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FG Wilson Control Systems

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Putting You in Control

Whatever your power requirements, FG Wilson can provide a control system to suit your needs. Our generator set experts design and validate FG Wilson control systems to optimise your generator set performance and put you in control.

All FG Wilson control panels are compact, versatile and easy to use. Our comprehensive range includes key-start analogue control panels for straightforward functionality and reliability; digital control panels suitable for use in mains failure applications, providing advanced metering, protection and diagnostics; and the next generation of advanced synchronising panels with integrated load management capability, suitable for synchronising up to 32 generator sets.

Our range of load transfer panels are designed to enhance the operation of your standby generator set in conjunction with our electronic control panels, to provide automatic control of your standby generator set in the event of a power outage, 24 hours a day, 365 days a year.

For more challenging power requirements, our Power Solutions Team is dedicated to the design and production of bespoke control systems to meet your individual needs, regardless of complexity.



easYgen-2500

Synchronising Control Panel

The easYgen-2500 offers industry leading power management and control

The easYgen-2500 is a generator set-to-set controller for paralleling and load sharing applications of up to 16 generator sets. A special feature of the easYgen-2500 is the enhanced load sharing system. This provides advanced generator load dependent start / stop functionality with automatic generator set selection to ensure optimal system efficiency.

easYgen-2500



Benefits

- Capable of set-to-set synchronising for up to 16 generator sets
- User friendly interface
- Easy system navigation via programmable soft keys
- Multiple communication protocols for communication with Engine Control Units (ECUs), external I/O boards, PLCs and modems
- Multilingual capability: English, Chinese, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish and Turkish
- Capable of working with all common industrial interfaces

Features

- Power and reactive power load sharing up to 16 units including load-dependent start / stop
- Engine start / stop and generator set measuring and protection
- Running hours balancing
- Breaker control: synchronization, open-close control, only-open control, breaker monitoring
- Dead bus closure negotiation
- PLC-like programming with Logics Manager
- 300-entry, time and date stamp log
- Operating hours / start / maintenance counters
- Configurable trip levels / delays / alarm classes
- Field configurable application settings
- Multi-level password protection

Protection

Generator Set

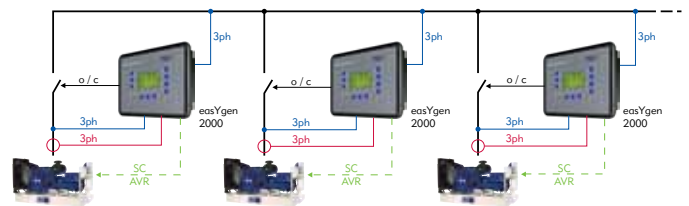
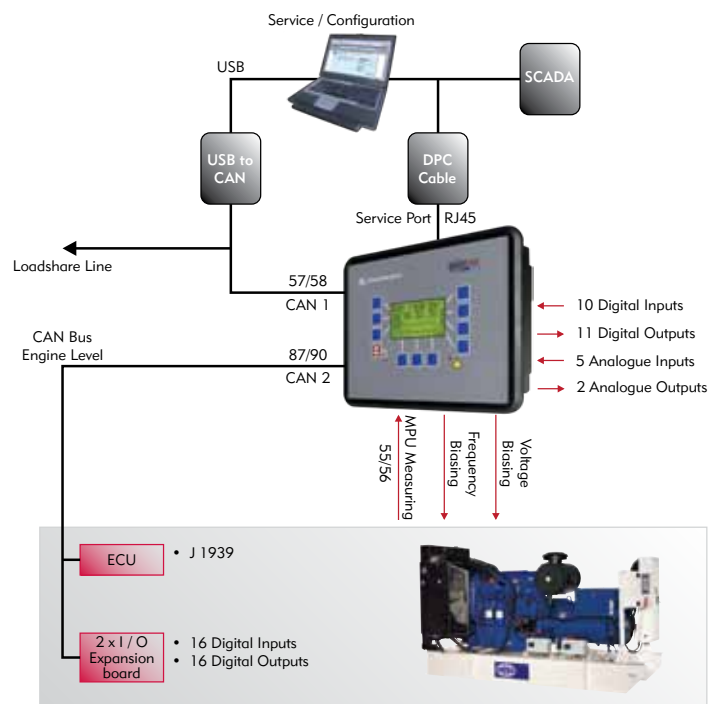
- Over / under voltage
- Over / under frequency
- Dead bus detection
- Overload
- Reverse / reduced power
- Time over current
- Instantaneous over current
- Inverse time over current
- Phase rotation
- Unbalanced load
- Power factor

