



RESIDUAL CURRENT MEASURE- MENT DEVICE

RCM 202-AB

(as of firmware 1.3.0)

Data sheet

APPLICATION AND FUNCTION

The RCM-202-AB is used with connected current transformers to measure and monitor residual currents in TN and TT systems (grounded AC systems). The main functions of the RCM-202-AB are:

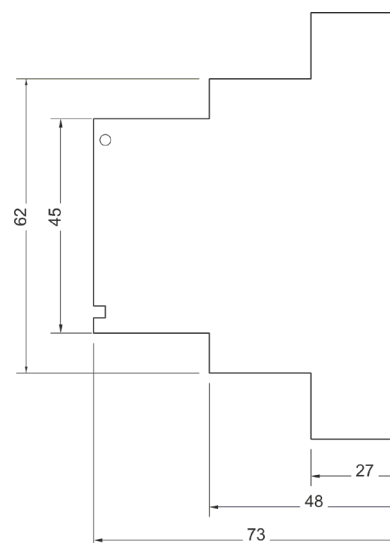
- Residual current measurement via up to two connected current transformers
- Converter connection monitoring for wire breakage or short circuit per channel
- Evaluation of residual currents (differential currents) type A and B according to IEC 62020
- Detection of sinusoidal AC residual currents with frequencies up to 20 kHz (type B+)
- Memory for measured values and extreme values with time stamp
- parameterizable response thresholds per channel (warning message and alarm message)
- parameterizable delay times and reset delay times of the response messages
- Indication of operating and error messages in the display
- Communication via Modbus (RS-485 interface/Modbus RTU)

DEVICE VIEWS

Front view



Side view



Device dimensions in mm

TECHNICAL DATA

General	
Supply voltage U_s	AC 90 to 230 V +/- 10% OVC III, 50/60 Hz
Operating mode	Continuous operation
Power consumption (own consumption)	8 W
Area of application	Indoor use
Measuring channels	
Number of measuring channels	2 (current transformers, can be connected)
Measured value acquisition	Parallel, true RMS
Evaluation	Residual current types A and B to IEC 62020
Rated residual current $I_{\Delta n}$	Configurable, 20 mA ... 20 A
Response delay	parametrizable, 10 ms to 10 s
Reset delay	parametrizable, 10 ms to 10 s
Transformer connections	
Connection to current transformers	Line resistance max. 2 Ω
Transformer cable	2-conductor
Displays, messages and memory	
Full graphic display (LCD)	128 x 64 pixels
LED status	Three-color
Controls	3 buttons
Menu languages	German, English, Spanish
Date and time	With RTC, zero-voltage safe
Configuration	On RCM 202-AB in the menu
Messages	Display/ LED/ Modbus/ digital outputs
Electromagnetic compatibility (EMC)	
Compliant with IEC/EN 61326-1	

Connections	
Interface/protocol	RS-485/Modbus RTU
Transformer connection	2 x K/L (I1 and I2)
Digital outputs	2
Analog outputs	2 x 4 ... 20 mA
Supply voltage connection	N/L
Environmental conditions	
Ambient temperature (operational)	-5 to +55 °C (23°F to 131°F)
Storage temperature	-25 to +70 °C (-13°F to 158°F)
Altitude	0 to 2000 m (0 to 1.24 mi)
Relative humidity	Maximum relative humidity 80% at temperatures up to 31°C, decreasing linearly up to 50% relative humidity at 40°C, up to 25% relative humidity at 55°C
Pollution degree	2
Installation conditions	
Mounting orientation	Vertical/ horizontal
Mounting	Rail mounting to DIN EN 60715
Device dimensions (W x H x D)	71 x 90 x 73 mm (2.78 x 3.54 x 2.87 in)
Horizontal pitch	4 HP
Protection level to DIN EN 60529	IP20
Protection class	II
Flammability classification	UL 94V-0
Weight	170 g (0.375 lb)

CURRENT TRANSFORMERS

Transformer type	Inner window (mm)	Separable	Transformation ratio	Transformation ratio	Information
CT-AC RCM 35N	35	-	700:1	20000	
CT-AC RCM 80N	80	-	700:1	20000	
CT-AC RCM 110N	110	-	700:1	20000	
CT-AC RCM 140N	140	-	700:1	20000	
CT-AC RCM 210N	210	-	700:1	20000	
KBU23D	20 x 30	•	600:1	18000	
KBU58D	50 x 80	•	600:1	18000	
KBU812D	80 x 120	•	600:1	18000	
DACT20	20	-	600:1	18000	
CT-AC RCM A110N	110	•	700:1	20000	
CT-AC RCM A150N	150	•	700:1	20000	
CT-AC RCM A310N	310	•	700:1	20000	
Bender W1-S35	35	-	600:1	18000	From firmware version V1.0.3
Bender W3-S105	105	-	600:1	18000	From firmware version V1.3.1
Bender W4-S140	140	-	600:1	18000	From firmware version V1.3.1
Socomec ΔIC200	200	-	600:1	10000	From firmware version V1.4.0

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Subject to technical alterations.

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