

# MDA PLUS



## Manual and remote start unit

- Simple and basic unit
- Basic engine protection
- Manual and remote control
- Display
- Automatic or manual start/stop
- Output extensions



The MDA PLUS is a comprehensive generator control unit, designed to start and stop the generating set both manually and remotely.

The manual control is operated via the pushbuttons on the front panel. The remote control is activated via the remote start input signal on the module.

### A SIMPLE PRODUCT FOR COMPREHENSIVE FUNCTIONS

In the RUN position, the MDA PLUS controls the automatic start and stop sequence of the generating set. Once the generator is running, it monitors internal protections and external fault inputs. If a fault condition occurs, the unit shuts down the engine automatically and indicates the source of the failure with a warning lamp.

### FRONT PANEL CONFIGURATION

The MDA PLUS provides a comprehensive set of digitally adjustable timers, threshold levels, input and output configurations and operating sequences. The unauthorized access to program parameters is prevented by the program lock input. All programs may be modified via front panel pushbuttons, and do not require an external unit.

### TELEMETRY AND REMOTE PROGRAMMING

The MDA PLUS module provides the user with large telemetry facilities via its standard RS-232 serial port. The unit can be connected either to a PC or a modem for remote communication. The PC software provides local, Local Area Network (LAN), internet and modem operation capabilities.

The PC program is used for the following purposes:

- parameter upload/download
- remote monitoring
- diagnostics and analysis

### CONFIGURABLE INPUTS/OUTPUTS

The unit has 7 configurable digital inputs and 2 configurable analog inputs. The remote start input is not programmable.

The unit also provides 4 relay outputs of which 2 have programmable functions which are selected in a list. In addition to genset control signals, any specific alarm information may be transmitted via a relay output.

## STATISTICS AND EVENT LOGGING

The following incremental counters provide statistics about the past performance of the generating set: engine hours run, engine hours to service, time to service, number of crank attempts, and number of genset runs. The MDA PLUS also records the last 12 events. These records are displayed on the software.

## FEATURES

- Both manual and remote starting and stopping,
- Start/ stop sequences
- Engine protections
- Generator protections
- Built in alarms and warnings
- 3 phase genset voltage inputs
- 3 phase genset CT inputs
- Periodic maintenance request indicator

- Hours run counter
- Event logging
- Statistical counters
- Password capability
- On-site adjustable parameters
- RS-232 serial port
- Free MS-Windows Remote monitoring Software
- Remote Start operation available
- Survives cranking dropouts
- Plug-in connection system for easy replacement

## INPUTS/OUTPUTS

- Configurable analog inputs: 2
- Configurable digital inputs: 7
- Configurable relay outputs: 2
- Total relay outputs: 4
- Output extension capability

## MEASUREMENTS

- Engine oil pressure
- Engine coolant temperature
- Genset active power
- Genset power factor

## CHARACTERISTICS

### Current, voltage and frequency

- Alternator voltage: 15-300 V-AC (Ph-N)
- Alternator frequency: 0-100 Hz.
- DC supply range: 9.0 to 33.0 V-DC
- Cranking dropouts: survives 0 V for 100ms.
- Typical standby current: 100 mA-DC
- Max. operating current: 300 mA-DC (relay outputs open)
- Relay outputs: 10 A / 28V
- Charge excitation current: 54mA @ 12V-DC.

### Component details

- Analog input range: 0-5000 ohms.
- Serial port: RS-232, 2400 bauds, no parity, 1 stop bit.