Engine

- Over / under speed
- Battery over / under voltage
- Speed / frequency mismatch

Inputs / Outputs (I/O)

- 3 phase true r.m.s. generator set current / power
- 1 speed input (magnetic / switching)
- 10 configurable discrete alarm inputs
- Five configurable analogue inputs
- Four configurable analogue outputs (+/- 10 V, +/- 20 mA, PWM; configurable)
- Two CAN bus interface (load share, Toolkit)
- 11 Relay Outputs Isolated
- RS485 Modbus interface
- Service Port (RS232 – Woodward DPC cable required)



easYgen-3200

Synchronising Control Panel

The easYgen-3200 offers industry leading power management and control

The easYgen-3200 is a versatile control unit, incorporating all the features of the easYgen-2500 including enhanced load sharing, and is adaptable to every application. Typical applications include co-generation, standby, AMF, peak shaving, import / export or distributed generation. This control panel is suitable for synchronising up to 32 generator sets running in island mode, mains parallel and multiple unit mains parallel operations.

easYgen-3200



Benefits

- Capable of generator set-to-set, set-to-mains and multiple set-to-mains synchronisation for up to 32 generator sets
- Enhanced system flexibility meets demanding customer specifications
- User friendly interface via 320 x 240 pixel graphical interactive 5.7" LCD
- Easy system navigation via programmable soft keys
- Multilingual capability: English, Chinese, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish and Finnish
- Multiple communication protocols for communication with Engine Control Units (ECUs), external I/O boards, PLCs and modems

Features

- Power and reactive power load sharing up to 32 units including load-dependent start / stop
- Engine start / stop and generator set measuring and protection
- Automatic base loading
- Running hours balancing
- Import / export control
- Dead bus closure negotiation
- ECU monitoring and alarm management as well as remote start / stop and control commands
- PLC-like programming with Logics Manager
- 300-entry, time and date stamp log
- Operating hours / start / maintenance counters
- Configurable trip levels / delays / alarm classes
- Field configurable application settings
- Multi-level password protection
- RP3000 remote display panel available for management and control from adjacent plant room

Protection

Generator Set

- Over / under voltage and frequency
- Dead bus detection
- Overload
- Unbalanced load
- Reverse / reduced power
- Time over current
- Instantaneous over current
- Measured ground fault
- Phase rotation
- Power factor

Engine

- Over / under speed
- Battery over / under voltage
- Auxiliary excitation
- Speed / frequency mismatch

