



# RESIDUAL CURRENT MONITORING RCM 201-ROGO

Data Sheet

## TECHNICAL DATA

Rogowski coil	Technical data
Diameter	120, 200, 290, 390, 580 mm
Cable length connection line	3.0 m
Lock	Bayonet
Operating temperature	-30 °C to +80 °C (-22 °F ... 176 °F)
Storage temperature	-40 °C to +80 °C (-40 °F ... 176 °F)
Secondary voltage	100 mV/1kA @ 50 Hz
Overvoltage category	1000 V <sub>eff</sub> CAT III 600 V <sub>eff</sub> CAT IV
Protection class	IP67

Differential amplifier RCM 201-ROGO	Technical data	
Dimensions	22.5 x 100 x 110 mm ( W x H x D) 0.89 x 3.94 x 4.33 in ( w x h x d )	
Weight	Approx. 0.2 kg (0.44 lb)	
Power supply	24 V <sub>DC</sub> / 0.1 A	
Connections	Screw terminal (max. 2.5 mm <sup>2</sup> )	
Rogowski loop connection	Mini-Din 4-pole	
Rated response differential current measuring ranges	2.5 A - 125 A 0.5 A - 25 A 0.2 A - 10 A 0.1 A - 5 A	
Current measuring range setting	Manually using the key (> 3 sec) or Modbus (measuring range selection via micro-controller and PGA)	
Signal and alarm output test	Manually using the key (> 6 sec) or Modbus	
Operation and measuring range display	Measuring range display: Measuring range selection: Signal output: Alarm output:	LED green LED yellow LED yellow LED red
Nominal input voltage	100 μV / A	
Current output	0 - 40 mA ~	
max. current output for load = 0 Ω	70 mA ~	
Overload current (duration)	50 kA	
Overload current (max. 1 sec)	100 kA	
Transmission error	40 Hz ... 60 Hz	< 2%
	60 Hz ... 5 kHz	< 5%
Rated frequency	40 Hz - 5 kHz	
Load (40 mA output)	0 - 10 Ω	
Operating lock	via Modbus	

<b>Alarm output potential-free (Opto) (Programming via MODBUS)</b>	<b>Transistor output 24 V<sub>DC</sub> / 100 mA</b>
Output	Alarm normal (NO) Alarm inverted (NC)
Alarm functions	Residual current level Measurement loop circuit Overtemperature Undervoltage (24 V) Internal error
Response differential current Alarm output	10% - 100% (0.5% steps)
Hysteresis response differential current level	5% (0 - 30%)
Response time alarm output	10 sec (1 sec - 255 sec)

<b>Alarm output potential-free (Opto)</b>	<b>Transistor output 24 V<sub>DC</sub> / 100 mA</b>
Signal output functions	Residual current level normal (NO) Residual current inverted (NC)
Response residual current Signal output	5% - 100% (0.5% steps)
Signal output hysteresis	5% (0 - 30%)
Signal output response time	5 sec (1 sec - 255 sec)

<b>Interface</b>	<b>RS485 (electrically isolated)</b>
Communication protocol	MODBUS RTU
Baud rate	9600 - 250000; programmable via Modbus
Address	1 (1 - 255); programmable via Modbus
Protection class	IP30
Operating temperature	-20 °C ... 50 °C (-4 °F ... 122 °F)
Storage temperature	-25 °C ... 85 °C (-13 °F ... 185 °F)

Janitza electronics GmbH  
Vor dem Polstück 6  
D-35633 Lahnau  
Support Tel. +49 6441 9642-22  
E-mail: [info@janitza.de](mailto:info@janitza.de)  
[www.janitza.de](http://www.janitza.de)

Subject to technical alterations

**Janitza**<sup>®</sup>