The EAOM-3 manual engine start units are designed to control the engine via a three position key switch on the front panel. The unit is used to start and stop the engine and provides automatic shutdown on detection of a fault condition. LEDs provide automatic indication of fault conditions and engine failure, giving true first up fault annunciation. Available with overspeed protection, a built-in running hours display and stop button.

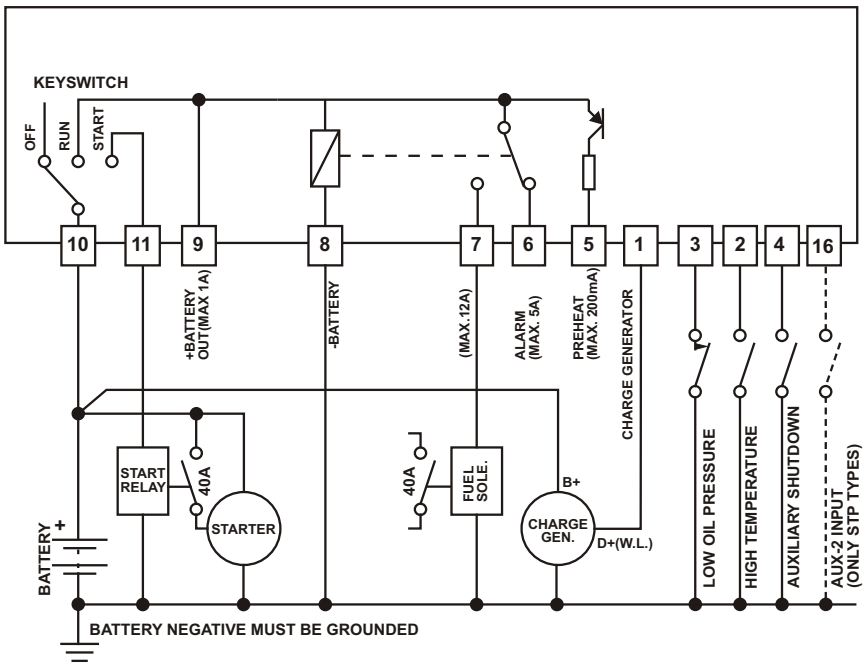
Operation

The EAOM-3 unit is operated via a three position key switch mounted on the front panel, with OFF (O), RUN (I) and START (II) positions. In the OFF position the ⎓ supply is removed from the unit and the fuel and crank relay outputs are de-energised. When the switch is turned to RUN, the unit is powered up, the fuel relay is energised and the engine's fuel system is activated. Moving the switch to the START position and holding it against the spring return energises the crank relay output and activates the starter motor. Once the engine has started, the switch should be released and allowed to return to the RUN position.