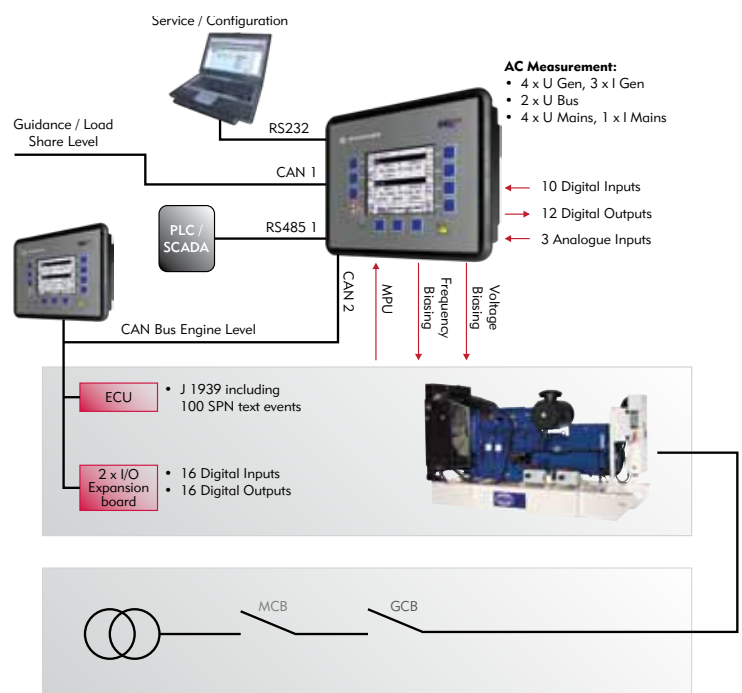
Mains

- Over / under voltage and frequency
- Phase shift
- Rotation field

Inputs / Outputs (I/O)

- Two separate sets of 3-phase true r.m.s. voltage measuring inputs for the generator set and mains, and 2-phase busbar voltage
- 3-phase true r.m.s. generator set current / power
- 1-phase true r.m.s. current input freely configurable
- 1 speed input (magnetic / switching)
- 10 configurable discrete alarm inputs

- Up to 12 programmable discrete outputs
- Three configurable analogue inputs
- Two configurable analogue outputs
- Two CAN bus communication networks (up to 32 participants, isolated)
- Two serial ports supporting Modbus RTU Protocol, RS-485 and RS-232 (isolated)



easYgen Control Panel Options

NetBiter® FGW200

Remote management for new and existing generator set installations

With software designed exclusively for FG Wilson, the FGW200 offers new opportunities for remote access over the internet and mobile phone. The NetBiter unit is suitable for use in new and existing installations due to control panel Auto Detect software which offers plug and play capability.



Remote management that takes customer service to a new level by:

- Reducing the need to travel to remote sites for maintenance purposes
- Minimising downtime with instant information about equipment health
- Theft prevention through generator set tracking
- Fuel level monitoring to optimise fuel inventory
- Start up logging to help prevent generator set misuse
- Allowing multiple project and device management through NetBiter.net

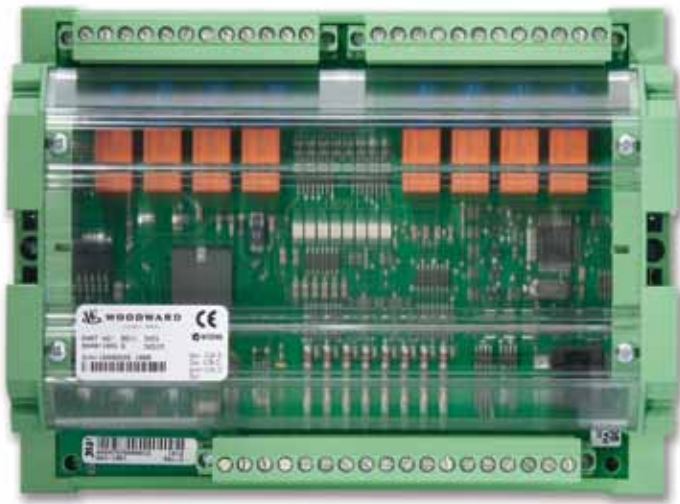
Features

- New Auto Detect software allows retrofit to PowerWizard 2.0, PowerWizard 2.1, easYgen-2500, easYgen-3200 control panels and ATI transfer panels
- Built in web interface for data monitoring
- Built in alarm manager for SMS, email and SNMP
- Built in data logger of historical trends
- GSM/GPRS modem included
- All software included, easily upgraded remotely and provided with no licensing cost

easYgen Control Panel Options

I/O Expansion Module

Connection to and from external system devices enabling more flexibility to meet your specific power requirements.



Features

- 8 configurable discrete alarm inputs
- 8 configurable relay outputs
- Connection to easYgen control panel via CAN bus
- Input and output configuration via onboard easYgen relay manager
- Remote control of output relays via CAN bus
- The I/O Expansion Module can be used with other manufacturer's controls. Consult Woodward product manual 37135 for information regarding the address assignments of the CAN bus interface