# 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 will energize, connecting terminal 7 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 sensed on generator output pilot light RC socket #1), the start relay is de-energized and latched out to prevent further starting attempts of 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 will energize for 5 sec, connecting terminal 7 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 "A" 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 button "B".

## NOTE

The starter relay can only energize for 2<sup>nd</sup> and 3<sup>rd</sup> crank cycle if pilot light signal 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

Inputs/outputs are available for:

- Remote Start (terminal 1)
- Start output (terminal 2)
- Stop output (terminal 5)
- Pilot light output sensing (terminal 3)
- Battery positive (terminal 7)
- Battery negative (terminal 8)

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;

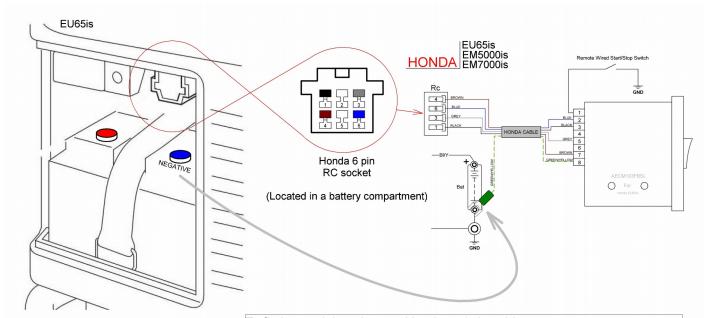
Operating Temperature Range: -30 to +70°C.

### Wireless transmitter/receiver specification

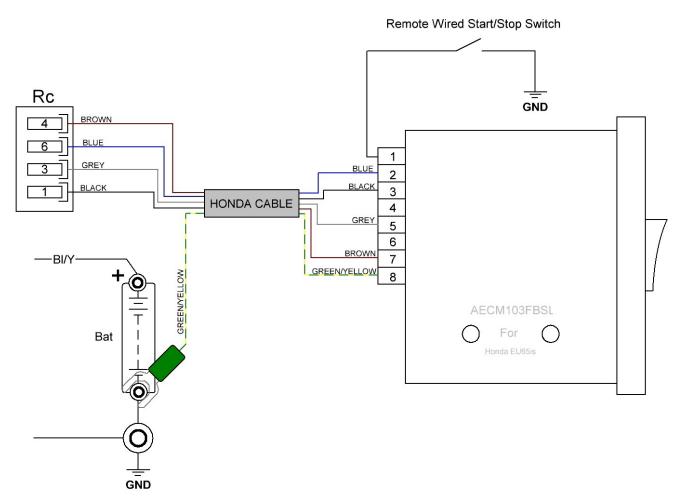
Receiver: internally fitted into AECM module

Transmitter/Receiver working frequency: 315Mhz (433Mhz)

Number of channels: 1Ch Encoding type: fixed code Receiver sensitivity:>-105dB



To fit the module using our Honda eu65is cable: Connect every cable wire to the corresponding module's terminals as shown. Connect the green/yellow wire to the battery negative. Insert the 6pin Honda plug into generator RC 6 pin socket.



The Honda EU65IS cable can be ordered from our website (see Table A): https://www.gencontrol.co.uk/honda-eu65is-auto-start.html