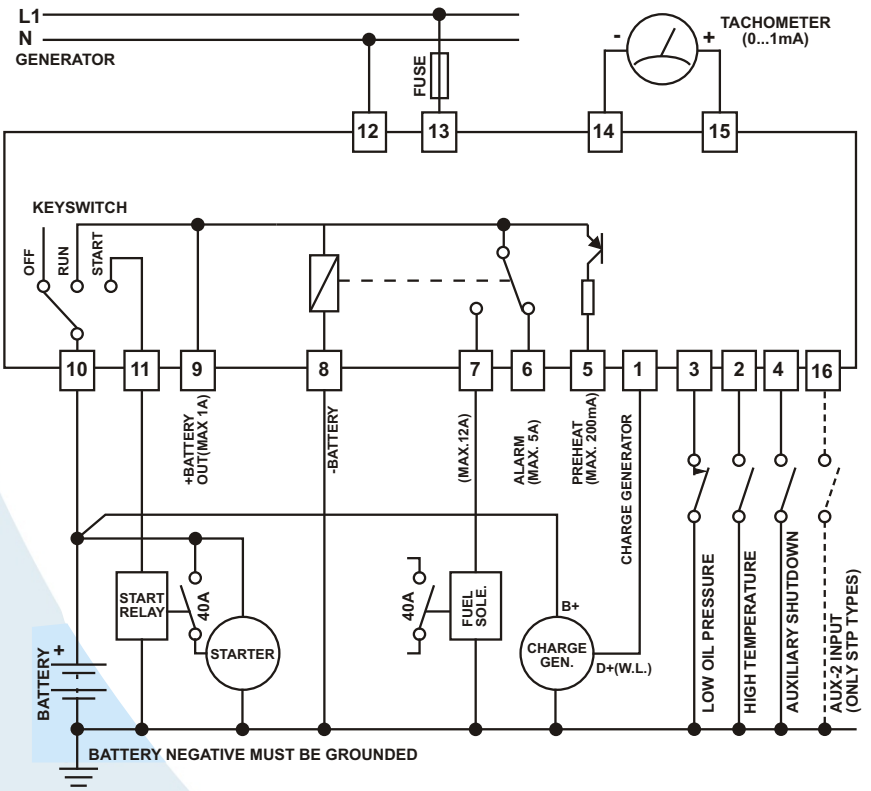
Specifications

Housing & Mounting	72mm high x 72mm wide x 107mm deep (excl. 13mm clips)
Protection	IP30 at front panel, IP20 at rear side
Operating / Storage Temperature	-25ºC to +70ºC / -40ºC to +85ºC
EMC	EN-61000-6-4, EMC generic emission standard for industrial equipment EN-61000-6-2, EMC generic immunity standard for industrial equipment
Electrical Safety	EN-61010-1, safety requirements for electrical equipment for measurement, control and laboratory use
Supply Voltage (⎓)	8-32 V⎓
Supply Voltage Measurement	8-32 V⎓. Accuracy:1%FS. Resolution:0.1V⎓
Cranking Dropouts	Battery voltage can be 0V⎓ for max. 100msn during cranking (battery voltage should be at least nominal voltage before cranking)
Generator Speed Measurement	From generator voltage or magnetic pickup
Alternator Frequency Range	10 to 110 Hz (@30 to 300 VL-N∿ RMS)
Magnetic Pickup Frequency Range	35 Hz to 10kHz (@3 to 35V peak continuously)
Outputs	Start Relay Output. 12A (@8-32V⎓) Fuel Relay Output. 12A (@8-32V⎓) Alarm Relay Output. 5A (@8-32V⎓) Preheat Relay Output. 250mA⎓ transistor output (PNP) Tachometer Analogue Output. 0 to 1mA⎓
Failure Indicators	Low Oil Pressure High Engine Temperature Charge Alternator Over Speed (optional) Auxiliary Shutdown
Status Indicators	Protection On Preheat On (for some types which do not have stop button)
Alarm Duration	Continuous
Preheat Duration	10 seconds
Protection On Delay	20 seconds
Generator Over Speed Shutdown Setting	10 – 110 Hz selectable via rear panel trimmer (if Generator) 35 – 10 kHz selectable via rear panel trimmer (if Magnetic Pickup)
Analogue Calibration	Adjustment via rear panel trimmer
Indicator Display	Annunciators
Hour Meter (HM Option)	7 digit electro mechanical converter 0 to 999999.9 hours

