AUTOMATIC ENGINE CONTROL FOR DIESEL/GAS ENGINES

The ECU®-9907 engine control provides complete automation and safety monitoring of a gas or diesel engine. The ECU®-9907 controls the starter and fuel thus completely taking the operator out of the picture. A built in speed switch controls both starter disengagement and overspeed protection.

ECU®-9907

ONE VERSION FOR 12 AND 24 VDC

APPLICATIONS: Generator Control Panels, Automatic Engine Systems

FEATURES:

- Loss of Speed Signal detection during both cranking and running
- Single or Multi-crank modes are field adjustable
- Built in speed switch uses Generator 60 Hz AC instead of a magnetic pickup
- Grounded or positive HWT/LOP inputs
- Low oil pressure and high water temp override during cranking
- Wide temperature range -40C to +85C
- Epoxy encapsulated module for excellent field reliability
- LEDS with auto/manual lamp test 1 AMP Relays for annunciator outputs

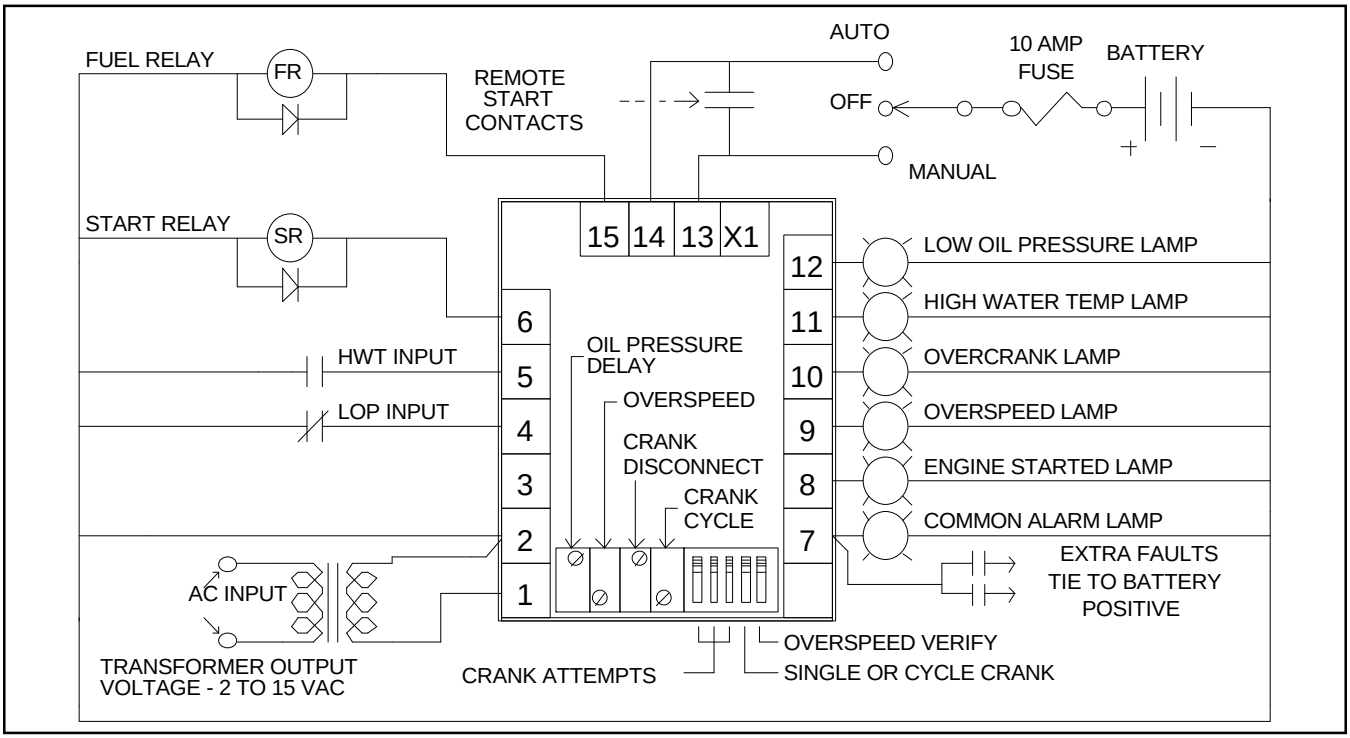
ECU®-9907 A COMPLETE AUTOMATIC ENGINE CONTROL

The ECU®-9907 automatically cranks, starts and monitors an engine for Overcrank, Overspeed, High Water Temperature and Low Oil Pressure. Any crank timing sequence is accomplished by using the multiple or single crank modes in conjunction with the timer adjustments. A built in speed switch uses the generator AC voltage coupled through a step down transformer to monitor engine speed for crank disconnect and overspeed. The bypass timer/logic assures Low Oil Pressure and High Water Temp override during the crank period and an additional adjustable period after crank disconnect.

