

ATR244

Controller / Regolatore / régulateur



3 Model Identification

The ATR244 series includes 4 versions:

Models with power supply 24..230 VAC/VDC ±15% 50/60 Hz – 6 Watt/VA	
ATR244-12ABC	1 analogue input + 2 relays 2 A + 2 SSR + 2 D.I. + 1 analogue output V/mA
ATR244-12ABC-T	1 analogue input + 2 relays 2 A + 2 SSR / D.I. + 1 analogue output V/mA + RS485
ATR244-13ABC	1 analogue input + 3 relays 2 A + 2 SSR + 2 D.I. + 1 analogue output V/mA
Model with power supply 24 VAC/VDC ±15% 50/60 Hz – 6 Watt/VA	
ATR244-23A-T	2 analogue input + 3 relays 2 A + 2 SSR + 2/4 D.I. + 2 analogue output V/mA + RS485 + CT
Model with power supply 115..230 VAC ±15% 50/60 Hz – 6 Watt/VA	
ATR244-23BC-T	2 analogue input + 3 relays 2 A + 2 SSR + 2/4 D.I. + 2 analogue output V/mA + RS485 + CT

4 Technical Data

4.1 General Features

Displays	4 digits 0,52", 5 digits 0,30"
Operating temperature	Temperature: 0-45° C -Humidity 35..95 uR%
Sealing	IP65 front panel (with gasket) - IP20 box and terminals (UL not evaluated)
Material	Box and front panel: PC UL94V2 self-extinguishing
Weight	Approx. 185 g

4.2 Hardware Features

Analogue inputs	AI1 – AI2: Configurable via software. Input: Thermocouple type K, S, R, J,T,E,N,B. Automatic compensation of cold junction from -25...85° C. Thermoresistances: PT100, PT500, PT1000, Ni100, PTC 1K, NTC 10K (β 3435K) Input V/mA: 0-1 V, 0-5 V, 0-10 V, 0-20 o 4-20 mA, 0-60 mV. Pot. Input: 1...150 KΩ. CT: 50 mA.	Tolerance (25° C) ± 0.2% ±1 digit (on F.s.) for thermocouple, thermoresistance and V/mA. Cold junction accuracy 0.1° C/°C. Impedence: 0-10 V: Ri>110 KΩ 0-20 mA: Ri<5 Ω 0-40 mV: Ri>1 MΩ
Relay outputs	Configurable as command and alarm output.	Contacts: 2 A - 250 VAC Resistive load.
SSR output	Configurable as command and alarm output.	12/24 V, 25 mA.
Analogue outputs	Configurable as command and alarm output or as retransmission of process / setpoints.	Configurable: 0-10 V with 40000 points +/-0.2% (on F.s.) 4-20 mA con 40000 points +/-0.2% (on F.s.)
Power-supply	For ATR244-12xxx and ATR244-13ABC: Extended power-supply 24..230 VAC/ VDC ±15% 50/60 Hz For ATR244-23A-T: 24 VAC/VDC ±15% 50/60 Hz For ATR244-23BC-T: 115..230 VAC ±15% 50/60 Hz	Consumption: ATR244-12ABC: 6 Watt/VA ATR244-12ABC-T: 9 Watt/VA ATR244-13ABC: 8 Watt/VA ATR244-23A-T: 7 Watt/VA ATR244-23BC-T: 12 Watt/VA

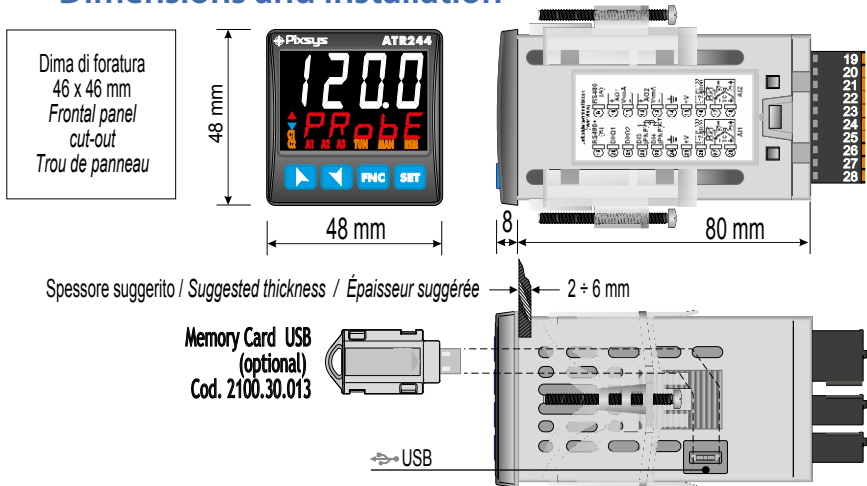
4.3 Software Features

Regulation algorithms	ON-OFF with hysteresis. - P, PI, PID, PD with proportional time
Proportional band	0..9999°C o °F
Integral time	0,0..999,9 sec (0 excludes)
Derivative time	0,0..999,9 sec (0 excludes)
Controller functions	Manual or automatic Tuning, selectable alarm, protection of command and alarm setpoints.

4.4 Programming mode

by keyboard	..see paragraph 12
software LabSoftview	..on "Download section" of official pixsys site: www.pixsys.net ..through download the App on Google Play Store®, see paragraph 11
App MyPixsys	When activated by a reader/interrogator supporting NFC-V protocol, controller ATR244 is to be considered a VICC (Vicinity Inductively Coupled Card) according to ISO/IEC 15693 and it operates at a frequency of 13.56 MHz. The device does not intentionally emit radio waves.

5 Dimensions and Installation



6 Electrical wirings

This controller has been designed and manufactured in conformity to Low Voltage Directive 2006/95/EC, 2014/35/EU (LVD) and EMC Directive 2004/108/EC, 2014/30/EU (EMC). For installation in industrial environments please observe following safety guidelines:

- Separate control line from power wires.
- Avoid proximity of remote control switches, electromagnetic contactors, powerful engines.
- Avoid proximity of power groups, especially those with phase control.
- It is strongly recommended to install adequate mains filter on power supply of the machine where the controller is installed, particularly if supplied 230Vac.

The controller is designed and conceived to be incorporated into other machines, therefore CE marking on the controller does not exempt the manufacturer of machines from safety and conformity requirements applying to the machine itself.

- Wiring of pins 1...8 on ATR244-12ABC, ATR244-12ABC-T or ATR244-13ABC: use crimped tube terminals or flexible/rigid copper wire with diameter 0.2 to 2.5 mm² (min. AWG28, max. AWG12, operating temperature: min. 70°C). Cable stripping lenght 7 to 8 mm.