PID controller 48×96 mm ATR444

PID controller 48×96 mm (1/8 DIN)
Up to 5 relays, 2 analog inputs, 12 segment programmer



KEY FEATURES

- Two universal entries and calculations
- Up to 5 relays and 2 analog outputs
- Built-in programmer
- NFC, USB and RS485 Modbus

Description

The Pixsys ATR444 is a 48×96 mm (1/8 DIN) PID controller designed for applications that require more information and outputs. Its large alphanumeric display displays the measurement, scrolling status messages, and online help, and its 8-key keyboard features programmable function keys.

Two universal entries and calculations

According to the version, the ATR444 has one or two 16-bit analog inputs, programmable for thermocouples, thermistors, 0...10 V, 0/4...20 mA, 0...60 mV or potentiometer signals. The two-input versions perform mathematical operations between the measurements.

Up to 5 relays and 2 analog outputs

The 5 A relay outputs, the two SSR outputs and the 4...20 mA or 0...10 V analog outputs are used for regulation, alarms or the transmission of the measurement and setpoint values.

Built-in programmer

In addition to PID regulation, the ATR444 runs a cycle of up to 12 segments, with wait functions at the end of segments and resume functions. A simple solution for ramp-up and temperature maintenance.

NFC, USB and RS485 Modbus

Configuration is done via NFC with the MyPixsys app, via micro USB with MyPixsysLab or via Memory Card. The -T versions add an isolated RS485 port in Modbus RTU, compatible with the Pixsys IIoT modem CNV580 for remote monitoring.

Typical applications

- Industrial furnaces and thermal treatments with ramps
- Machines requiring multiple alarms and outputs
- Two-input regulation: differential, average or two zones
- Replacement of the ATR401, the successor of the ATR444

Non-contractual document. Specifications subject to technical changes. Edition 11/2026.

Technical specifications

General characteristics

Dimensions	48 x 96 x 69 mm
Nutrition	24…230 VAC/DC ±10 %, 50/60 Hz (galvanic isolation 2.5 kV)
Consumption	8 to 12 W/VA depending on version
Display	4 digits 0.63 + 5 digits 0.39 + 5 digits 0.33, bargraph
Materials	Enclosure and front panel: UL94V2 self-extinguishing PC
Weight	Approx. 245 g
Protection index	Front view IP65, enclosure and terminals IP20
Terms of use	0 to 45 °C, 35 to 95 % RH
Certifications	CE, UL

Entrées

Analog inputs	1 or 2 depending on the version, resolution 16 bits
Thermocouples	K, S, R, J, T, N, B (cold welding compensation -25 to 85 °C)
Thermostatic resistances	PT100, PT500, PT1000, Ni100, PTC1K, NTC10K
Process signals	0…10 V (50,000 points), 0/4…20 mA (40,000 points), 0…60 mV (25,000 points)
Potentiometer	1…150 kΩ (50,000 points)
Precision	±0.2% full scale ±1 digit
Current transformer inputs	1 or 2, 50 mA
Sampling time	Programmable up to 2.1 ms (470 Hz)

Versions and releases

ATR444-13ABC	1 analog input, 4 digital inputs, 3 relays, 1 analog output
ATR444-14ABC-T	1 analog input, 2 digital inputs, 4 relays, 1 analog output, RS485
ATR444-15ABC	1 analog input, 4 digital inputs, 5 relays
ATR444-22ABC	2 analog inputs, 4 digital inputs, 2 relays, 1 analog output
ATR444-24ABC-T	2 analog inputs, 4 digital inputs, 4 relays, 2 analog outputs, RS485
Relais	5 to 250 VAC resistive load
SSR outputs	2 outputs 12/24 VDC, 25 mA max.
Analog output	4…20 mA or 0…10 VDC (40,000 points, ±0.2%)
Communication	Isolated RS485, 1200 to 115 200 baud, Modbus RTU (versions -T), micro USB

Software functions

Regulatory algorithms	ON/OFF with hysteresis, P, PI, PID, PD time-proportional
Adjustment	Manual or automatic (autotuning)
Alarm modes	Absolute/threshold, band, high/low range, manual reset option, loop break alarm
Double PID	Hot/cold
Soft-start	Gradient in degrees/hour or fixed output percentage
Programmer	Cycle up to 12 segments, waiting and resuming at the end of the segment
Open/closed logic	For motorized valves
Configuration	NFC (app MyPixsys), MyPixsysLab software, Memory Card, EASY-UP codes
Data protection	Locking of the settings, access to the parameters via password

Non-contractual document. Specifications subject to technical changes. Edition 11/2026.