

DESCRIPTION

The microprocessor range of AMF modules have been designed to provide for the automatic control, monitoring & protection of diesel engine driven generator units.

The fundamental purpose of the AMF controller is to allow automatic operation of unmanned stand-by generators. The AMF continually monitors the local mains supply and will start the generator if there is a disruption in this supply. The AMF will then run and monitor vital engine and alternator parameters, whilst the supply interruption continues. The generator will automatically be stopped by the AMF once the local mains supply has been restored to within acceptable limits.

Incorporated into the controller are outputs to automatically control load transfer from the local supply to the generator alternator, and vice-versa.

Included 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 via the panel cut out. The two securing clips provided are then attached to the top and bottom of the controller case. They should then be turned until the screw head comes into contact with the front fascia, and tightened until secure.

FEATURES

Module Type.....Automatic Mains Failure
Module Dimensions (HxWxD)142x65x125mm
Housing.....Plastic Case
Panel cut out.....36.5x67.5mm
Switch..6 position – Off, Inhibit, Automatic, Remote, Off, Test
Start.....4 x Start Attempt
Fuel Control.....Output Relay
Timed Pre-heat Control.....Output Relay
Starter motor Control.....Output Relay
Plant Contactor Control.....Output Relay
Mains Contactor Control.....Output Relay
Remote Start Function.....Yes
Low oil pressure shutdown.....Input
High Coolant temperature shutdownInput
Under voltage sensing.....Input
Overspeed Protection.....Yes
Charge fail indication.....Input
Starter motor lock out.....Via W/L or AC rise
Automatic Load Transfer.....Yes
Plant Sensing.....Single Phase
Mains Sensing.....3 Phase
Adjustment Timers.....Yes
Microprocessor Controlled.....Yes
Dc Voltage Available for.....12 or 24
AC Voltage (Ph to N) Available for115 or 230



LED INDICATIONS

The front fascia of the module contains twelve high intensity LED's. Enabling a quick statuses check of the generator module to be made. The layout is as follows:-

Position	LED Color	Condition/Status
1	Green	Mains Available
2	Green	Mains On Load
3	Red	Mains Failed
4	Green	Plant Available
5	Green	Plant On Load
6	Red	Generator Failed
7	Red	Start Failure
8	Red	Plant Under Voltage
9	Red	Overspeed
10	Red	High Coolant Temperature
11	Red	Low Oil Pressure
12	Red	Charge fail

Switch Positions

Control of the generator is through a six-position Rotary switch, located on the front fascia.

TEST Manual Start. Enables the fuel, timed pre-heat and starter motor outputs.

OFF Resets all alarm conditions and removes power from the module.

ENGINE INHIBIT This position enables the mains sensing circuits with in the module. The 3 phases of the local supply are monitored. The engine will be inhibited from starting

AUTOMATIC This position switches the module into AMF mode. The load transfer circuits in the module are enabled. The unit may be left unattended in this mode and all operations are automatic

REMOTE This feature allows the module to be controlled from a remote switch. This operates by linking the AUTO and TEST terminals through a remote switch.

DIPSWITCHES

The rear of the controller houses a 8 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

Dip Switch	Parameter	Switch set to ON	Switch set to OFF
S1	N/A	N/A	N/A
S2	Oil pressure Fail	N/O	N/C
S3	Coolant Temp Fail	N/C	N/O
S4	Static Charger	Ground = Fail	Open-circuit = Fail
S5	Charge Fail Shutdown	Enabled	Disabled
S6	Charging Alternator	No Charge Alternator fitted	Charge Alternator fitted
S7	N/A	N/A	N/A
S8	Nominal Freq	60Hz	50Hz

TYPICAL INSTALLATION