### Environment

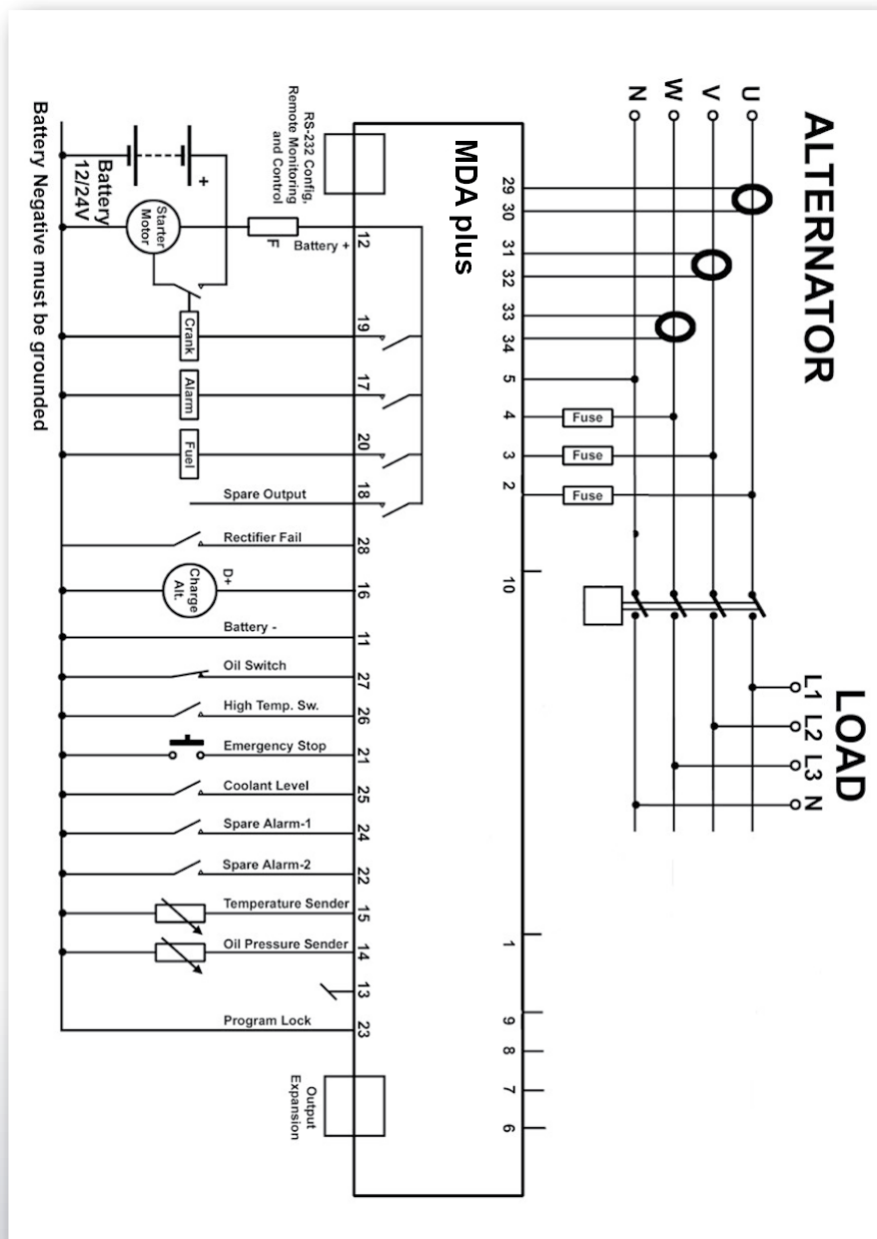
- Operating temp.: -20°C (-4°F) to 70°C (158°F).
- Storage temp.: -30°C (-22°F) to 80°C (176°F).
- Maximum humidity: 95% non-condensing.
- Protection: IP65 for the front panel, IP30 for the rear.
- Case Material: high temperature (110°C)

### Dimensions and weight

- Dimensions: 155 x 115 x 48 mm (WxHxD)
- Panel cut-out dimensions: 151x111 mm minimum.
- Weight: 310 g (approx.)

### Homologation

- EMC
- Low voltage



### PART NUMBER

A60Y3

### SOFTWARE

Rainbow 2.026

### CABLE

A60R2

### ASSOCIATED PRODUCTS

Complementary: UNIGEN FAMILY