PID Controller 32x74 mm ATR144

Programmable via NFC,
Control and alarm functions,
programmable analogue input, multivoltage power supply, digital input, serial
communication

Process controller ATR144 is latest release of Pixsys controllers size 32x74mm, integrating recent Blue line standards that have been introduced with ATR244. It stands out for bright display, ensuring optimal visibility in industrial environments and making available more information for the operator as well as a scrolling Help function.

ATR144 is programmable by NFC with dedicated **App MyPixsys for Android devices** (same already in use for Pixsys latest product lines), not requiring wirings and power supply and allowing quick set-up/updates on site.

Multi-voltage power supply 24 to 230V AC/DC with galvanic isolation does not require any hardware selection. Optional serial communication via RS485 with Modbus RTU/Slave protocol.





User friendly, multimedia support and traceability

For the entire range of Pixsys products we provide <u>technical support</u> for installation, programming and operation via our <u>online forum</u>and via Skype.

The interface of the controller ATR144 is user-friendly; operator is also supported by programming tools such as **MyPixsys App** (for Android devices) and **LABSOFTVIEW** programming software.

Programming tutorial videos are available on **our YouTube channel**. As for the entire range of PIXSYS products, thanks to the **QR code the traceability of the product** is guaranteed for its entire life cycle; the information and documentation online can be also be accessed by reading the QR CODE that directs your mobile device to the product's technical specifications and verifies its warranty conditions.

Ordering codes

ATR144-ABC	1 analogue input + 2 relays 5 A + 1 D.I/O - Supply 24230 V AC/DC
ATR144-ABC-T	1 analogue input + 1 relay 5 A + 1 D.I/O + RS485 - Supply 24230 V AC/DC

Main features

Enclosure	32 x 74 (front) x 53 mm
Power supply	24230 V AC / DC ±15% 50/60 Hz - galvanic isolation 2,5KV
Consumption	5 VA
Display	4 digits 0,38" white + 5 digits 0,28" red
Environmental conditions	Temperature 0-45 °C, humidity 3595 RH%
Material	Enclosure: PC UL94V2 self-extinguishing. Front: PC UL94V2
Weight	approx. 120 g
Sealing	Front panel: IP65 (with gasket). Enclosure and terminal block: IP20
Quick set-up options	Memory Card, LABSOFTVIEW software, EASY-UP codes
APP / NFC	Programming via APP (NFC) for Android devices

Inputs

1 analogue / configurable	Resolution 16bit, programmable for thermocouples K, S, R, J, T, N, B
	(automatic compensation of cold junction) -2585°C, ±0,2% F.S. ±1 digit F.S.),
	Thermoresistances PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K),
	process signals 010 V (50000 points), 0/420mA (40000 points), 060 mV
	(25000 points), potentiometer 1150 K Ω (50000 points)
Sampling time	Programmable till 2,1 ms (frequency up to 470 Hz)
1/2 Digital	Setpoint change, Hold, Run, Tuning, Start / Stop, configuration lock

Outputs

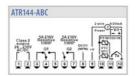
1/2 Relays	5 A - 250 V AC resistive
1 SSR	12 V DC - 25 mA max
Serial communication	RS485 Modbus RTU - Slave (4800115200 baud) Code "-T"

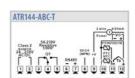
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time-proportioned
Tuning	Manual or automatic
Data protection	Lock of Command/Alarm Setpoints - Access to parameters by Password
Alarm modes	Absolute/ threshold, band, upper/lower deviation, Alarms with optional manual reset and activation delay, Loop Break Alarm.
Dual PID	Heating / cooling PID
Soft-Start	Rising gradient programmable as Degree / hour or fixed output %
Open/Close logics	Motorised valves

Installation







Wiring plan