

Deep Sea Electronics Plc

600 Series

MODEL 603 AUTOMATIC MAINS FAILURE MODULE

DESCRIPTION

The DSE 603 Automatic Mains Failure Module in its basic form has been designed to control the automatic starting, stopping and load transfer of a generating set in the event of a mains power failure. Once the generator is running it monitors the internal protections i.e. Over/Under Speed, Over/Under Voltage, Plant Battery High/Low Voltage plus any external fault inputs i.e. Low Oil Pressure, High Engine Temperature and all programmable fault inputs. Incorporated into the design are a full range of Timers, Voltage and Speed monitoring all adjustable by the user. The 603 indicates the operating status and first up fault condition on an LCD, fault conditions are also duplicated by flashing high intensity LEDs. Incorporated into the design are a full range of timers, 3 phase. The unit is housed in a metal chassis with polycarbonate fascia, designed for front panel mounting. Connection to the unit is via locking plug and sockets.

- Hours run counter and Frequency Display
- Sealed membrane panel to IP65
- Fully programmable to meet system requirements
- Panel wiring diagnostics
- 9 programmable fault inputs
- Programmable LCD text for above fault inputs
- Contactor and Breaker control
- Speed sensing from magnetic pick-up or generator
- Remote start, Auto Inhibit and Manual Restoration
- Louvre/Preheat Control
- Push button control with system lock facility
- Remote Fault Indication
- Lamp Test



OPERATION

Control of the 603 is by push buttons, however to prevent unauthorised use, a System Lock facility is provided to lock the 603 in whatever mode you require i.e. AUTO. Once the system lock is activated the only push buttons which can be operated are Alarm Mute and Lamp Test. If you wish to change the operational mode, system lock must first be removed.

With the AUTO selected, detection of a mains failure will initiate a start sequence. The 603 will carry out all the start and stop procedures whilst monitoring the Generator Speed and Voltages. Once the operating criteria are met the load will be transferred to the generator. On mains restoration, to ensure a stable mains supply the mains return timer is activated and after this time out the load is restored to the mains. The generator remains running for a cool down period then shuts down.

Should a fault arise, the engine will shut down, an alarm will be sounded and indication of the fault is by a flashing LED and LCD on the front panel. To cancel the alarm, an alarm mute is provided.

SPECIFICATIONS

DC Supply 10.5 to 36 volts (Provision is made to protect against voltage dips during cranking)

Alternator Input range 80 to 300 volts ac rms

Alternator Input frequency 50-60 Hz at rated speed

Magnetic pick-up range 1 to 80 volts ac

Magnetic Pick-up Frequency 0 to 6 KHz

Internal Relays rated at 16 amps Volts Free

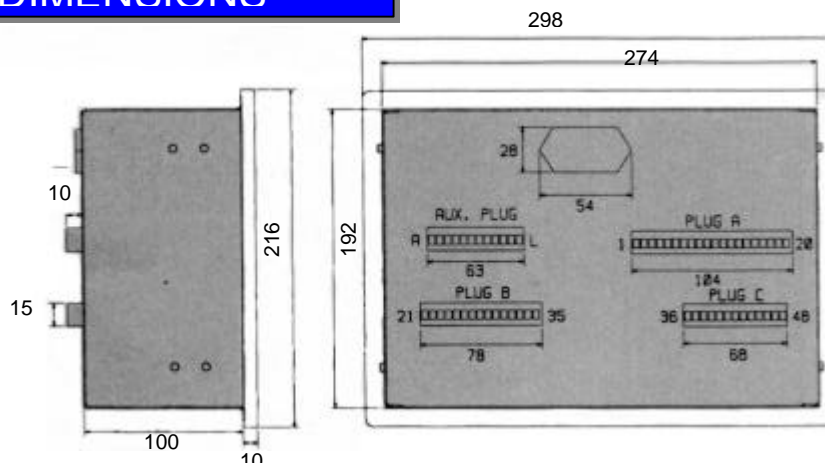
Operating Temperature range -10° to $+60^{\circ}$ C

Auxiliary Outputs, Open collector 400mA max output

3 Phase Mains sensing

CASE DIMENSIONS

ALL
DIMENSIONS
ARE IN MM



TELEPHONE: +44 (0) 1723 377566

FAX: +44 (0) 1723 354453

E-MAIL: sales@deepseapl.com