Smart Energy & Power Quality Solutions

RESIDUAL CURRENT MONITORING

RCM 201-ROGO

Data Sheet

06/2021

Dok.-Nr. 2.551.021.0.d

Janitza®

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_{eff} CAT III 600 V_{eff} 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	external, potential separated DC voltage, 24 V_{DC} / 0.1 A	
Transport and storage - Storage temperature - Relative humidity	 -40 °C to +80 °C (-40 °F ... 176 °F) 0 to 90% RH (without condensing)	
Ambient conditions during operation - Operating temperature - Relative humidity	 -20 °C to +60 °C (-4 °F ... 140 °F) 0 to 75% RH (without condensing)	
Operating height	0 .. 2000 m (1.24 mi) above sea level	
Pollution degree	2	
Protection class	IP30	
Connections	Screw terminal (max. 2.5 mm²)	
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

Alarm output potential-free (Opto) (Programming via MODBUS)	**Transistor output 24 V_{DC} / 100 mA**
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)

Alarm output potential-free (Opto)	**Transistor output 24 V_{DC} / 100 mA**
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)

Interface	**RS485 (electrically isolated)**
Communication protocol	MODBUS RTU
Baud rate	9600 - 250000; programmable via Modbus
Address	1 (1 - 255); programmable via Modbus

Janitza electronics GmbH
Vor dem Polstück 6
D-35633 Lahnau
Support Tel. +49 6441 9642-22
E-mail: info@janitza.de
www.janitza.de

Janitza®