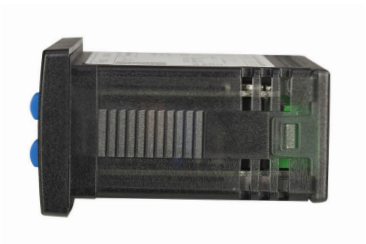
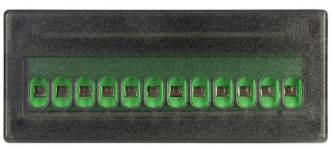
ATR144

PID Controller/Indicator with NFC

- 4-digit PID indicating controller
- Dual bright LED displays
- Easy configuration via NFC with Android app
- Built-in controls for configuration
- Wide supply voltage range 24 to 230 V AC/DC
- Relay and SSR outputs
- Optional RS485 Modbus communications
- Universal sensor input for current, voltage, thermocouple, RTD, thermistor etc





SPECIFICATIONS

Dimensions	32H x 74W x 53D mm
Supply Voltage	24 to 230 V AC/DC with 2.5 KV galvanic isolation
Power Consumption	5 W
Display	4-digit white LED (digit height 9.6 mm) 5-digit red LED (digit height 7 mm)
Operating Conditions	0 to 45°C, 35 to 95% RH
Inputs	1 analogue input, configurable, for: Thermocouple: J, K, R, S, T, N, B, RTD: Pt100, Pt500, Pt1000, Ni100, Thermistor: PTC, NTC, Current: 0-20 mA, 4-20 mA Voltage: 0-10 V DC, 0-60 mV, Potentiometer: 1 to 150 kΩ 1 or 2 digital inputs, configurable for setpoint change, hold, run, tuning, start/stop or configuration lock
Outputs	1 or 2 Relays (see Models), 5 A, 250 V AC resistive; 1 SSR, 12 V DC, 25 mA max;
Serial Communication (-T models)	RS485 Modbus RTU Slave (4800..115200 baud)
Control Algorithms	ON/OFF with hysteresis, P, PI, PID, PD time-proportioned
Tuning	Manual or automatic
Sampling Time	Programmable as fast as 2.1 ms (frequency up to 470 Hz)
Sealing	Front panel: IP65 with gasket Enclosure and terminal blocks: IP20
Data Protection	Setpoint lock; parameters protected by password
Configuration	Via NFC using free Android app; via push buttons on front of controller; via USB memory card (optional); PC software (optional); via EASY-UP codes

This powerful indicating controller has dual white and red LED displays, showing the process variable and setpoint value at the same time.

The built-in switching power supply has a wide range of 24 to 230 V AC or DC and provides galvanic isolation. The analogue input is selectable for almost any industrial sensor including types commonly used in refrigeration, air conditioning and general manufacturing industries, among many others.

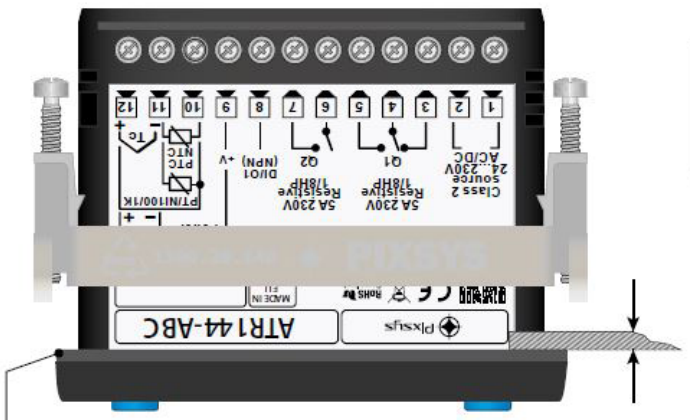
Potentiometers with full scale from 1 to 150kΩ may also be used, and there is a “latch on” function for quick calibration and setting of minimum, maximum and zero via the front keys.

Three setpoints are provided for control and/or alarm functions. They can be assigned to two relay outputs or an SSR output. The main control relay is rated at 8A. The alarm relay is rated at 5A (alarm modes: threshold, band, deviation). Open/Close logic for motorised valves is also available.

Software features include ON/OFF control, PID + Autotuning and Heating-Cooling PID with a neutral zone. A single output (1 relay + SSR) version is available with RS485 serial communication and Modbus-RTU/Slave protocol for supervisory systems.

Front of panel sealing to IP65 can be achieved using a gasket (optional). There is also an optional Memory Card to copy all of the configuration parameters from one controller to another without powering them up.

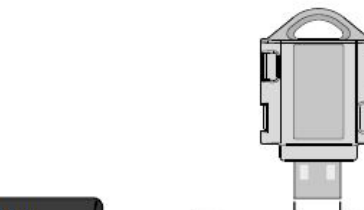
Software application LabSoftView for Windows enables setting and monitoring of parameters on a PC. A special software release which integrates both the basic control loop and the timer function is available upon request.



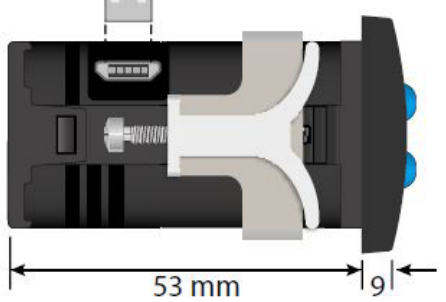
Frontal panel cut-out
Dima di foratura
28.5 x 70.5 mm

Suggested thickness
Spessore suggerito
2 ÷ 8 mm

Gasket for 32x74
Guarnizione per 32x74
Cod. 1600.00.082 (optional)



Memory Card USB
(optional)
Cod. 2100.30.013



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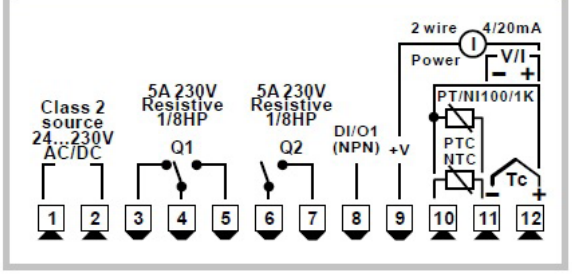

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