

ATR243

Multifunction Controller



- Metalworking furnaces
- Heating element control
- Refrigeration
- Footwear machinery
- Plastics extrusion
- Injection moulding
- Dryers
- Load cell control
- Motorised valve control
- Woodworking machinery
- Pharmaceutical industry
- Cold stores
- Current control
- Remote control via RS485
- Signal converter

GENERAL SPECIFICATIONS

Dimensions	48H x 48W x 122.5D mm
Supply Voltage	24 to 230VAC/DC +/- 15% 50/60Hz
Power Consumption	3W
Display	4-digit dual LED, 8 red status LEDs
Operating Conditions	0-45°C, 35-95%RH
Inputs	1 configurable for J, K, R or S thermocouples; Pt100; Ni100; Pt1000; Pt500; PTC1k; NTC10k; 0 to 10V; 0/4 to 20mA; 0 to 40mV; potentiometer 6kΩ /150kΩ; TA 50mA.
Outputs	ATR243-20ABC: 2 relays 5A resistive OR 1 relay + 1 logic SSR 12V-30mA /4 to 20mA / 0 to 10V for control or retransmission ATR243-21ABC-T: 2 relays 5A resistive + 1 logic SSR 12V-30mA /4 to 20mA / 0 to 10V for control or retransmission + RS485 Modbus RTU (57600 baud max) + Input TA 50mA for Loop Break Alarm ATR243-31ABC: 3 relays 5A resistive + 1 logic SSR 12V-30mA / 4 to 20mA / 0 to 10V for control or retransmission + Input TA 50mA for Loop Break Alarm.
Digital Input	Tuning start, Setpoint change, Man/Auto selection, Hold function, Start/Stop preprogrammed cycle
Control Modes	ON/OFF, P, PI, PID, Autotuning
Accuracy	0.5%±1digit for TC/RTD; 0.2%±1digit for V/mA
Sampling Time	Selectable (15ms max)
Sealing	IP54 front panel (IP65 with gasket), IP30 housing, IP20 terminal blocks
Configuration	Parameters protected by password; optional memory card with battery for repeat configurations; software for configuration via a PC.

