

# DKG-119 MANUAL AND REMOTE START UNIT

## DESCRIPTION

The DKG-119 is a comprehensive generator control unit designed to start and stop the generating set both manually and remotely. The manual control is made using the pushbuttons on the front panel. The remote control is made via the **REMOTE START** input signal.

In **AUTOMATIC** position, DKG-119 monitors the **REMOTE START** signal and controls the automatic starting, stopping and load transfer 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 failure source with the corresponding red led lamp and text.

The operation of the unit is controlled with front panel pushbuttons. The **RUN**, **AUTO** and **STOP** pushbuttons select the operating mode. Other buttons select the display parameter scroll, alarm mute and lamp test functions.

The DKG-119 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 a 3 level password protection. All programs may be modified via front panel pushbuttons, and do not require an external unit.

The fault conditions are considered in 3 categories as Warnings, Load dumps and Shutdown Alarms. Measured values have separate programmable limits for warning and shutdown conditions. The unit is able to send SMS messages in fault conditions.

Last 100 faults are stored in the event log file. The event log includes a comprehensive list of measured genset parameters at the time that the fault has occurred.

The unit offers the magnetic pickup input as standard for engine rpm measurement.

The service request warning turns on at the expiration of either engine hours or time limits.

It is possible to monitor and control the operation of the system locally or remotely with the WINDOWS based RAINBOW program (external adapter required).

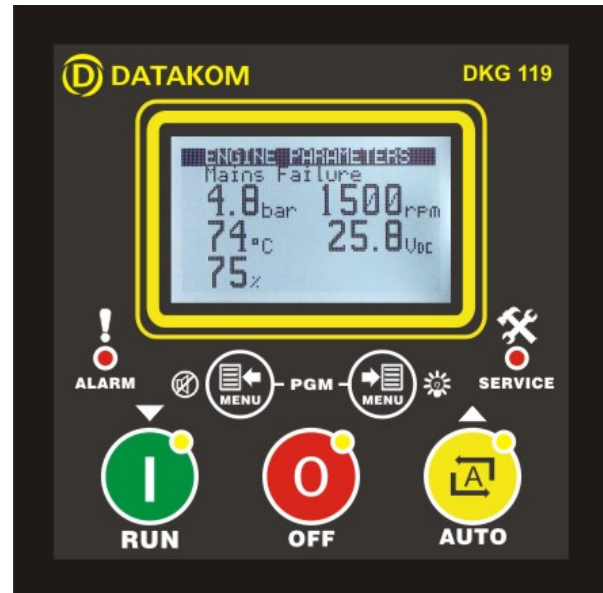
The unit supports MODBUS protocol enabling communication with PLCs and building management systems.

The unit is designed for front panel mounting. Connections are made with 2 part plug and socket connectors.

The unit offers triple language support. Default languages are English-Turkish and Chinese.

## MEASUREMENTS

Generator Volts: L1-N  
 Generator Amps: L1  
 Generator KW: L1  
 Generator pf: L1  
 Generator Frequency  
 Engine rpm  
 Battery Voltage  
 Engine Coolant Temperature  
 Engine Oil Pressure  
 Fuel Level



## FEATURES

**True RMS measurements**  
**Both manual and remote starting and stopping**  
**Engine control**  
**Gas engine support**  
**Engine idle speed control**  
**Generator protection**  
**Built in alarms and warnings**  
**Magnetic pickup input**  
**Remote Start operation**  
**Dual genset mutual standby operation**  
**Load shedding, dummy load**  
**Periodic maintenance request indicator**  
**Event logging with measurements**  
**Statistical counters**  
**Field adjustable parameters**  
**Logic level serial port**  
**Firmware downloadable from serial port**  
**Free MS-Windows Remote monitoring SW:**  
 -monitoring and control  
 -download of parameters  
 -upload of parameters  
**GSM SMS message sending on fault**  
**MODBUS communications**  
**Graphic LCD display (128x64 pixels)**  
**User friendly graphic indicators**  
**Triple language support**  
**Customer logo display capability**  
**Protected semiconductor digital outputs**  
**Configurable analogue inputs: 3**  
**Configurable digital inputs: 5**  
**Configurable relay outputs: 2**  
**Total relay outputs: 4**  
**Survives cranking dropouts**  
**Sealed front panel**  
**Plug-in connection system for easy replacement**

