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DATA SHEET

RU

Produal

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RU room unit



RU is a simple room unit designed to be used with the CU and CU-LH control units or as a stand-alone Modbus RTU slave device. The basic version has a built-in temperature sensor and a setpoint knob.

The setpoint knob has an endless rotation function. The indicator lights around the knob indicate the current temperature setpoint. Building management system can reset the setpoint via bus.

The following options are available:

- CO_2 measurement (-CO2 models)
- Relative humidity measurement (-RH models)
- One or two buttons (/)
- Display with backlight adjustment (-D models)

You can connect this room unit to the CU and CU-LH control units with four wires. Use two-pair twisted cable or similar cable between the room unit and the control unit. Use one pair for Modbus communication and one pair for supply power.

Technical specifications

Property	Value
Supply	24 Vac/dc, < 1 VA (< 2 VA in -CO2 models)
Temperature measurement	
Range	0...50 °C
Accuracy (18...26 °C)	±0.5 °C
Humidity measurement (-RH models)	
Range	0...100 %rH
Accuracy (25 °C)	typ. ±2 %rH (20...90 %rH), max. ±3 %rH
CO_2 measurement (-CO2 models)	
Range	0...2000 ppm
Accuracy (25 °C)	typ. ±40 ppm +3 % from reading (automatic background calibration)
Long term stability / year	< 2 % FS (automatic background calibration)
Time constant	< 2 min
Communication	

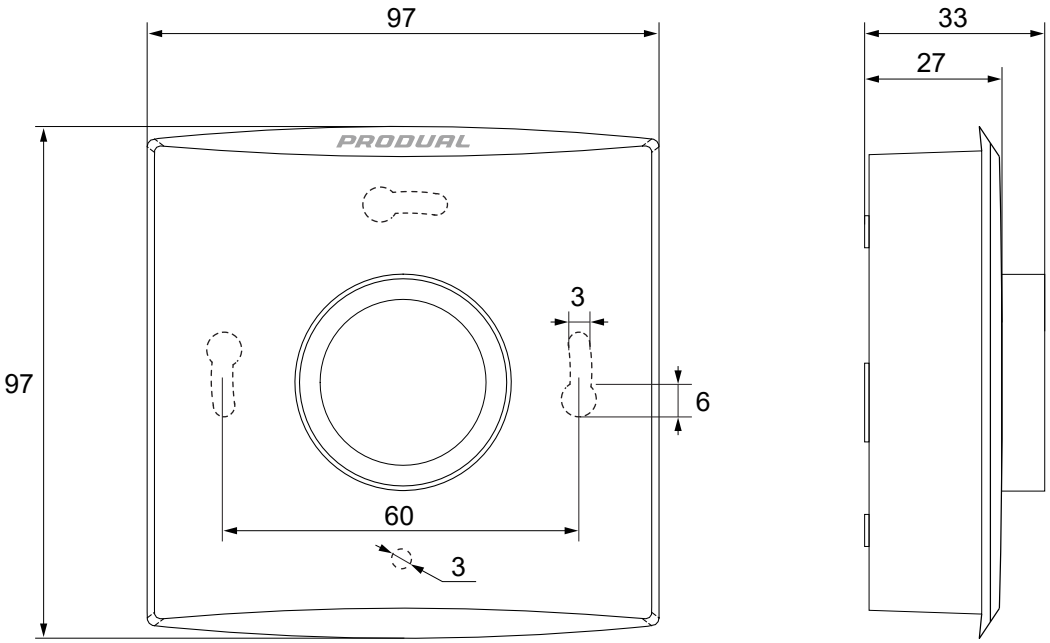
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Property	Value
Protocol	Modbus RTU
Bus speed	9600*/14400/19200/38400/57600/115200 bit/s
Data bits	8
Parity	none*/odd/even
Stop bits	1* / 2
Unit load	1/4 UL
Appliance class (IEC 60664-1)	III
Operating conditions	
Temperature	0...50 °C
Humidity	0...85 %rH (non-condensing)
Wiring terminals	
Type	spring terminals
Wire	0.2...1.5 mm^2 (24...16 AWG)
Housing	
Protection class	IP30
Materials	ABS/PC plastic
Mounting	on the wall surface or on the standard flush mounting box (60 mm hole distance)
Dimensions (w x h x d)	97 x 97 x 33 mm
Warranty	5 years
CE UKCA	Refer to the EU Declaration of Conformity or the UK Declaration of Conformity for compliance information. You can find the declarations on this product's page at www.produal.com.
Company certificates	
Quality management	ISO 9001
Environmental management	ISO 14001
	* factory setting

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Dimensions

All dimensions are in millimeters (mm).



Wiring

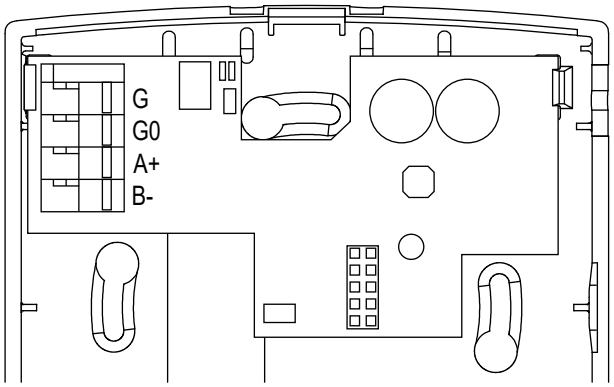
WARNING: Only connect wires and commission the device if you are qualified for electrical work and familiar with building automation products. Risk of electric shock and damage to the device.

WARNING: Always commission the device in a de-energised electricity network. Risk of electric shock.

WARNING: Connect this device to SELV (separated extra low voltage) electricity network only. This device is appliance class III product according to IEC 60664-1.

CAUTION: Connect the device only to overvoltage category I, II or III electricity network according to IEC 60664-1.

The wiring terminals are designed for maximum of 1.5 mm^2 wires. Use a twisted pair cable (2x2 pairs) for communication (RS-485). The maximum cable length for the room unit is 10 m.



G	24 Vac/dc, < 1 VA (< 2 VA in -CO2 models)
G0	0 V
A+	Modbus RTU (RS-485)
B-	

Ordering information

You can use the ordering guide below to generate ordering information for products you would like to order. For example, the ordering information for a black room unit with a display and fan button is as follows:

Product type: RUB1F-D
Product number: 5202B1D000

			Type	0	1	2	3	4	5	6
0	Room unit		RU	5202					0	0
1	Body colour	White (RAL9016)			W					
		Black (RAL9011)	B		B					
2	Buttons	No buttons				0				
		Fan	1F			1				
		Occupancy	1M			2				
		Fan and occupancy	2FM			3				
3	Display	No display (indicator lights only)					0			
		Display	-D				D			
4	Additional measurements	No additional measurements						0		
		Relative humidity	-RH					1		
		CO_2	-CO2					3		
		Relative humidity and CO_2	-RH-CO2					5		
5	Reserved								0	
6	Reserved									0

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