

OUMAN

# A203 Controller for three circuits

- control for 2 heating circuits
- 1 domestic hot water control



<b>Dimensions</b>	width 213,5 mm, height 93,3 mm, depth 96,8 mm
<b>Weight</b>	0.7 kg
<b>Protection class</b>	IP 20
<b>Operating temperature</b>	0 °C...+40 °C
<b>Storing temperature</b>	-20 °C...+70 °C
<b>Power supply</b>	
Operating voltage	24 Vac, 50 Hz (22 Vac - 33 Vac)
Power required	(15 Vdc output = if not connected) 13 VA (15 Vdc output = 750 mA) 34 VA In addition, the operating voltage of 24 Vac and the power requirement of the Triac outputs must be taken into attention. Maximum total current limit is 4A. Then maximum supply power need is 96 VA. (Max 1A/triac pair)
Backup input	12 Vdc
Current consumption	300mA / 3,6W (relays not in use) 400mA / 4,8W (relays in use)

**Universal measurement input (can be configured) measurement types:**

Passive sensors (inputs 1...13)	Measurement channel accuracy: <ul style="list-style-type: none"> <li>• NTC10: +0,1 °C between -50 °C...+100 °C , +0,25 °C between +100 °C...+130 °C</li> <li>• NTC 1.8 ±0,2 °C between -20 °C...+40 °C, +0,6 °C between +40°C...+70 °C and +2.0 temp. over 75°C.</li> <li>• NTC 2.2: ±0,2 °C between -20 °C...+55 °C, +0,5 °C between +60°C...+70 °C and +2.0 temp. over 75°C.</li> <li>• NTC 20: ±0,1 °C between -20 °C...+70 °C, ±0,6 °C between +75°C...+120° C</li> <li>• Ni1000 LG: +1,0 °C between -50 °C...+130 °C</li> <li>• Ni1000DIN: ±0,2 °C between 100 °C...+130 °C, +0,5 °C between -5 °C...-20 °C</li> <li>• PT1000 element: +1,0 °C between -50 °C...+130 °C</li> </ul> <p>Also sensor tolerances and the effect of cables must be considered when calculating total accuracy.</p>
Active sensors (inputs 4, 7, 12-14)	0...10 V voltage message, meas. accuracy 1 mV Milliampere signal with 250Ω shunt resistor 0-20 mA
Contact information (inputs 10...16)	Contact voltage 5 Vdc. Contact current 0,5 mA Contact resistance max 1,9 kΩ (closed), min 11 kΩ (open)

**Digital input measurement types:**

Contact information (inputs 21 and 22)	Contact voltage 15 Vdc. Contact current 1,5 mA Contact resistance max 500 Ω (closed), min 1,6 kΩ (open)
Counter inputs (inputs 21...22)	Minimum pulse length 30 ms

**Analog outputs (61...66)**

**Relay output** Output voltage range 0...10 V. Output current max 10 mA/output.

Change-over contact relay (71...76)	2 pcs, 230 V, 6 A
Normally open contact relay (77...84)	4 pcs, 230 V, 6 A

**Triac outputs**

24 Vac (42 and 43)	Output current together max 1 A
24 Vac (44 and 45)	Output current together max 1 A

**Operating voltage outputs**

5 pcs 24 Vac outputs (41)	Output current max 1 A /output
15 Vdc output	Output current max 750 mA

Data transfer connections	
RS-485 bus (A1 and B1)	Galvanically isolated, supported protocols Modbus-RTU (COM2, Modbus master)
RS-485 bus (A2 and B2)	Galvanically isolated, supported protocols Modbus-RTU (COM3, Modbus slave)
USB-host connection	RS-232-modem (GSMMOD)
Ethernet	Full-duplex 10/100 Mbit/s, supported protocols Modbus-TCP/IP
Ouman Access	Intelligent remote connection built-in for use with Ounet.

**APPROVALS**

EMC-directive	2014/30/EU
Interference tolerance	EN 61000-6-1
Interference emissions	EN 61000-6-3

