# Microprocessor PID controller Gama-3K



Three-state PID controller + 2 alarm
Logging of the measured data to the USB
Direct / reverse control
Reliability - simply adjust
Display of measurement and the default size
RS-485 MODBUS communication
Available in multiple sizes (DIN standard)

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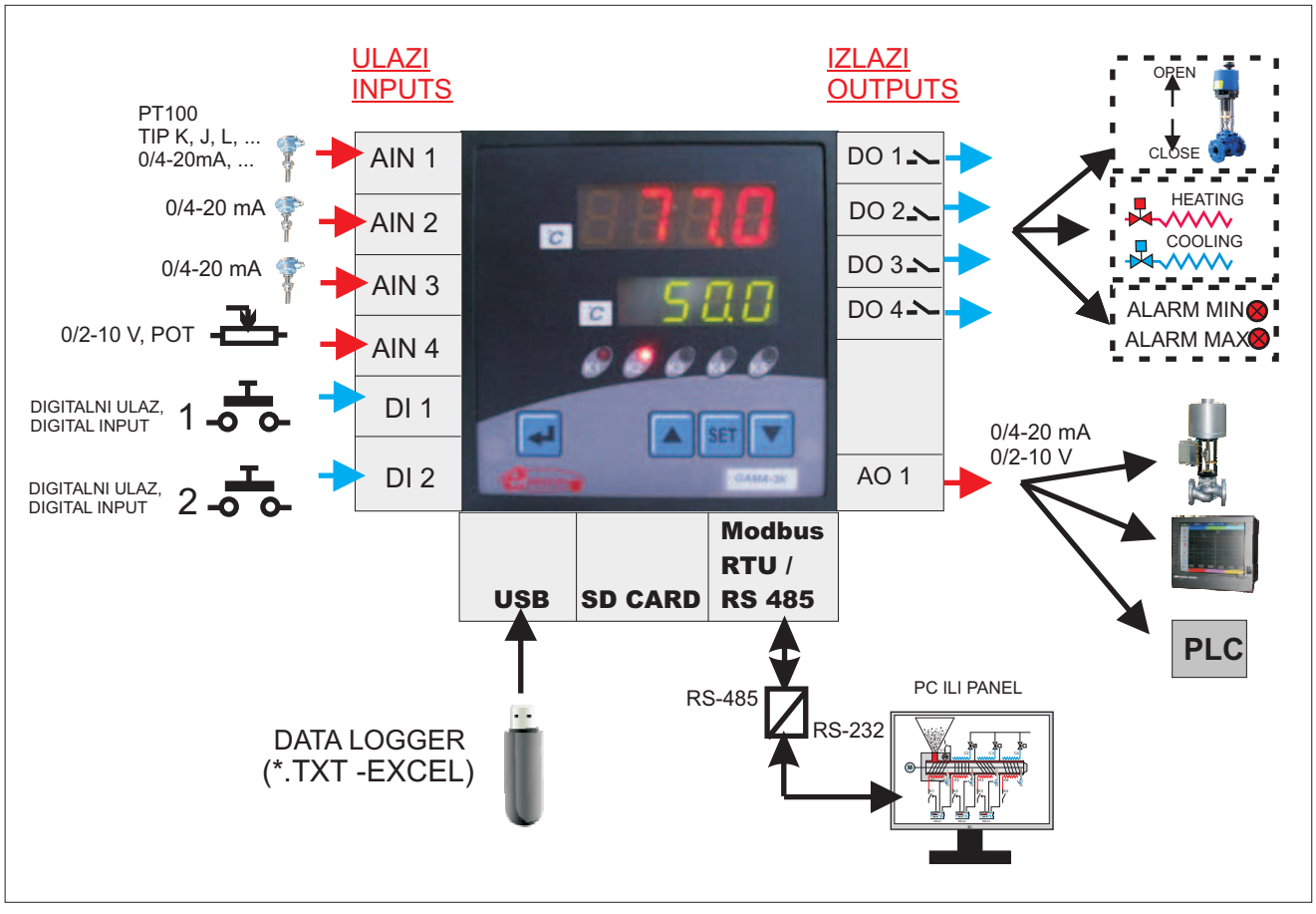
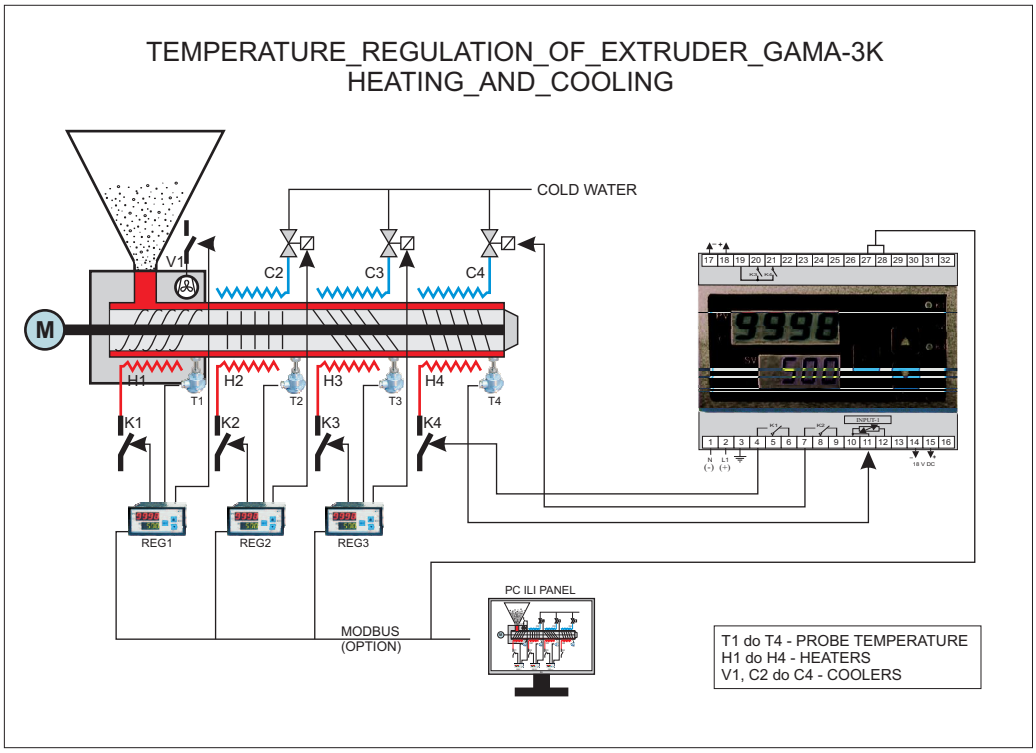
**GAMA-3K** is an industrial microprocessor PID controller for measuring and regulation of various physical processes. It is used in:
processing of glass, plastic, chemical and food industries, machine building, the technique heating and cooling, air conditioning and various other industries.

