

# DIGITAL MULTIMETERS WITH ROGOWSKI COILS



 **Lovato**  
**electric**

ENERGY AND AUTOMATION

## DIGITAL MULTIMETERS WITH ROGOWSKI COILS

The **DMG611R...** kits are multimeters that, by reading the current through Rogowski coils, are the ideal solution for the installation of measuring points on systems where the classic solid-core or split-core CTs are inapplicable or too expensive. The included calibration ratio is specific to each individual kit to guarantee measurement accuracy.



■ **Measure kit:** DMG611 multimeter + 3 Rogowski coils

■ **Calibration report:** all kits are calibrated during the testing process and come with the relevant calibration report

■ **Integrated communication:** built-in RS485 with modbus RTU and ASCII protocols

■ **Expandability:** support of EXP modules (EXP1013 Ethernet module with modbus TCP protocol included)

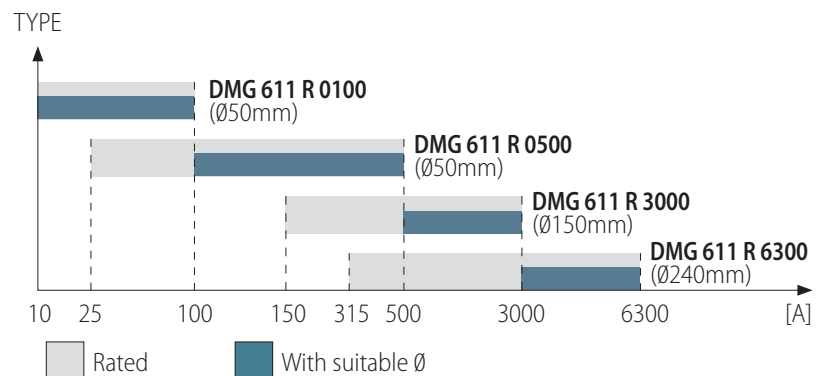
■ **Front optical port:** to support programming through CX 01 dongle and to use the functionality of CX 02 Wi-Fi dongle

■ **Safety:** it is not necessary to short the secondary before disconnecting the coil

### MEASUREMENTS

- voltage, current, frequency
- active, reactive and apparent power
- power factor
- high, low and average value for all measurements
- maximum demand of power and current values
- voltage and current asymmetry
- unbalancing active power
- total harmonic distortion (THD) and harmonic analysis of voltage and current up to the 15<sup>th</sup> order
- energy meters for active, reactive and apparent values
- hour counter.

### SELECTION GUIDE



### OPERATIONAL CHARACTERISTICS

#### VOLTAGE INPUTS

- auxiliary supply rated voltage: 100...440VAC/110...250VDC
- measurement range: 50...720VAC L-L

#### CURRENT INPUTS

- maximum current I<sub>max</sub>: 100A, 500A, 3000A, 6300A
- measurement range: 10...100% I<sub>max</sub> (DMG 611 R0100)  
5...100% I<sub>max</sub> (DMG 611 R0500...R6300)
- input type: Rogowski coils
- measure type: true RMS measurements (TRMS)

#### MEASUREMENT ACCURACY

- current:
  - ±0,5% (centered cable) ●
  - ±1% (cable near the coil) ●
- voltage: ±0,5% (50...720VAC)
- active power: ±1%
- active energy: ±1%

#### ROGOWSKI COILS CONNECTION

- type of terminals: removable, 2-level push-in



### CERTIFICATIONS AND COMPLIANCE

Certifications obtained: EAC.

Compliant with standards: IEC/EN 61010-1, IEC/EN 61010-2-030, IEC/EN 61000-6-2, IEC/EN 61000-6-3.



## DIGITAL MULTIMETERS WITH ROGOWSKI COILS

ORDER CODE	DESCRIPTION
DMG 611 R 0100	Multimeter with backlight icon LCD, harmonic analysis, auxiliary supply 100...440VAC/110...250VDC, built-in RS485 serial port, multilanguage <sup>1</sup> . Current reading through 3 Rogowski coils included, max current 100A. Ø50mm. 2mt cable length
DMG 611 R 0500	Multimeter with backlight icon LCD, harmonic analysis, auxiliary supply 100...440VAC/110...250VDC, built-in RS485 serial port, multilanguage <sup>1</sup> . Current reading through 3 Rogowski coils included, max current 500A. Ø50mm. 2mt cable length
DMG 611 R 3000	Multimeter with backlight icon LCD, harmonic analysis, auxiliary supply 100...440VAC/110...250VDC, built-in RS485 serial port, multilanguage <sup>1</sup> . Current reading through 3 Rogowski coils included, max current 3000A. Ø150mm. 2mt cable length
DMG 611 R 6300	Multimeter with backlight icon LCD, harmonic analysis, auxiliary supply 100...440VAC/110...250VDC, built-in RS485 serial port, multilanguage <sup>1</sup> . Current reading through 3 Rogowski coils included, max current 6300A. Ø240mm. 2mt cable length

<sup>1</sup> Italian, english, french, spanish, portuguese, german.

## ACCESSORIES

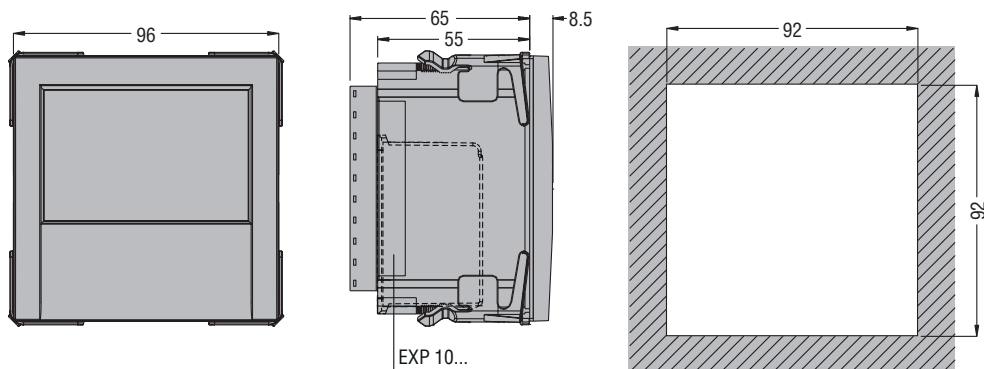


ORDER CODE	DESCRIPTION
<b>EXPANSION MODULES</b>	
EXP10 00	4 opto-isolated digital inputs
EXP10 01	4 opto-isolated static outputs
EXP10 02	2 digital inputs and 2 static outputs, opto-isolated
EXP10 03	2 relay outputs rated 5A 250VAC
EXP10 08	2 opto-isolated digital inputs and 2 relay outputs rated 5A 250VAC

ORDER CODE	DESCRIPTION
<b>COMMUNICATION PORTS</b>	
EXP10 10	Opto-isolated USB interface
EXP10 11	Opto-isolated RS232 interface
EXP10 12	Opto-isolated RS485 interface
EXP10 13	Opto-isolated Ethernet interface

ORDER CODE	DESCRIPTION
<b>COMMUNICATION DEVICES</b>	
CX 01	USB/optical dongle with PC-DMG611... connecting cable, for programming, data download, diagnostics and firmware upgrade
CX 02	Wi-Fi dongle for PC-DMG611... programming, data download diagnostics and cloning

## DIMENSIONS [mm]



## SOFTWARE

- **Sam1** app for Android and iOS smart devices;
- **Xpress** for configuration and remote control via PC;
- **Synergy** and **Synergy cloud** for supervision and energy management.



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