Auto Synchronizing one generating set with the mains (including AMF function). When the 6000 Series panel is operating in Automatic Mains Failure mode the controller waits for a remote start signal to indicate that the mains have failed. When configured as a 6300 control system, two types of operation are available:

Baseload operation

The operator manually starts the generating set. The controller then automatically synchronizes it to the mains. The amount of active (kW) and reactive (kVAr) power supplied by the generating set is increased at a predetermined rate until the preset quota is met. Power will be exported to the mains if the generating set output is greater than the local load.

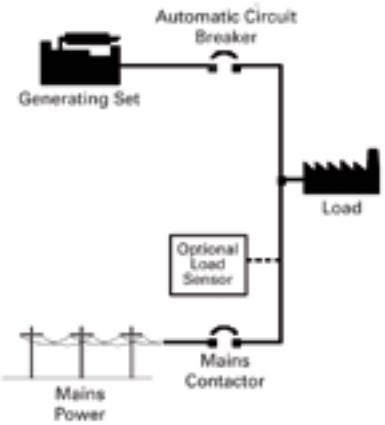
Peak lopping

With the addition of an optional load sensor on the mains supply the controller will ensure that only local load is supplied and no power is exported to the grid. This operating mode must be specified when ordering.

Note:

The above modes also allow for AMF operation with soft load re-transfer.The optional facility of the industry standard Modbus protocol communication interface ensures compatibility with most building management or SCADA/HMI systems.

Consult your local utility to ensure that the control and protection equipment incorporated in the 6000 Series control panel meets their specific regulations. Consult the factory if the utility requires additional protection relays. Due to the specialized nature of generating set systems synchronizing with the mains, consult the factory before specifying a 6300 control system.



FG WILSON

6300 Series

Control panel

Standard features

Generating set parameter displays (2 X 4 line LCD display)

AC voltage phase to phase and phase to neutral (on 3 phases)
AC current (on each of 3 phases)
Frequency
CosΦ (power factor) average
kW - total + per phase
kVAr - total + per phase
kWh - total
% Voltage difference between bus and generator
Phase shift
Frequency slip
Hours run
Coolant temperature
Lube oil pressure
DC voltage

Bus parameter displays

AC voltage (on a single phase)
AC voltage/frequency within limits indicator

Operator controls

Off/auto/test/run control switch
Emergency stop pushbutton (lockdown)
Membrane keypad with tactile feedback
AC voltage adjust - manual and automatic
Engine speed adjust - manual and automatic

System controls

3 attempt start counter
Cool down delay
Pre-glow delay
Remote start capability
Check synch relay
Reverse power relay
Manual synchronizing
Automatic synchronizing
Automatic load sharing control
Automatic loading and unloading ramp controller
Automatic mains failure controller
Load sequencing control
Static battery charger (5amp) 220/240 Volts AC
Quadrature droop kit

Shutdowns and alarms

High lube oil temperature shutdown
Low coolant temperature shutdown
High coolant temperature shutdown
Low oil pressure shutdown
Overspeed shutdown
Fail to start shutdown
Emergency stop operated
Reverse power shutdown
Overvoltage shutdown
Undervoltage shutdown or alarm
Overfrequency shutdown
Underfrequency shutdown or alarm
Alternator loss of excitation alarm
Fail to synchronize alarm
Battery overvoltage shutdown or alarm
Battery undervoltage alarm
Bus overvoltage alarm
Bus undervoltage alarm
Bus underfrequency alarm
Bus overfrequency alarm
Bus load surge
Spare fault channels, up to 3:
– Low coolant temperature alarm
– Earth fault
– Earth leakage
– Low fuel level shutdown or alarm
– Low coolant level shutdown

Status indicators

Load switch status indicator
General switch status indicator
Fault log memory
Password security
Interface to remote monitoring package

Optional features

System controls

Volt free contacts for generating set running
R448 regulator (required)
Electronic governor (required)
Droop engine control module

Shutdowns and alarms

Earth fault shutdown
High fuel level alarm
Earth leakage shutdown

FG Wilson has manufacturing facilities in the following locations:
Northern Ireland • Brazil • China • India • USA
With headquarters in Northern Ireland, FG Wilson operates through a Global Dealer Network. To contact your local Sales Office please visit the FG Wilson website at www.FGWilson.com