1/32 DIN Temperature Controller

- Ultra-Compact 1/32 DIN Size
- Dual Outputs for Heat, Cool and Alarm
- User Selectable Sensor and Process Inputs
- · Autotune PID
- · Single Ramp/Soak
- NEMA 4X (Front Panel)
- · IP66
- Large 4 Digit Display
- Program Security
- RS-232/ RS-485 Digital Communications Option

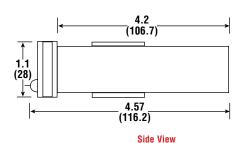




Dimensions



Front View



All Dimensions in Inches (mm)

Description

The 3204 control provides full auto-tuning PID control in a compact 1/32 DIN package, making it an excellent choice where panel space is a premium. The large 4-digit display, several temperature and process control options, a rugged design and efficient programming capabilities make the 3204 ideal for use in several demanding applications such as plastics, packaging, heat treating and life sciences. Input options include 9 different thermocouples, 100 Pt RTD or 0-20 or 4-20 mV or mA linear process. Each of the two outputs can be programmed as heat control, cool control or

alarm output. Select from Relay and SSR Drive output combinations. The 3204 also offers either RS-232 or RS-485 Modbus/RTU communications for remote management needs. Auto tuning functions calculate dependable PID parameters for optimal control of the process. The single ramp to setpoint feature enhances process control capability. NEMA 4X/IP66 front panel withstands harsh environments and applications where the unit might come in contact with water or corrosives.



Controls

3204 1/32 DIN Temperature Controller *(cont'd.)*

Specifications

1 3							
Control Modes	Field Selectabl	eld Selectable, On/Off, PID					
Control Adjustments		Control Setpoint Proportional Band Automatic Reset Rate Output Cycle Time Approach Control		Instrument Range 25% of span, adjustable for each output 0.1 to 60 min. or Off 1-200 seconds or Off 0.1-81 seconds 0.5 to 5 x Proportional Band			
Outputs							
Output #1	(One Heat, Coo Relay	Nor	larm Output mally open SPST conta 50 VAC	ct rated 2 Amps		
		SSR Drive	5 VI	DC, +0, -15%, 15 mA, n	on isolated		
Output #2	(One Heat, Coo Relay	Norr	larm Output nally open SPST contac 50 VAC	et rated 1 Amps		
		SSR Drive		0C, +0, -15%, 15 mA, no	on isolated		
Alarm Features							
Functions	İ	Field Selectable					
Types	i	Process, Devation, Band Field Selectable					
турез	'			on Start up, Latching			
Input Specifications							
Input Sampling	10 times per	second					
Sensor Type		Range	* °F	С	Accuracy		
Thermocouple	J	32 to 1		0 to 800	±0.25% of		
	K	-58 to 2		-50 to 1200	Sensor		
	T	-273 to		-200 to 250	Maximum		
	E	32 to 1		0 to 600	"		
	R	32 to 2		0 to 1600	"		
	S N	32 to 2 -58 to 2		0 to 1600 -50 to 1200	II		
	В	32 to 3		0 to 1800	п		
	l	32 to 3		0 to 1000	н		
RTD	100 Ohm Pt			-200 to 400	п		
Linear Voltage	0-20 mV, 4-2			200 10 .00			
Linear Amperage		20 mA (must i	use 19	Ω resistor)			
Instrument Power		90-264 VAC, 50/60 Hz or 12 to 24 VAC/VDC					
Operating Environment		32-130°F (0-50°C) with relative humidity 90% or less (non-condensing)					
Physical Specifications			1/32 DIN, 1.89 (48) x 0.95 (24) x 3.98 (102) Max. Panel Thickness 0.39 (10)				



Controls

3204

1/32 DIN Temperature Controller *(cont'd.)*

Ordering Information

Complete the model number using the matrix provided.

Model	3204 1/	/32 DIN Auto Tuning PID Controller						
3204	0-20, 4- and lim	-20 mV or it control (mA** line capabiliy, v	ear proces vith user p	ntroller with the following standard features: User selectable inputs (thermocouple, RTD or is inputs), dual outputs for heat, cool and alarm; single ramp & soak program, latching alarm program security levels. Also, NEMA 4X / IEC IP66 front panel; large 4-digit display. Optional modBus RTU digital communications. 3 year warranty. Approvals: UL, cUL, CE			
	Code	Outputs 1 and 2, Control Output or Alarm						
	11*	Two Relay Outputs: Output 1: 2 Amps at 250 VAC. Output 2: 1 Amp at 250 VAC. Both resistive loads						
	71	Two Outputs: Output 1: Solid State Relay Drive, 5 VDC, 15 mA. Output 2: Relay, 1 Amp at 250 VAC						
	77	77 Two Solid State Relay Drive Outputs: 5 VDC, 15mA (X 2)						
		Code						
		0	Add to complete model number					
		9	Special	Configura	tion			
			Code	Options	8			
			0	None				
			1	RS-485	ModBus/RTU Digital Communications Interface			
			2	RS-232 ModBus/RTU Digital Communications Interface				
				Code	Power Supply			
				0	90-264 VAC			
				1	12-24 VDC/AC +/20%			
3204 -	71	0	0	0	Typical Model Number			

^{*2} Relay Output Code "11" is not available with the 12-24 VDC/AC Power supply option

Stocked Items

Model	PCN
3204-11000	305090
3204-71000	305082
3204-77000	305103
3204-71001	305146
3204-77001	305162
3204-11010	305120
3204-71010	305111
3204-77010	305138
3204-11020	305189
3204-71020	305170
3204-77020	305197

Accessories

Description	PCN
Resistor, 1Ω (2% tolerance)	305630



^{**0-20} mA or 4-20 mA input signal requires 1 resistor. See accessories.