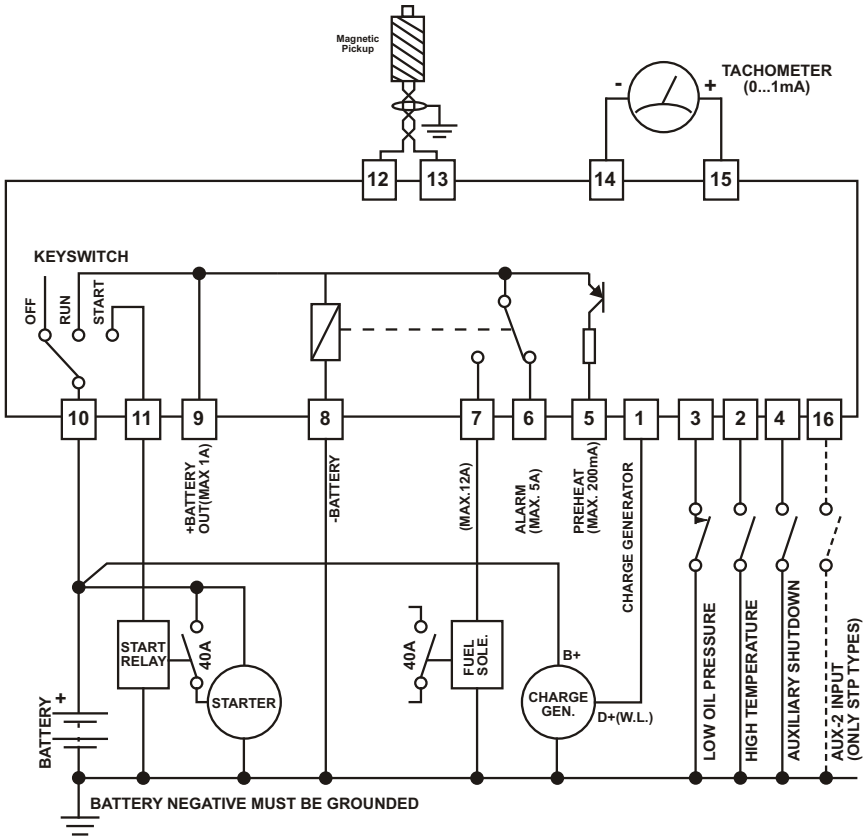
Electrical Wiring for EAOM-3, EAOM-3-HM, EAOM-3-STP, EAOM-3-HM-STP



Electrical Wiring for EAOM-3-ALT, EAOM-3-HM-ALT, EAOM-3-STP-ALT, EAOM-3-HM-STP-ALT



Electrical Wiring for EAOM-3-MAG, EAOM-3-HM-MAG, EAOM-3-STP-MAG, EAOM-3-HM-STP-MAG



EAOM-3	Manual Start & Engine Protection Controllers with Key Switch, 72x72x107 mm Size
EAOM-3-ALT	EAOM-3 Unit with Overspeed Sensing from Generator Voltage, 72x72x107 mm Size
EAOM-3-MAG	EAOM-3 Unit with Overspeed Sensing from Magnetic Pickup, 72x72x107 mm Size
EAOM-3-HM	EAOM-3 Unit with Elapsed Time Meter, 72x72x107 mm Size
EAOM-3-HM-ALT	EAOM-3 Unit with Elapsed Time Meter and Overspeed Sensing from Generator Voltage, 72x72x107 mm
EAOM-3-HM- MAG	EAOM-3 Unit with Elapsed Time Meter and Overspeed Sensing from Magnetic Pickup, 72x72x107 mm
EAOM-3-STP	EAOM-3 Unit with Stop Button, 72x72x107 Size
EAOM-3-STP-ALT	EAOM-3 Unit with Stop Button and Overspeed Sensing from Generator Voltage, 72x72x107 mm Size
EAOM-3-STP-MAG	EAOM-3 Unit with Stop Button and Overspeed Sensing from Magnetic Pickup, 72x72x107 mm Size
EAOM-3-HM-STP	EAOM-3 Unit with Elapsed Time Meter and Stop Button, 72x72x107 Size
EAOM-3-HM-STP-ALT	EAOM-3 Unit with Stop Button, Elapsed Time Meter and Overspeed Sensing from Generator Voltage, 72x72x107mm
EAOM-3-HM-STP-MAG	EAOM-3 Unit with Stop Button, Elapsed Time Meter and Overspeed Sensing from Magnetic Pickup, 72x72x107 mm