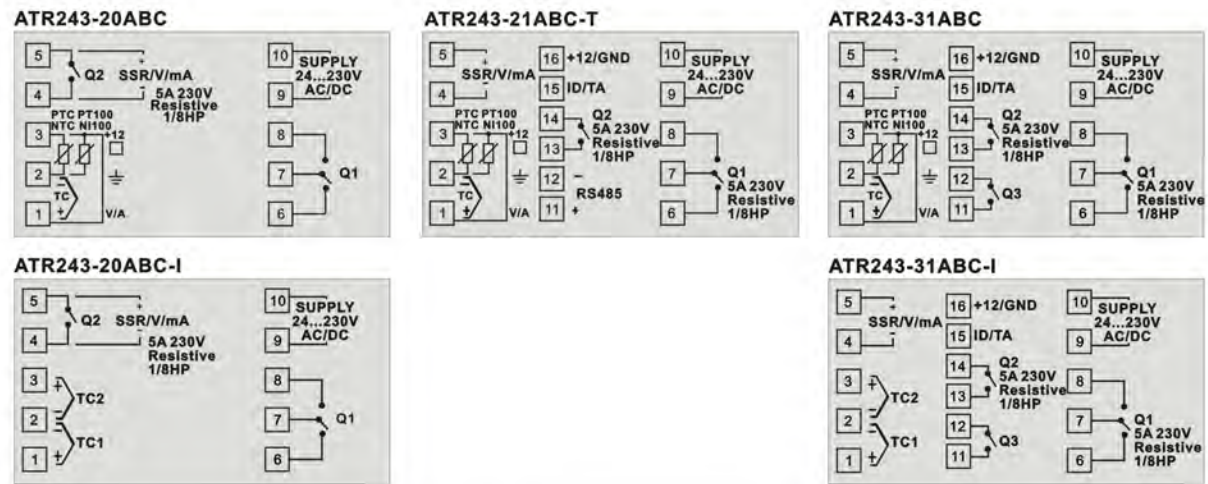
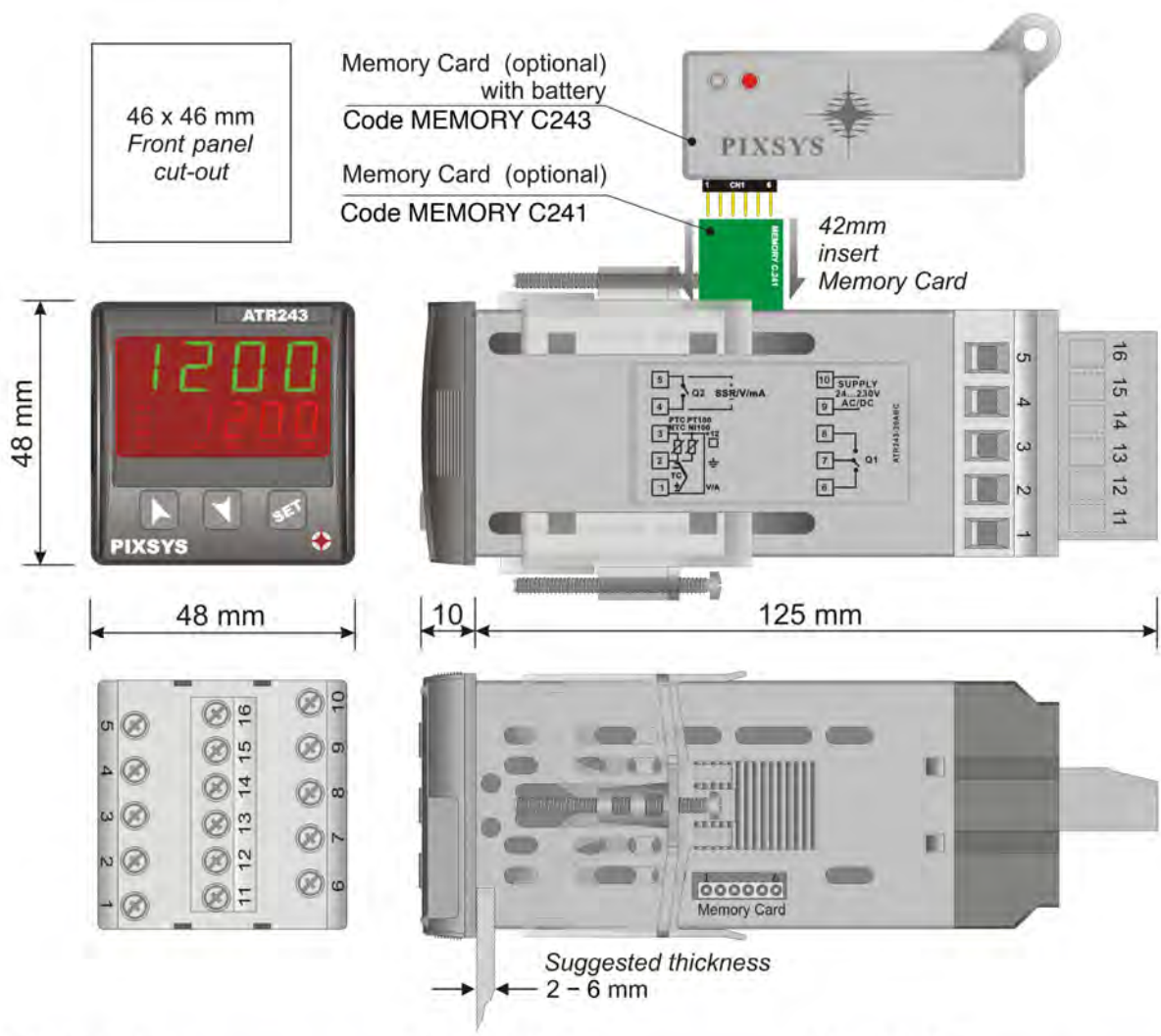
This multifunction controller offers 2 to 4 setpoints. It has one analogue input which is configurable for up to 18 different sensors/signals. The 2 to 4 outputs are configurable as relays (including Open/Close logic for motorised valve control), SSR, 4 to 20mA and 0 to 10V (either for control or re-scalable retransmission of the process variable/setpoint).

The built-in switching power supply has an extended range of 24 to 230VAC/DC and does not require any jumper setting. The control modes are ON/OFF, PID + Autotuning and Heating/Cooling PID with a neutral zone.

Software features include launch tuning, setpoint selection via digital input, optional manual reset of the output via the front keypad, latch-on function for sensor calibration (including load cells) and a programmable cycle of 3 steps. Optional features include RS485 serial communication (Modbus RTU) and load monitoring function (Loop Break Alarm) with current transformer TA.

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.



MODEL	INPUTS	OUTPUTS	POWER SUPPLY
ATR243-20ABC	Selectable	2 Relays + SSR / 4..20mA / 0..10V	24...230V AC/DC +/- 15% 50/60Hz
ATR243-20ABC-I		2 Relays + SSR / 4..20mA / 0..10V + RS485	
ATR243-21ABC-T		3 Relays + SSR / 4..20mA / 0..10V	
ATR243-31ABC			
ATR243-31ABC-I			

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