Produal Proxima® RU - room unit

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

The set point knob has an endless rotation function and the set point value can be reset via the building management system. The indicator lights indicate the current temperature set point.

The room unit can be ordered with additional measurements (CO_2 and/or relative humidity) and with a display that has back light adjustment. Also one or two touch buttons (and) are available.

The room unit connects to the Produal Proxima® CU and CU-LH control units with 4 wires. The cable between the room unit and control unit should be 2 x twisted pair or equivalent. One pair for Modbus communication and one pair for supply voltage.

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	Modbus RTU
Bus speed	9600*/14400/19200/38400/57600/115200 bit/s
Data bits	8
Parity	none*/odd/even

Property	Value
Stop bits	1* / 2
Unit load	1/4 UL
Operating conditions	
Temperature	0...50 °C
Humidity	0...85 %rH (non-condensing)
Wiring terminals	1.5 mm^2, spring terminals
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
	* factory setting

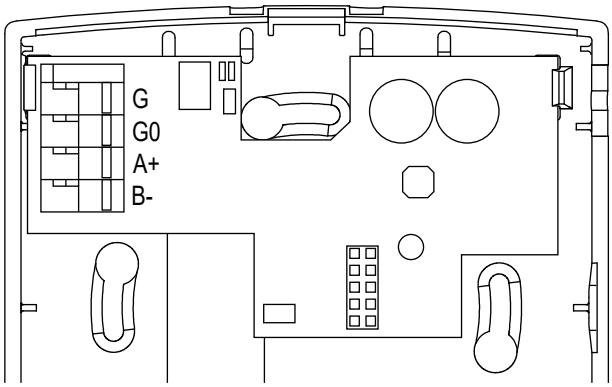
Wiring

WARNING: Device wiring and commissioning can only be carried out by qualified professionals. Always make the device wirings in de-energised electricity network.

WARNING: This product is appliance class III product according to IEC 60664-1. The product may only be connected to SELV (safety extra low voltage) electricity network.

CAUTION: The product may only be connected to overvoltage category I, II or III electricity network according to IEC 60664-1.

The terminals are designed for maximum of 1.5 mm^2 cable area. Please note that the cables for communication (RS-485) should be twisted pair (2x2 pairs). The cable length to the room units should not exceed 10 m.



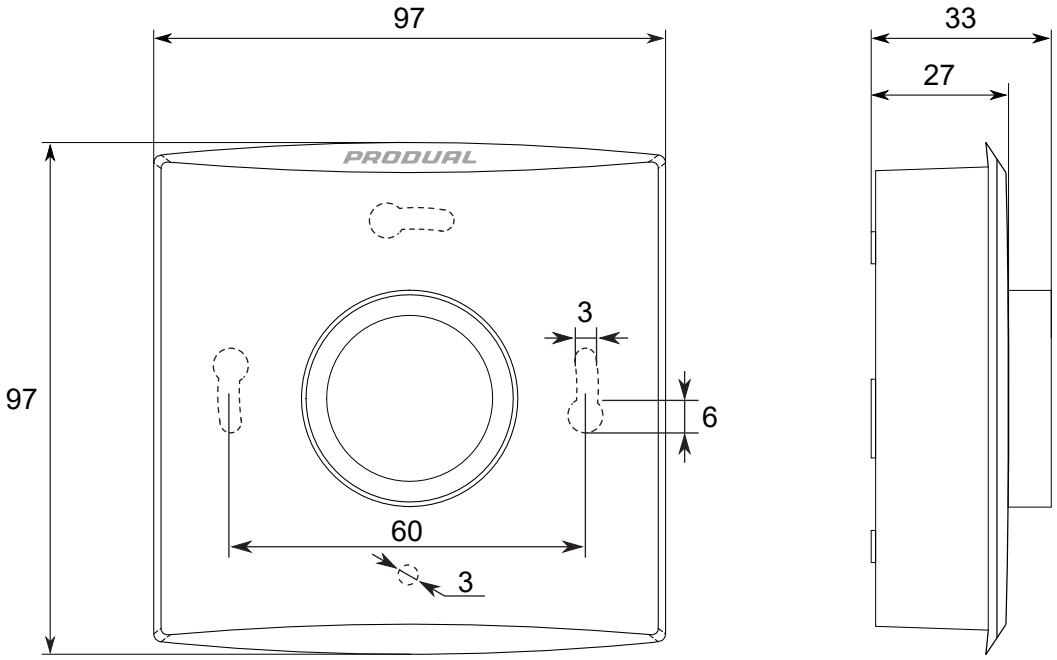
G	24 Vac/dc, < 1 VA (< 2 VA in CO2 models)
G0	0 V
A+	Modbus RTU (RS-485)
B-	

Ordering information

			Type	0	1	2	3	4	5	6
0	Room unit type			5202					0	0
1	Body colour	White	RU		W					
		Black	RUB		B					
2	Buttons	No buttons				0				
		1 button (fan speed)	1F			1				
		1 button (man in house)	1M			2				
		2 buttons (fan speed and man in house)	2FM			3				
3	Display	No display (indicator lights only)					0			
		Display (indicator lights are also included)	-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		

For example, ordering a black room unit with display and a fan button: The product type is RUB1F-D and the product number is 5202B1D000.

Dimensions



Supported standards and directives

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
EN 61000-6-2:2019	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.
EN 61000-6-3:2007/ A1:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.
EN 61000-4-2:2009	Electromagnetic compatibility (EMC). Testing and measuring techniques - Electrostatic discharge immunity test.

Standard	Description
EN 61000-4-3:2006/ AMD1:2007+AMD2:2010	Electromagnetic compatibility (EMC). Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test.
EN 61000-4-4:2012	Electromagnetic compatibility (EMC). Testing and measurement techniques - Electrical fast transient/burst immunity test.
EN 61000-4-5:2014/ AMD1:2017	Electromagnetic compatibility (EMC). Testing and measurement techniques - Surge immunity test.
EN 61000-4-6:2014	Electromagnetic compatibility (EMC). Testing and measurement techniques. Immunity to conducted disturbances, induced by radio-frequency fields.