

ATR421

Programmer 48 x 96 mm
 Programmable controller 15 cycles / 45 steps



Programmer 48x96mm (1/8 DIN), single control loop. Allows the programming of 15 cycles/programs that can provide up to 45 steps/segments, all of which can be configured by the user as raise/maintain/lower. Programming mode of the work cycle that is intuitive and simple to use even for inexpert operators.

Step end wait software functions (in case of a delay of the process on the programmed setpoint value) and Cycle Recovery mode (after a power cut-off) are the main features of this programmer that has been specifically designed for the automation of industrial kilns, climatic chambers, dryers and the management of thermal processes in general that require the programming of cycles/curves with control of the process variable in relation to time.

Universal input and outputs that can be set as control, alarm/auxiliary analogue retransmission and/or serial RS485. All options can be configured from the keypad without selecting external Jumpers. Useful power supply ranges from 24 to 230V AC/DC with galvanic isolation from the power supply and between inputs and outputs.

MEMORY-CARD or parameter setting software help the installer configure the device quickly and easily and LABSOFTVIEW records trends.

Main features

Box	48x96 (front panel) x 123 mm
Power supply	24...230Vac/dc $\pm 15\%$ 50/60 Hz (selection 24 - 110...230Vac with jumper)
Consumption	5,5 VA, 4W
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35...95% RH (non condensing)
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: Silicon rubber V0
Weight	Approx. 350 g
Sealing	IP65 (Front panel), IP20 (Box and Terminal blocks)
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW

Inputs

1 Analog	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4...20 mA, 0...10 V
1 Digital	1...9 cycle selection, Hold, Run, "Open door" lock (code -14ABC)
1 Potentiometer	Position signal by potentiometer for servo-valves / motorized-valves

Outputs

2...4 Relays	Relay 8 A - 250 Vac resistive charge
1 SSR	24 Vdc - 25 mA max
1 Analog	Selection SSR 12Vdc - 4...20 mA or 0...10 Vdc for command or retransmission PV/SPV (code -12ABC-T)
Serial communication	RS485 Modbus RTU - Slave (code -12ABC-T)

Software feature

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time-proportioned
Tuning	manual or automatic
Data protection	Lock of control / alarm setpoint, Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation, timed auxiliary programmable for single steps
Gas mode	Open / Close logic for motorize valves, management of burners and fan, GID selection (management of burners during falling steps)
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system
Cycle recovery	Resume the cycle after unexpected power failure
Setpoint controller mode	Regulation on a fixed setpoint (function might be enabled from general menu or during a cycle in progress)
Delayed start	Cycle start delayed by decremental timer

Ordering codes

ATR421-14ABC

1 Analog Input + 1 Digital Input + 4 Relays + 1 Digital PNP, supply 24...230Vac/dc

ATR421-12ABC-T

1 Analog Input + 2 Relays + 1 Digital PNP + 1 Analog 0/4...20mA / 0...10V + RS485, supply 24...230Vac/dc

