

TRI-P-1R - Touchscreen room unit



TRI-P-1R touchscreen room units provide attractive user interface and sensor for room control applications. The devices are connected to BMS or controllers via Modbus or BACnet communication interfaces. The room units have 320 x 480 pixel 255 colour touchscreen that displays the plant and control status information on the modern intuitive user interface.

The room unit includes internal temperature measurement. In addition, models with humidity and/or CO₂ measurement are available.

The users can use the unit to change the control settings such as the set point, fan speed and operation mode. They can switch lights and air conditioning units on/off, or activate the Party Mode for extended or boost period.

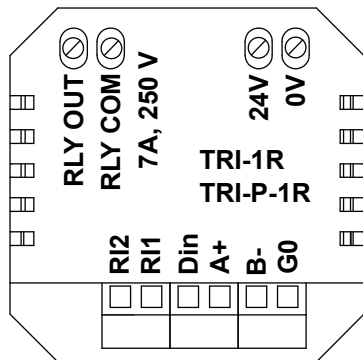
The room units are equipped with 7-day clock, a relay output (230 V, 7 A), two external sensor inputs and a digital input.

Property	Value
Relay output	230 Vac, 7 A (res.) / 2.2 A (inductive) or 115 Vac, 7 A (res.) / 1.3 A (inductive)
Inputs	
Analogue inputs	2 x external NTC 10 sensor
Digital inputs	1 x digital input, potential free contact, impedance <1 kΩ
Communication (MOD models)	
	Modbus RTU
Bus speed	9600*/19200/38400/57600/76800 bit/s
Parity	none*/odd/even
Stop bits	1 or 2
Network size	up to 63 devices per segment
Communication (BAC models)	
	BACnet MS/TP
Bus speed	9600*/19200/38400/57600/76800 bit/s
Parity	none*/odd/even
Stop bits	1 or 2
Network size	up to 63 devices per segment
Display	3.5" backlit touchscreen, 320 x 480 pixels, 255K colours
Operating conditions	
Temperature	0...50 °C (32...122 °F)
Humidity	0...95 %rH (non-condensing)
Storage conditions	
Temperature	-30...70 °C (-22...158 °F)
Humidity	0...95 %rH (non-condensing)
Wiring terminals (power supply and outputs)	
Wire type	Solid and stranded wire
Wire size	Solid: 0.05...2.5 mm ² , stranded: 0.05...1.50 mm ² / 14...30 AWG (UL)
Rising clamp size	2.5 x 2.2 mm
Wiring terminals (communication and inputs)	
	Tilted terminals
Wire type	Solid and stranded wire
Wire size	0.05...1.5 mm ² / 14...30 AWG (UL)
Rising clamp size	2.5 x 1.9 mm
Housing	
Protection class	IP20
Materials	Polycarbonate plastics, self extinguishing
Mounting	On a flush mounting box (60 mm hole distance)
Dimensions (w x h x d)	88 x 112 x 43 mm
Weight	220 g
	* = factory setting

Wiring



CAUTION: Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.

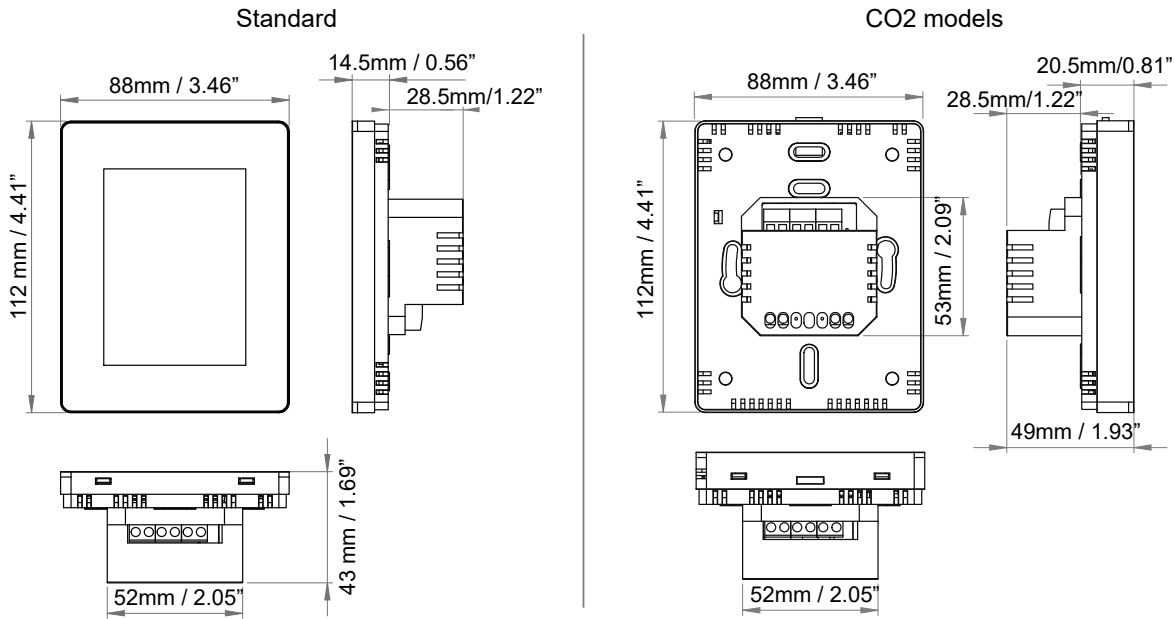


RLY OUT	Relay contact, 230 Vac / 30 Vdc, 7 A
RLY COM	Relay contact, 230 Vac / 30 Vdc, 7 A
24V	Supply, 24 Vac/dc
0V	0 V, common
RI2	External temperature sensor input 2, NTC 10
RI1	External temperature sensor input 1, NTC 10
Din	Digital input, potential free contact
A+	Modbus RTU / BACnet MS/TP, RS-485
B-	
G0	0 V, common

Ordering information

		Type	0	1	2	3	4	5	6
0	Touchscreen room unit		6001	7		2		0	
1	Device type	Room unit	TRI-P-1R	7					
2	Communication	Modbus	-MOD		M				
		Bacnet	-BAC		B				
3	Power supply	24 Vac/dc	-24			2			
4	Additional measurements	No additional measurements					0		
		Relative humidity	-RH				1		
		CO ₂	-CO ₂				2		
		Relative humidity and CO ₂	-RH-CO ₂				3		
5	Reserved							0	
6	Body colour	Chrome							0
		White (RAL 9010)	-W						W
		Black (RAL 8022)	-B						B

Dimensions



Supported standards and directives

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2014/35/EU	Low Voltage Directive (LVD).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
EN 61000-6-1:2007	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments.
EN 61000-6-2:2005	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 61000-6-4:2007/ A1:2011	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments.
EN 60730-1:2016	Automatic electrical controls - Part 1: General requirements.