AT 600 — MULTISETPOINT INDICATOR CONTROLLER

Controllers 48x48 mm(1/16 DIN). It is characterised by its high configurability The input can be programmed for temp. sensors, resistance thermometers and thermocouples, but also for pressure transmitters, humidity and flow sensors. The controller's outputs can be selected as command/multiple alarm modes/analogue retransmission. Useful extended range power supply from 24 to 230V AC/DC with galvanic isolation from the network.

Display: 4 digits 0,4 " green + 4 digits 0,3" red

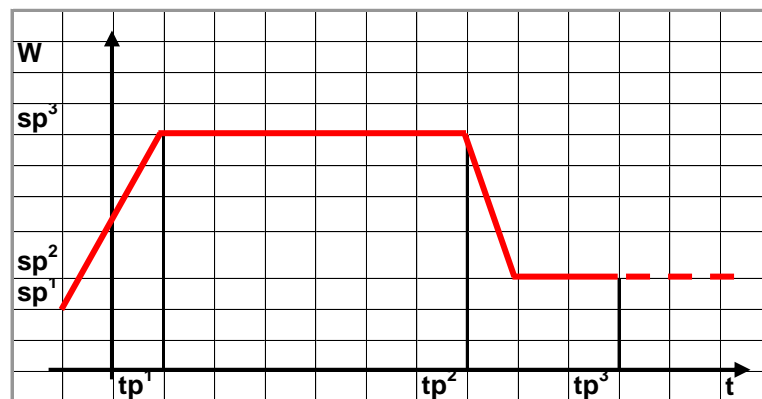| Inputs	Outputs
1 Analog selectable for TC type K, S, R, J, thermoresistance PT100, PT500, PT1000, Ni100, PTC1K. NTC10K, process signals 0..10V, 0/4..20mA, 0..40mV, potentiometer 6KΩ, 150 KΩ, T.A.	1..3 Relays Relay 5 A - 250 VAC resistive charge
	1 Digital / Analog selection: digital PNP 12 VDC-30 mM / 4..20 mA / 0..10 VDC for command or retransmission PV / SPV
Sampling time Programmable up to 4,1 ms (Frequency from 4,12 Hz to 242 Hz)	1 Auxiliary 12 VDC - 30 mAfor external sensor supply
1 Digital PNP, 1/4 setpoint selection, Hold, Run Auto/man regulation, tuning start, pre-programmed cycle start	Serial communication RS485 Modbus RTU - Slave (code 21ABC-T)
1 current transformer T.A. 50 mA (acquisition time 100 mS, (codes -21/-31ABC)	

AT60001

2 display 48 x 48

AT 610 — Compact Controller with program function

The AT610 series of controllers includes four freely programmable devices in different DIN formats for controlling temperature, pressure and other process variables. The devices are used in heat-generating plants to control the temperature of liquids or gases. The high-contrast, multicolor LC display for process value, setpoint and operator prompting contains two four-digit 7-segment displays, two single-character 16-segment displays, display of the active setpoints, six switch position indicators, and displays for the dimensional unit, ramp function and manual operation. Simple operation through 4 keys. The instruments can be used as 2-state, 3-state, modulating or continuous controllers. The controller software includes a program or ramp function, parameter set changeover, two autotuning (self-optimization) procedures, a math and logic module, as well as 4 limit comparators. A serial interface for RS422/485 or Profibus-DP can be used to integrate the instruments into a data network. The electrical connection is made at the back, via screw terminals. The option boards are universally applicable for all instruments in the series.

Ramp function

Either a rising or a falling ramp function can be used (increase or decrease in the setpoint). The change in setpoint value SP at t0 is the final value for the ramp. The ramp starts with the setpoint at time t0. The slope of the ramp can be programmed; the sign (direction) of the slope is given by the relationship between the setpoint at time t0 and the SP value. When the supply voltage is switched on, the ramp function starts with the momentary process value.

Option boards:
– Analog input
– 2 logic inputs
– 1 relay 230V/8A (changeover)
– 2 relays 230V/3A (make contact) with common pole
– 1 solid-state relay
– Analog output (voltage/current)
– RS422/485 interface
– PROFIBUS-DP interface

CODES	DESCRIPTION
AT61106	2 display - 48 x 96 / 96 x 48
AT61201	come sopra + RS 485
AT61501	3 display-Rampa-8 spezzate-setpoint remoto-110/240V

VALVOIND Srl Via Pascoli, 5 - 24060 Bagnatica (Bergamo) Tel. 035.681919-Fax. 035.684461


