easy interface. The SS20 is a small and compact speed switch but is packed full of useful features.

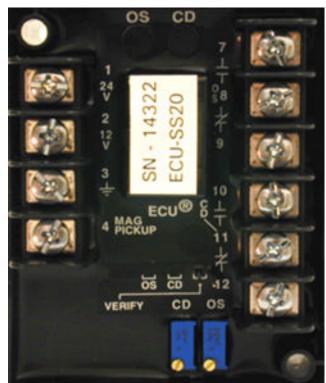
ECU® -SS20

ONE VERSION FOR 12 AND 24 VDC

## **APPLICATIONS:** Generators, Pumps, Compressors

### FEATURES:

- Two Element speed switch
- Verify mode
- Wide speed sensing range from 500 to 500 Hertz
- High current output for solenoid control
- Epoxy encapsulated module for excellent field reliability
- Wide temperature range -40C to +85C



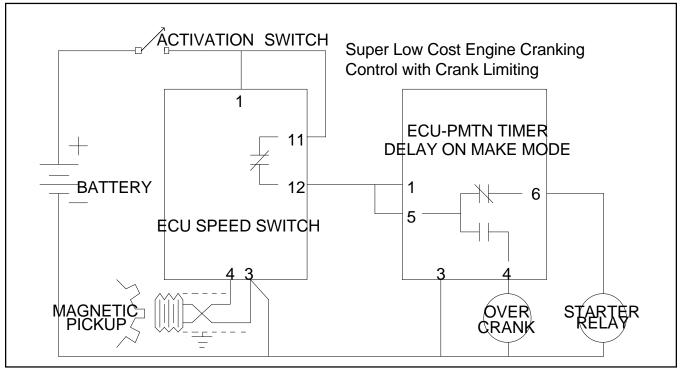
## ECU® -SS20 EASY TO USE VERIFY MODE

The ECU-SS20 speed switch follows the ECU design philosophy to produce a quality product in a small, self-contained module without penalizing the user with a loss of features.

One interesting feature is the Verify Mode. When this mode is selected, it will lower the Overspeed and Crank Disconnect trip points by approximately 13%. This feature is useful because it reduces the engine stress normally associated with the setting of high Overspeed trip points.

ECU® IS A REGISTERED TRADEMARK OF ENGINEERING CONCEPTS UNLIMITED, INC. P.O. BOX 250 - 8950 TECHNOLOGY DRIVE - FISHERS, IN 46038 Voice: 317-849-8470 Fax: 317-849-6475 E-Mail: sales@ecu-engine-controls.com

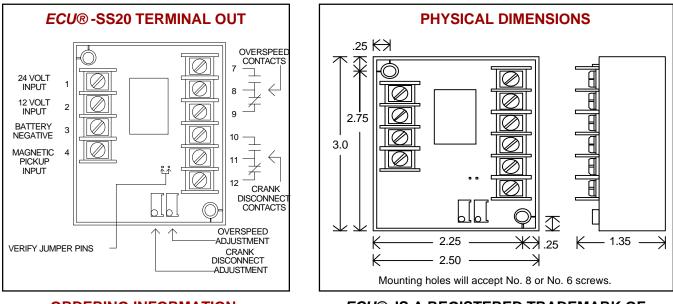
#### SAMPLE ECU®-SS20 APPLICATION: SIMPLE HOOK-UP WITH ECU-PMTN



The diagram above shows the ECU speed switch and the ECU-PMTN (programmable timer) synthesizing the Overcrank function. When the Activation Switch is closed the speed switch begins monitoring the engine speed. Also battery positive is applied to terminals 1 and 5 of the PMTN via the normally closed Crank Disconnect contacts (terminals 11 and 12) of the speed switch. This initiates the PMTN delay period and also energizes the Starter Relay through the normally closed contacts of the timer (terminals 5 and 6). If the engine comes up to speed before the delay period expires then the Crank Disconnect relay will energize, opening the normally closed contacts (terminals 11 and 12 of the speed switch), and thereby disengaging the Starter Relay and the ECU-PMTN. However, if the timer's delay period expires before the engine comes up to speed, then the PMTN's contacts will transfer, causing the Starter Relay to disengage and annunciate the fault through the Overcrank lamp.

### SPECIFICATIONS:

OUTPUT RATING - 10 AMPS MAX 12 VOLT MODE - 9 TO 15 VOLTS 24 VOLT MODE - 19 TO 28 VOLTS MAGNETIC PICKUP - 500 TO 9500 HERTZ



ORDERING INFORMATION: ORDER BY SPECIFYING: ECU® -SS20 *ECU*® IS A REGISTERED TRADEMARK OF ENGINEERING CONCEPTS UNLIMITED, INC.