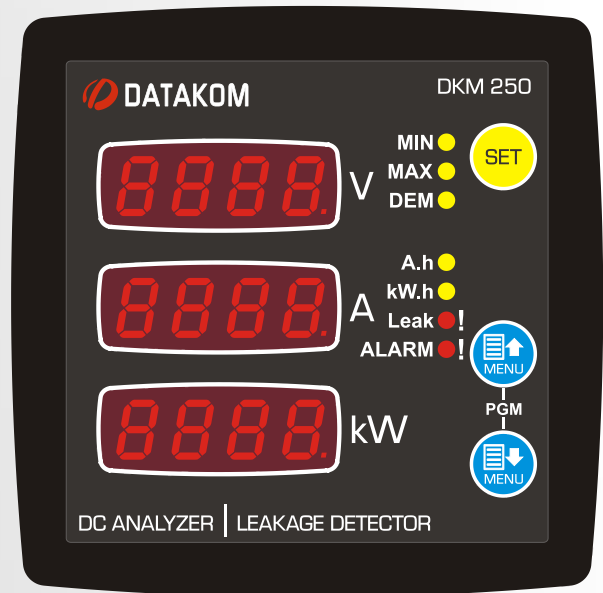


DKM-250

DC ENERGY ANALYZER & EARTH LEAKAGE DETECTOR



DESCRIPTION

The DKM-250 is a precision instrument designed for measuring, displaying and remote monitoring earth leakage and various DC parameters in a DC distribution box.

The unit features a 32-bit ARM core microcontroller.

The unit is supplied from the measuring DC voltage input. Operating range is between 19 and 150VDC.

The current input of the unit is isolated from the rest of the circuit and has different circuit options:

- External current shunt (standard)
- Internal current shunt
- Hall Effect sensor input
- 4-20mA analog input

The unit has 2 digital inputs and 2 relay outputs, both of them programmable for required functions.

Thanks to its isolated RS-485 Modbus RTU comport, the device is free from ground potential difference issues and data are safely transferred to automation and monitoring systems. Program parameters may be uploaded to the unit through the RS-485 port.

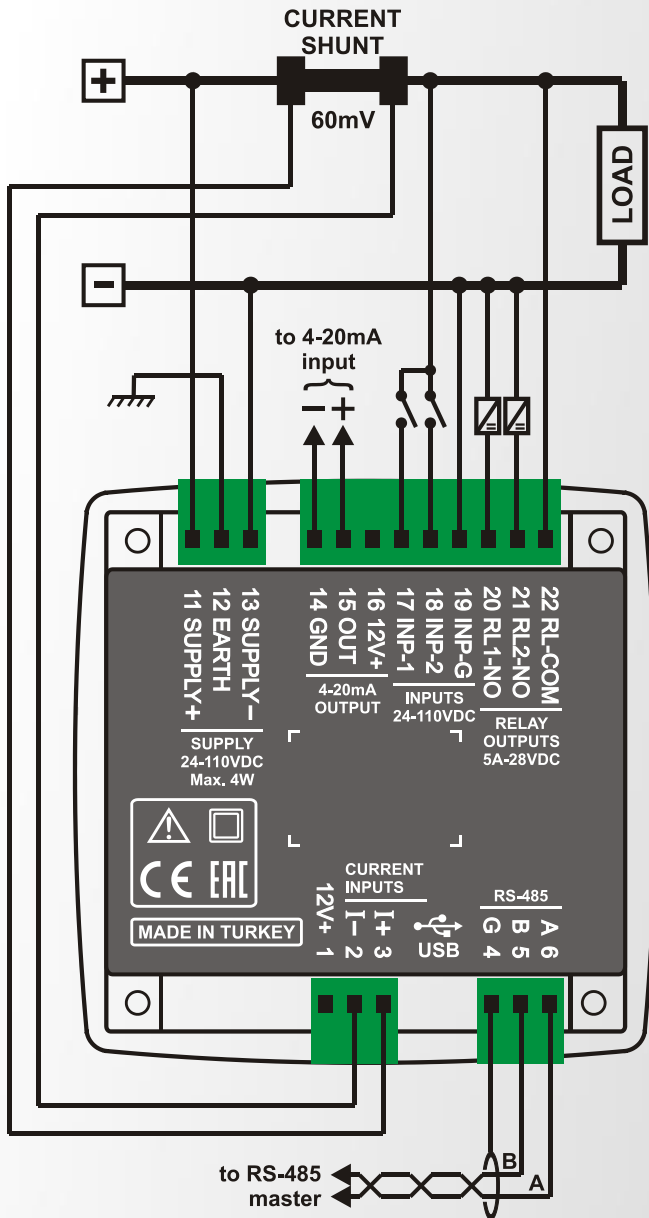
The unit may output any measured value as analog signal through its 4-20mA port. This output allows easy connection to PLC systems.

FEATURES

- *Displays earth leakage in %*
- *Various current input options*
- *2 programmable relay outputs*
- *2 programmable digital inputs*
- *Programmable 4-20mA analog output*
- *Demand, Min & Max records*
- *Fully isolated RS-485 serial port*
- *MODBUS-RTU communications*
- *Bidirectional current & power measurement*
- *Bidirectional kW-h energy counter*
- *Bidirectional A-h counter*
- *Hours run counter*
- *Front panel programming*
- *Wide operating temperature range*
- *Sealed front panel (IP65 with gasket)*
- *Two part connection system*



CONNECTION DIAGRAM



TECHNICAL SPECIFICATIONS

Supply Input: 19-150VDC

Power Consumption: < 4W

Voltage Measurements Inputs:

0-70V Input Sensitivity: 0.02V

0-400V Input Sensitivity: 0.40V

Current Measurement Input:

Measurement range: -100mV to +100mV.

Accuracy: % 0.2

Isolation: 1000V AC, 1 minute

Internal Current Shunt Option:

Measurement range: 0-15A

Analog Output: 0-20mA

Analog Output Precision: 16 bit

Digital Input Range: 19 to 150VDC

Relay Outputs: 5 Amps @ 28VDC

Serial Port:

Signal type: RS-485

Protocol: Modbus RTU

Data Rate: 2400-38400baud

Isolation: 1000V AC, 1 minute

Operating Temp. Range: -20°C...+70 °C

(-4°F...158°F)

Max. Relative Humidity: %95 non-condensing

Protection Degree: IP 65 (Front panel, w. gasket)

IP 30 (Back panel)

Enclosure: Flame retardant, ROHS compliant
high temperature ABS/PC (UL94-V0)

Installation: Flush mounting with rear brackets

Dimensions: 102x102x53mm (WxHxD)

Panel Cutout: 92x92mm

Weight: 200 gr

EU Directives:

2014/35/EC (LVD)

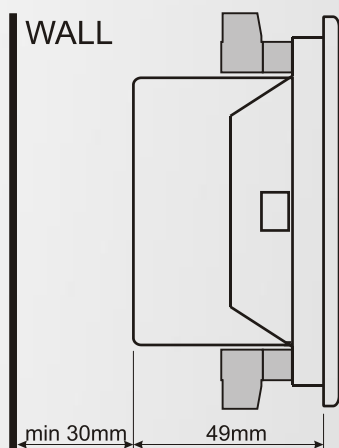
2014/30/EC (EMC)

Reference Standards:

EN 61010 (safety)

EN 61326 (EMC)

INSTALLATION



PANEL CUTOUT

