BERNINI
design

State of

the Art

Digital

Generator

Controller

BE21

PROGRAMMABLE GENERATOR CONTROLLER

BERNINI design

BE 21

BE21 provides inexpensive A.M.F and Generating Set control and monitoring with digital accuracy.
This microprocessor-based controller includes 6 push-buttons, 24 LED lamps, 4-digits display, 6 relay outputs, 8 digital inputs, 5 analogue inputs, 28 programmable parameters, Hour-meter, Digital Calibration, 8 display modes, 14 display-messages and 4 operating modes.

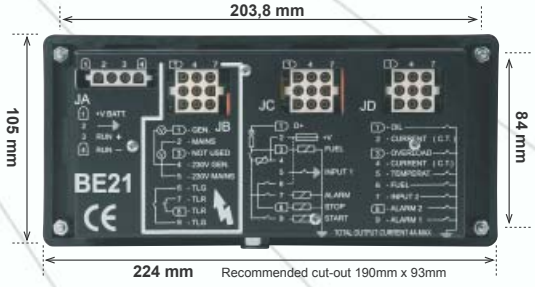
TECHNICAL DATA

Display	Parameter
Ch.0	Mains Failure Delay
Ch.1	Mains Restore Delay
Ch.2	Mains Under-voltage(V)
Ch.3	Mains Over-voltage(V)
Ch.4	Warm Up Timing
Ch.5	Cooling Down Timing
Ch.6	Generator Under-Voltage (V)
Ch.7	Generator Over-Voltage (V)
Ch.8	Generator Under-Hz (Hz)
Ch.9	Generator Over-Hz (Hz)
Ch.10	Current Transformer Size (A)
Ch.11	Overload Setting (A)
Ch.12	G Failure Alarm (Code)
Ch.13	Glow/Choke Control (Code)
Ch.14	Engine Crank Timing
Ch.15	Engine Running Trigger (V)
Ch.16	Engine Rest Timing
Ch.17	Number of Starting Attempts
Ch.18	Low Oil Pressure By-Pass Delay
Ch.19	Stop Solenoid Timing
Ch.20	Alarm Output Mode or Timing
Ch.21	JC7 Output Control Mode (Code)
Ch.22	Input 1 Control (Mode)
Ch.23	Belt Break Control (Code)
Ch.24	Temperature Switch (n.c/n.o)
Ch.25	ALARM 2 Switch (n.c/n.o)
Ch.26	Automatic Periodic Test (Days)
Ch.27	Automatic Engine Test (Minutes)

TECHNICAL DATA

Terminal	Description
JA1	+V Battery (Supply)
JA2	-v Battery (Supply)
JA3	Charge Control Input
JA4	Charge Control Input
JB1	Generator Voltage Input
JB2	Mains Voltage Input
JB3	Not Used
JB4	Generator Voltage Input
JB5	Mains Voltage Input
JB6	KG Relay Output (n.o.)
JB7	KM Relay Output (n.c.)
JB8	KM Relay Output (n.c.)
JB9	KG Relay Output (n.o.)
JC1	Charger Excitement output
JC2	+V Relay Contact Supply
JC3	Fuel Solenoid Output
JC4	Not Used
JC5	Mains Simulation/Test Switch Input
JC6	Stop Solenoid Output/Dry Contact
JC7	Alarm/Preheat/Choke Relay Output
JC8	Stop Solenoid Output/Dry Contact
JC9	Start Relay Output
JD1	Oil Pressure Contact input
JD2	Current Transformer Input
JD3	Overload Relay Input
JD4	Current Transformer Input
JD5	High Temperature Switch Input (note*)
JD6	Low Level Fuel Switch Input
JD7	Remote Lock Switch Input
JD8	Alarm 2 Switch Input (note*)
JD9	Alarm 1 Switch input
(note*)	The polarity of the switch is programmable

REAR VIEW



SIDE VIEW

Specifications

- *DC supply:*
  Battery plant 12-24Vdc / 250mA MAX
- *Mains / Generator Input Voltage Range:*
  24Vac up to 500Vac
- *Operating Temperature Range / Humidity:*
  -30°C to +70°C /0-95% non condensing
- *DIN Size / Cut-out:*
  DIN 192x96 (double size 96x96) / 190 mm x 93 mm
- *DC Relay Outputs:*
  4 Amps dc at supply voltage (total current of the Outputs)
- *AC Relay Outputs:*
  8 Amps / 250Vac (external 1A Fuses are required)
- *Shipping Weight / Box Dimensions:*
  850Gr. / 245 mm x 135 mm x 60 mm

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