

DESCRIPTION

The microprocessor range of KEY START modules have been designed to provide local START/STOP control for diesel driven generators. Incorporated in this range of panel-mounted modules are all the safe guards required by today's generator market. These automatically stop the generator, should a fault occur. Positive indication of the fault is displayed via LED indicators

INSTALLATION

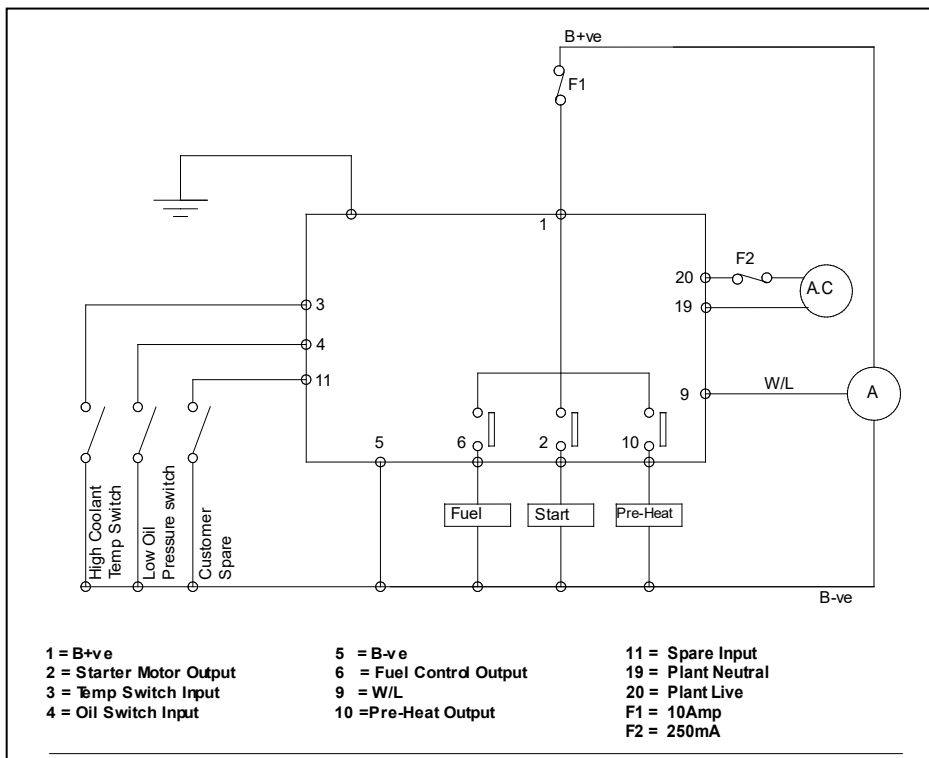
The control module has been designed to be panel mounted via a through hole panel cut out. The controller is to be inserted in to the control panel from the front side. Two securing clips, supplied, are then attached to each side of the controller case. They should be turned until the screw head comes into contact with the front fascia, and tightened until secure.

FEATURES

Module Dimensions (HxWxD).....	65x65x130mm
Housing.....	Metal Box
Panel cut out.....	68x68mm
Fuel Control.....	Output Relay 16Amp
Timed Pre-heat Control*.....	Output Relay 16Amp
Starter motor Control.....	Output Relay 16Amp
Low oil pressure shutdown.....	Input
High water temperature shutdown	Input
Customer spare shutdown.....	Input
Under voltage sensing*.....	Input
Over speed sensing*.....	Input
Charge fail indication.....	Input
Microprocessor Controlled.....	Yes
Configuration through dipswitches*.....	Yes
Dc Voltage Available for.....	12 or 24
AC Voltage (Ph to N) Available for	115 or 230

* = Optional

TYPICAL INSTALLATION



Switch Positions

Control of the generator is through a three position momentary key switch, located on the front fascia. This controls the outputs to the fuel and start circuits.



STOP/RESET → Removes power from the module, disabling the ignition circuits, thus stopping the generator. All alarm conditions are reset.



FUEL ON → Enables the fuel output thereby engaging the fuel system of the engine. The alarm/ fault detection circuits are enabled.



START ENABLE (Momentary) → A start signal (B+ve) is switched to the start output terminal, which in turn engages the starter motor

Note: In order for the starter motor output (2) and pre-heat output circuits (10) to be activated, the W/L (Warning Light) signal on terminal (9) must be a 0 volts prior to starting the engine, LED position 3 lit. This is a protection procedure to prevent the starter motor engaging on to a running engine. As the engine starts the W/L volts will rise to the battery charging voltage, and LED position 3 will turn off.

LED INDICATIONS

Position	LED	ICON	STATUS
1	Green		Fuel On
2	Green		Pre-Heat
3	Red		W/L
4	Red		A/C Fail
5	Red		Overspeed
6	Red		Temp Fail
7	Red		Oil P Fail
8	Red		Spare

DIPSWITCHES

The rear of the controller houses a 4 position Dual in Line (DIL) dipswitch. This allows the controller to be correctly configured for operation with the engine protection switches.

N/O = Normally Open Contact
N/C = Normally Closed Contact

Switch	Parameter	ON	OFF
S1	Oil p Fail	N/O	N/C
S2	Water T	N/C	N/O
S3	Over Speed	Disabled	Enabled
S4	Hz	60	50