

3 Attempt Automatic Engine Control Module

HONDA EU65is/EM5000is/EM7000is

DESCRIPTION

The Model AECM103FBSL is an Automatic Engine Control Module designed to automatically or manually start and stop the engine. It will indicate the operational status and fault conditions, automatically shut down the engine and indicate the start engine failure by a flashing "START FAIL" LED on the front panel. Other faults are indicated by steady LED.

Operation of the module is via 2 position rocker switch mounted on the front panel with AUTO/STOP and RUN positions. Remote wired control of the module is via terminal 1.

START.

Conditions: Rocker switch is in "RUN" position or remote start is active and rocker switch is in "AUTO/STOP" position.

Start sequence: the start relay (S1) will energize, connecting terminal 4 to terminal 2. If the engine has not fired by the end of 1st attempt, the starter is turned off for a resting period. The sequence will then repeat up to a maximum number of start attempts. Following a successful start, (100~230V sensed on generator output via terminals 11 and 12), the start relay is de-energized and latched out to prevent reengagement of the starter with the engine running.

STOP.

Conditions: move the rocker switch to STOP/AUTO position (LOCAL STOP), or break the link between terminal 1 (remote start input) and battery negative (remote stop).

Stop sequence: the stop relay (S2) will energize for 5 sec, connecting terminal 4 to terminal 5 making generator to stop.

WIRELESS CONTROL (optional)

Rocker switch is on STOP/AUTO position.
 Terminal 1 (wired remote start is unused)

Make sure there are no metal doors/walls/other metal shields between you and controlled generator. Any metal obstacle can significantly reduce the working distance between the transmitter (key fob) and controlled generator.

Press the red button on a key fob for 1 sec and release it. The generator should try to start within a few seconds.

To be able to stop it-press another time. If your generator doesn't respond - try to stretch out the aerial on key fob and press the red button again. If unsuccessful- come closer to controlled generator.

NOTE

The starter relay can only energize for 2nd and 3rd crank cycle if 100~230Vac is NOT sensed, to confirm that the engine is stationary.

Should the engine still fail to start after the maximum number of attempts, "START FAIL LED" is displayed and the starter is latched out until reset via "STOP/AUTO" position of rocker switch or remotely via terminal 1 if the engine start was initially made via remote start signal.



Relay outputs are provided for:

- Start relay output
- Stop relay output

The relays (S1 and S2) are volt free.

Inputs/outputs are available for:

- Remote Start (terminal 1)
- Start output (terminal 2)
- Stop output (terminal 5)
- Common terminals: (3 and 4)
- AC generator output sensing (terminals 11 and 12)
- Battery positive (terminal 7)
- Battery negative (terminal 8)

Multiple alarm channels are provided to monitor the following:

- AC alternator output
- Fail to Start

The AECM 103FBS lite series modules have been designed for front panel mounting.

The module is fitted into the 68X68mm cut-out with the fixing clips removed.

These are then fitted from the rear.

SPECIFICATION

DC Supply: 12 VDC (generator battery)

Max. Standby Current: 9.8 mA @ 12 V

Number of attempts: 3

Crank durations: 5sec

Hold-off timer set for: 7 sec.

Start relay output: 3.0A max;

Stop relay output 3.0A Max;

Dimensions: 72 X 72 X 60mm;

Operating Temperature Range: -30 to +70°C.

Wireless transmitter/receiver specification

Receiver: internally fitted into AECM module

Transmitter/Receiver working frequency: 315Mhz

Number of channels: 1Ch

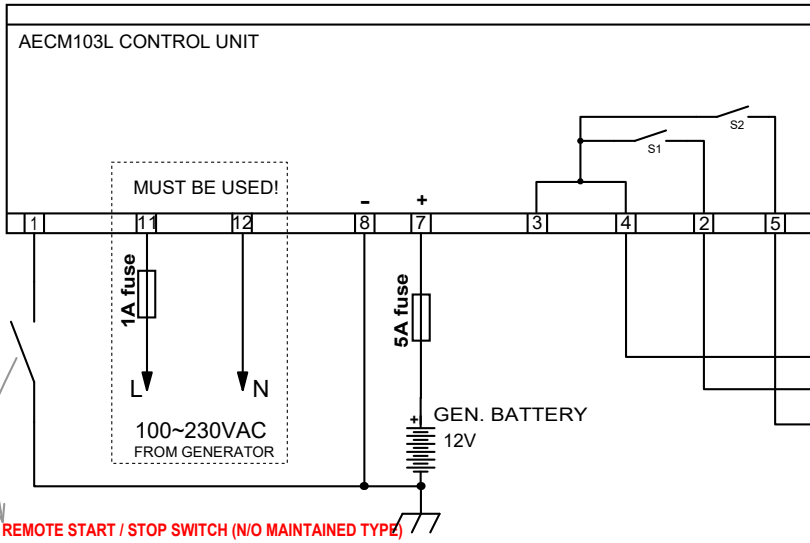
Encoding type: fixed code

Receiver sensitivity:>-105dB

SETTINGS

3 X 5 sec starting attempts with 10 sec pause between each attempt.
 Stop relay: ETS (ENERGIZE-TO-STOP) settings: 5 sec energize-to-stop to simulate stop switch button
 7 sec hold-off timer (to give generator a time to stabilize its parameters before all sensors come to active state).
 S1: 3A MAX
 S2: 3A MAX
 NUMBER and MAX. DURATION OF ATTEMPTS IS CONTROLLED VIA AC INPUT (terminals 11 and 12)
 AC alternator failure will result in stopping the genset (fault detection): LOW FUEL LED is displayed in this case.

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