**The controller** has a max. 4 inputs. First universal analog input (software configurable) that supports all thermocouples included ITS-90 standard,
standard curent and voltage signals, and Pt-100 temperature sensors.
Second and third analog input, are curent input 0/4 - 20 mA, and the fourth analog input is for connecting potentiometer (feedback from the valve, or ...).



**As output**, there are available 2 or 4 relays, and 1x analog output (standard voltage or current), for control with continuous valves or only as a signal to the printer or PLC.
To continuous output can be added measured size of all input or calculated regulation size (Y) .
The display is constructed with two LED display with 4 digits to display the process (measured) values and default values.




Saving data to a USB stick or SD card (Data Logger). Storage of measured values from analog and digital inputs and outputs to USB or SD card.

Choosing the functional scheme by which the device works, device automatically set parameters to appropriate value .

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|---|---|---|
| **Main panel** | Foil keyboard | |
| **Installation method** | On the panel with cutout | |
| **Kućište** | 96 x 48 mm | |
| | 48 x 96 mm | |
| | 96 x 96 mm | |
| | 48 x 48 mm | |
| | 72 x 72 mm | |
| | 144 x 72 mm | |
| | 72 x 144 mm | |
| | 105 x 90 mm RAIL | |
| | 218x184x126mm - wall mounting | |
| **Power supply** | 230 V C, 110 VAC, 24 VAC, 24 VDC | |
| **Accuracy** | 0.3 + 2 digits | |
| **Display** | 13mm Red LED display 4 digits _ for measured value | |
| | 10mm Green LED display 4digits for setpoint | |
| **Input** | 1x universal- program configurable | |
| | Current | 0 - 20 mA / 4 - 20 mA 20-0 mA/ 20-4 mA |
| | Voltage | 0 - 10 V / 2- 10 V / 0-50 mV / 0-60 mV |
| | RTD | Pt100 |
| | Thermocouples | L, J, K, S, R, T, N, E, B |
| | Other | (PWM signal, frequency) on special request |
| **Output** | 2 / 4 relays, 250 Vac / 5A | |
| | 0/4-20 mA, 0/2-10 V, 0/1-5 V continuing output (optional) | |
| **Regulation** | Two-state / three-state , relay contact 5 A, 250 V | |
| **Function of regulation** | ON/OFF, P,PI, PD, PID, adjustable | |
| **Data** | Storing data in E2 memory | |
| **Communication** | Modbus RTU / 485 | |
| **Alarm** | 4 programmable alarms (absolute, relative, regulation, ...) | |
| **Login** | USB stick / SD card | |

More information available on: www. elektron.hr

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