| **AP 100** | **PT 100 RESISTANCE THERMOMETERS** |

Normally the PT100 are simple (3-wire). However, it is recommended to request the double version (6-wire). With a double PT100 we can use: the first for the regulation, the second for the alarm, or as a reserve PT100 in case of failure of the first, or again as a comparison PT100.
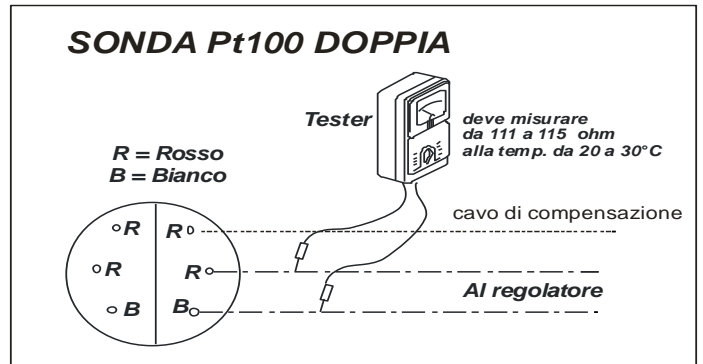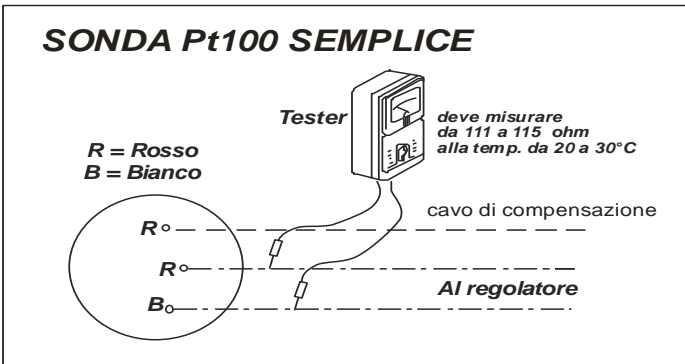
A) Resistance thermometer Type : Pt 100 std (IEC 751) other on request
B) Tolerance : IEC 751 class B - other on request
C) Number of elements : simple - double - triple on request
D) Type of connection : W 3; W 6 - other on request
E) Temperature range : -50 + 500 °C - other on request
F) Hollow conductor material : nichel - other on request
G) Sheath diameter (mm) : 2 - 3- 4,5 -6 (diam. 2 simple only)
H) Length "A" (mm) : up to 300mm standard - other on request
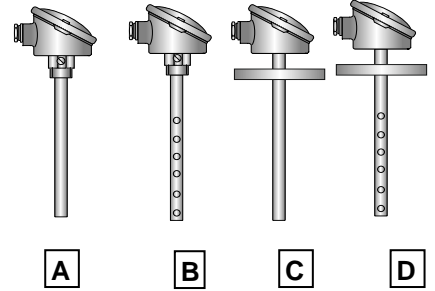
				CODES					
DIN head complete with stainless steel wells		**Ø STEM**	**Ø Connection**	**STANDARD**		**W/TRANSMITTER**		**ATEX**		
				simple	**double**	**simple**	**double**	**simple**	**double**	**w/transm.**
A	For Air	6 mm	1/2"	AP10101	AP10201	AP10301	AP10401	AP10501	AP10601	AP10701
B	For Air and Gas		1/2"	AP10102	AP10202	AP10302	AP10402	AP10502	AP10602	AP10702
C	For Fluids		DN 15	AP10103	AP10203	AP10303	AP10403	AP10503	AP10603	AP10703
D	Air channels		DN 15	AP10104	AP10204	AP10304	AP10404	AP10504	AP10604	AP10704

| **AP2…** | **PT 100 Resistance Thermometers with DIN head and slide joint** |

SONDA Pt100 SEMPLICE

Tester *deve misurare da 111 a 115 ohm alla temp. da 20 a 30°C*

R = Rosso
B = Bianco

cavo di compensazione

R
R
B

Al regolatore

SONDA Pt100 DOPPIA

Tester *deve misurare da 111 a 115 ohm alla temp. da 20 a 30°C*

R = Rosso
B = Bianco

cavo di compensazione

R R
R R
B B

Al regolatore

| **AQ 100** | **THERMOCOUPLES** |

AQK…	K	Nichel-Chromium	Nichel-Aluminium	0+1100° C	-180+1350°C	BS4937 ANSI/MC96.1 DIN 43710
AQJ…	J	Iron	Costantan	20+700°C	-180+750°C	BS4937 ANSI/MC96.1
AQE…	E	Nichel-Chromium	Costantan	0+800°C	-	BS4937 ANSI/MC96.1 DIN 43710
AQR…	R	Platinum-13% Rhodium	Platinum	0+1600°C	-50+1700°C	BS4937 ANSI/MC96.1 DIN 43710
AQS…	S	Platinum-13% Rhodium	Platinum	0+1550°C	-50+1700°C	BS4937 ANSI/MC96.1 DIN 43710
AQB…	B	Platinum-30% Rhodium	Platinum-6% Rhodium	+100+1600°C	+50+1750°C	BS4937 ANSI/MC96.1 DIN 43710

CODES				**DIN HEAD WITH S.S. WELL**		
STANDARD		**ATEX**		**DESCRIPTION**	**Ø STEM**	**CONNECTIONS**
SIMPLE	**DOUBLE**	**SIMPLE**	**DOUBLE**			
…10101	…10201	…10501	…10601	For Air	6 mm	THREADED Ø 1/2"
…10102	…10202	…10502	…10602	For Air and Gas		THREADED Ø 1/2"
…10103	…10203	…10503	…10603	For Fluids		FLANGED DN 15
…10104	…10204	…10504	…10604	Air channels		FLANGED DN 15