The ECU®-9907 requires a step down transformer to lower the generators AC output voltage from (120, 240, 480, etc.) to a range of 2 to 15 Volts AC. Be sure to properly size the transformer output voltage to a value not greater than 15 Volts AC at the generators maximum output voltage.

The ECU®-9907 monitors the AC input signal for problems during both cranking and running. If a problem is detected the engine will shutdown and the Overcrank and Overspeed LED's will both turn on.

SAMPLE *ECU*®-9907 APPLICATION:
AUTOMATIC ENGINE CONTROL OF DIESEL/GAS ENGINE

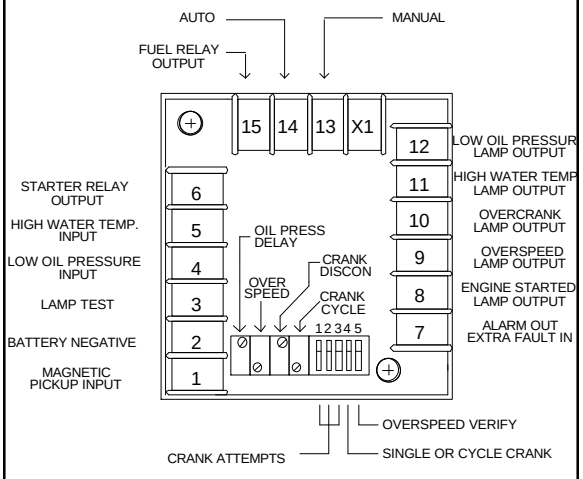


The above illustrates the ECU® -9907 engine control with an energized to run engine. Placing the control switch in MANUAL or closure of the Remote Start Contacts while in AUTO initiates the Crank mode. The Fuel and Starter Relays are energized causing the engine to begin cranking. If the engine does not start in the allotted time, as determined by the Crank Cycle Adjust and Dip Switch setting, the Overcrank Fault occurs, and the Fuel and Starter Relays are turned off. If during cranking the internal speed switch detects a speed equal to or above the Crank Disconnect Adjustment Setting the Starter Relay turns off, the LOP/HWT delay timer is initiated. After this delay period if the LOP or HWT switch closes the engine will shutdown immediately. If the internal speed switch detects a speed equal to or above the Overspeed Adjustment Setting the engine is shutdown immediately. To stop the engine or to clear a fault condition place the control switch if the Off position. If the signal from the AC speed input is lost during cranking or running the engine will shut down and the Overcrank & Overspeed LED's will both turn on.

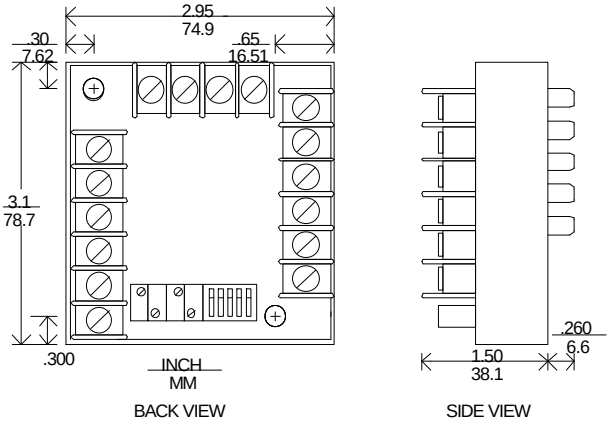
SPECIFICATIONS:

VOLTAGE RANGE - 9 TO 28 VOLTS
MAGNETIC PICKUP - 250 - 8500 HERTZ
STARTER AND FUEL OUTPUT - 5 AMPS MAX
LAMP OUTPUTS (TOTAL) - 1 AMP MAX

ECU®-9907N TERMINAL OUT



PHYSICAL DIMENSIONS



Mounting holes will accept No. 8 or No. 6 screws.
All dimensions in inches.

ORDERING INFORMATION:
ORDER BY SPECIFYING: *ECU*®-9907N