

# MAVOWATT 210 ROGOWSKI

## Flexible AC Current Probe based on the Rogowski Principle

3-447-116-03

1/4.22

- Flexible probe for high-accuracy measurements of AC current by being connected to MAVOWATT 210
- Wide range of applications in any three-phase system
- Designed for applications where space is limited and rigid-body current probes won't fit
- Broad frequency range is well-suited for measuring harmonics and power quality
- Precise measurements even with low currents, due to wide dynamic range and high sensor sensitivity



### Applications

The MAVOWATT 210 Rogowski are AC current probes utilizing the Rogowski principle. They can be used to measure AC current by being connected to MAVOWATT 210.

The flexible probes allow current measurements on conductors that are hard to reach. The flexible current transformers can be placed around one or several conductors of any type and design (i.e. insulated cable, busbars, pipes).

The MAVOWATT 210 Rogowski current probes are designed for AC measurements in any desired 3-phase system.

### Features

- High accuracy measurements for rigorous applications
- Protection type IP61
- High level of safety for the user:
  - Measurement category 1000 V / CAT III
  - 600 V / CAT IV
  - Unlimited overload capacity
  - Rated for continuous use
- Easy to operate in restricted space thanks to small sensor cross-section

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## Flexible AC Current Probe

### based on the Rogowski Principle

#### Technical Data

#### Mechanical Design

|               |         |
|---------------|---------|
| Protection    | IP61    |
| Coil length   | 40 cm   |
| Coil diameter | 15.5 mm |
| Window size   | 10.6 cm |
| Wire length   | 2 m     |

#### Ambient Conditions

|                       |                                       |
|-----------------------|---------------------------------------|
| Operating temperature | -20 ... +70 °C                        |
| Relative humidity     | 5% to 95%,<br>no condensation allowed |

#### Electrical Safety

|                     |                                   |
|---------------------|-----------------------------------|
| Measuring category  | 1000 V CAT III, 600 V CAT IV      |
| Pollution degree    | 2                                 |
| Dielectric strength | 7400 Vac at 50/60 Hz for 1 minute |

#### Electromagnetic Compatibility

|                       |                    |
|-----------------------|--------------------|
| Interference emission | EN 61326-2 class B |
| Interference immunity | EN 61326-2         |

#### Influencing Quantities

|                    |                                 |
|--------------------|---------------------------------|
| Frequency range    | 45 Hz – 65 Hz                   |
| Frequency response | 10 Hz – 20 kHz                  |
| Accuracy           | 0.5 % per IEEE C57.13 class 0.6 |
| Positioning error  | ±0.1%                           |

#### Relevant Standards

The instrument has been manufactured and tested in accordance with the following safety regulations:

|              |   |
|--------------|---|
| DIN EN 61326 | Electrical Equipment for Measurement, Control and Laboratory Use – EMC Requirements |
|--------------|---|

DIN EN 61010-1 Safety Requirements of Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

DIN EN 61010-1-031 Safety Requirements of Electrical Equipment for Measurement, Control, and Laboratory Use – Part 031: Safety Requirements for Hand-held Probe Assemblies for Electrical Measurement and Test

DIN EN 61010-2-032 Safety Requirements of Electrical Equipment for Measurement, Control, and Laboratory Use – Part 2-032: Particular Requirements for Hand-held and Hand-manipulated Current Sensors for Electrical Test and Measurement

#### Differences in Features

#### Measurement Range

|                               |                |
|-------------------------------|----------------|
| MAVOWATT 210 Rogowski 500/40  | 50 A – 500 A   |
| MAVOWATT 210 Rogowski 1500/40 | 150 A – 1500 A |
| MAVOWATT 210 Rogowski 3000/40 | 300 A – 3000 A |

#### Order Information

| Type                          | Article number | Description  |
|-------------------------------|----------------|--|
|                               |                | Flexible AC current probe based on the Rogowski principle, suitable for MAVOWATT 210 |
| MAVOWATT 210 Rogowski 500/40  | Z840A          | 50 – 500 A, measuring head length 40 cm  |
| MAVOWATT 210 Rogowski 1500/40 | Z840B          | 150 – 1500 A, measuring head length 40 cm  |
| MAVOWATT 210 Rogowski 3000/40 | Z840C          | 300 – 3000 A, measuring head length 40 cm  |

For additional information regarding accessories please refer to

- Measuring Instruments and Testers catalog
- [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)

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