ACGEN 2.0 & ICGEN 2.0

Enhanced microprocessor modules for generator control

CRE TECHNOLOGY offers 2 enhanced microprocessor modules for generator control.

These modules can be fully programmed either by the front face or either with a PC software free of charge and offer: A graphic display, Events logging with date and time, Modbus RTU RS85 communication port, Configurable Inputs / Outputs and 2 years warranty.

- **ACGEN 2.0:** Auto start controller with remote start/stop

- **ICGEN 2.0:** Auto transfer switch controller

ACGEN 2.0 MODULE

ICGEN 2.0 MODULE

FEATURES

ACGEN 2.0 BENEFITS

The ACGEN 2.0 is a complete auto start controller with remote start/stop for a single generating set operating in standby mode. This controller is used for automatic and manual control of generators. The test feature allows you to set various daily or weekly self tests of the generator. ACGEN2.0 module also handles OpEx feature for the control of fuel costs.

- Back-lit LCD graphic display with multiple information pages
- Help button for on-board instructions and multiple password access
- 57 configurable alarms and protections, high accuracy TRMS measurement
- Date and time (real time clock with battery)
- 3 languages available on board (English, French, Italian)
- 250 engine history events log and data-logger
- System statistics: engine, alternator
- Fully programmable by keyboard & easy set up
- Engine speed measurement with magnetic pick-up or alternator frequency
- Modbus communication

PROTECTIONS

- Low oil/ coolant level
- Ground protection alarm & High fuel consumption
- Start/Stop phase
- Battery maintenance & stop failure
- Fuel low/High leakage
- Unexpected consumption & service
- Refueling timeout & Remote start/stop
- Warranty expired
- Charger alternator failure & Test failed
- Low/High temperature alarm (digital)
- Battery charger alarm & emergency button
- Feedback generator breaker & System locked
- User alarm 1/2/3

- Faulty start & Mechanical fault
- Low/High frequency generator
- Low/High voltage generator
- Wrong phase sequence generator
- Current overload & short-circuit
- High temperature prealarm/alarm (analog)
- Low fuel prealarm/alarm (analog)
- Low oil pressure prealarm/alarm (analog)
- Low/High battery voltage
- Low/High RPM value & low autonomy

ICGEN 2.0 BENEFITS

The ICGEN 2.0 is a complete auto transfer switch controller with remote start/stop for a single generating set operating in standby mode. All mains parameters are checked and in case of failure, the controller will provide a remote start signal to the generator.

When the mains reappear, the ICGEN 2.0 opens the genset breaker, switches back the load on the mains and stops the generator after a programmable cooling time.

- Back-lit LCD graphic display with multiple information pages, help button for on-board instructions, multiple password access
- 26 configurable alarms and protections, high accuracy TRMS measurement
- Date and time (real time clock with battery),
- 3 languages available on board (English, French, Italian)
- System statistics: alternator and mains
- Fast & easy setup, 250 engine history events log, Modbus communication.

PROTECTIONS

- Ground protection alarm & Test active
- Battery maintenance, faulty mains & Test failed
- Battery charger alarm & Emergency button
- Feedback KG/Feedback KR, system locked & Faulty start

- Low/High frequency generator & voltage generator
- Wrong phase sequence generator
- Current overload & short-circuit
- Low/High frequency mains & voltage mains
- Wrong phase sequence mains, user alarm 1/2/3
- Feedback generator breaker & System locked

CE EAC

Part number: A63Z1 - ACGEN 2.0 Module
Part number: A63Z2 - ICGEN 2.0 Module

RELATED PRODUCTS & CABLES

TCGEN 2.0 – Ref A63Z0
CRE MONITOR - Configuration software

APPLICATIONS

ACGEN 2.0 is flexible and complete, ideally made for Genset panel refit, especially large series panels like Power Wizard, PCC or manual local panels.

ICGEN 2.0 is a user friendly ATS controller offering complete features and the capability of being entirely setup from the front panel display.

SPECIFICATIONS

ACGEN 2.0 CURRENT, VOLTAGE AND FREQUENCY

- DC range: 8 to 32 V_{DC} / AC supply range: 50 to 500 V_{AC}
- Typical standby current: 100 mA_{DC}
- Maximum operating current: 350 mA_{DC}
- Generator breaker relay output: 8 A / 250V
- DC outputs: 6A / 28V and 2A/28V
- Charge excitation current: 54mA @ $12V_{DC}$.
- Voltage dropouts immunity on the power supply : 0V for 200ms

ACGEN 2.0 COMMUNICATION PORTS

- 1 RS232 & 1 RS485 port for Modbus RTU communication
- 1 CAN bus J1939 for engine communication (Scania EMS, Volvo EMS, Volvo EDC, Perkins, John Deere, Deutz, Iveco, Cummins, MTU)

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- Maximum operating current: 350 mA_{DC}
- Generator breaker relay output: 8 A / 250V
- Mains breaker relay output: 8 A / 250V
- DC outputs: 6 A /28V and 2 A/28V

- Voltage dropouts immunity on the power supply : 0V for 200ms

ICGEN 2.0 COMMUNICATION PORTS

- 1 RS232 & 1 RS485 port for Modbus RTU communication

ICGEN 2.0 MEASURMENTS

GENERATOR
- V_{AC}:L1/L2-L2/L3-L3/L1
- V_{AC}:L1N-L2N-L3N
- kVA, kW & kVAR: L1-L2-L3-Total
- kWh
- cos (φ): L1-L2-L3 / Frequency (Hz) / Run hours

LOAD
- Currents: L1-L2-L3

MAINS
- V_{AC}: L1/L2-L2/L3-L3/L1
- V_{AC}: L1N-L2N-L3N
- kVA, kW & kVAR: L1-L2-L3-Total
- kWh
- cos ( ): L1-L2-L3
- Frequency (Hz)

DIRECTIVES

- EN61000-6-(2), (4)
- IEC61000-4-(2), (3), (4), (5), (6)
- IEC60086-2- (1), (2), (6) +
- IEC60086-2-30 - CISPR 16-1

ENVIRONMENT

- Operating temp.: -30°C + 70°C
- Maximum humidity: 95% non-condensing.
- Front panel protection: IP65

SIZE AND WEIGHT

- Dimensions: 245x182x40mm
- Panel cut-out dimensions: 220x160 mm minimum.
- Weight: 750 g