

ASM170 Auto Start Module



ASM170

ASM170

- Ideal for all basic auto-start/stop
- Programmable Multifunction Output
- Extended Operating Temperature Range
- Excellent Low Voltage Performance
- Compact Size Retrofits Existing ASM150 Installations
- Built-In Manual-Off-Auto Toggle Switch
- Smart FET Outputs

Description

The ASM170 is a compact yet powerful engine auto-start module. It offers flexibility and features normally found in much larger and more expensive units. Its high density MOLEX plug makes it ideal for panel builders. It can also be easily replaced in the field if problems should arise.

With the on-board Manual-Off-Automatic switch, Panel wiring is greatly simplified.

Its unique design also allows it to draw virtually no current in standby mode, yet be able to auto-start based on a sustained or momentary contact closure.

Features

The ASM170 is typically used in generator applications but can be applied anywhere a basic auto-start operation is required. Basic functions include engine crank/rest, crank disconnect, overspeed, low oil pressure, high engine temperature, low levels and spare shutdowns. The start signal to the controller can be momentary or sustained.

It also has a multifunction output that can be selected to perform one of the following functions:

- Glowplug
- Warmup/Cooldown
- Warmup
- Cooldown
- Choke
- Air Damper Shutoff

Specifications

Power Input:

6 to 28 VDC.

Power Consumption Standby:

<1 mA.

Operating Temperature:

-40 to 185 °F (-40 to +85 °C).

Inputs:

Ground or positive inputs for high temperature, low oil pressure, High/Low Level, Auxiliary/Remote Stop sensors.

Lamp Test:

When unit is powered up in Manual or Auto, the LED's light for 1 second as a test.

Outputs:

5A smart FET for cranking and multifunction output. 10A smart FET for Fuel Valve (Energized to Run) output. All 3 supply battery "+". 125 mA transistor for common failure, engine run, and auxiliary output. (Sink to battery "-")

Crank Attempts:

Selectable for 3, 5, 10, or 255.

Crank/Rest Cycle Timing:

Field adjustable 1 to 30 seconds.

Multifunction Output:

Field programmable to one of the following options: Glowplug, Cooldown, Warmup/Cooldown, Warmup, Air gate – Overspeed Only, Air gate – Always, Choke, or Auxiliary Run output.

Shutdown Lockout Time Delay:

Field adjustable 1 to 300 seconds. Locks out low oil pressure, high temperature, and loss of speed shutdowns on start-up.

Crank Disconnect Speed Setting:

From 13 to 2500 Hz.

Overspeed Trip Point Setting:

From 13 to 8500 Hz.

Speed Sensing Input:

1.5VAC RMS to 140 VAC RMS.

Shipping Weight:

1 lb. (.45 kg.)

Shipping Dimensions:

6.25 x 6.25 x 4.5 in.
(159 x 159 x 114 mm).

For the OEM

The ASM170 was designed with the OEM in mind. Each unit comes standard with a programming header easily accessible from the rear of the unit. Through this header, the OEM can upload specific operating parameters normally controlled with the DIP switch and Potentiometers directly into the controller. This way the exact settings required by the OEM will be programmed and the DIP switch and Potentiometer settings will be ignored.



ASM170
w/o Toggle Switch

CAUTION: *Certain danger to human and to equipment such as applied in a mobile or marine application may occur if some equipment is stopped without pre-warning. It is therefore, recommended that monitored functions be limited to alarm only or to alarm before shutdown in such applications.*

How to Order:

| | |
|---------------------|--|
| ASM170 | 00009126 ASM170 Standard with Toggle Switch |
| ASM170-LT | 00009347 ASM170 without Toggle Switch |
| ASM170-LT160 | 40700252 ASM160 Replacement Kit <i>INCLUDES:</i> 40000168 Drilling Template with terminal block and wire harness 00009347 ASM170 without Toggle Switch |

NOTE: P/N 40000138 connector and 4 ft. wire harness must be ordered separately if required.