

Temperature and Process Controllers

Proportional • PID • Ramp Soak • Limit

H34 Series

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The H34-540 Series is 1/16 DIN or 1/4 DIN temperature controller with auto tuning PID control capabilities. One of four user programmable set points may be selected. For PID control in the form of time proportional relay on/off output, time proportional voltage pulse, or 4-20 mAmp signal control. Its universal input accepts 23 inputs varieties, including thermocouple, RTD, and voltage inputs can be easily configured for a 4-20 mAmp input. The relays may be programmed as alarms with 20 different high, low, and deviation alarm types which can include fail-safe operation. Digital input options add the ability of external contacts to operate the controller. With RS-485 serial communication options include protocols for master/slave set point control, modbus ASCII and RTU.

H34-540 Series Temperature Controllers - Specifications

Part No.	DIN Size	Description
H34-540-6RA-11	1/16	2 Relays, 1 Analog Output, 2 Digital Inputs, Heating or Cooling
H34-540-6RA-14	1/16	2 Relays, 1 Analog Output, RS-485 Communication, Heating or Cooling
H34-548-6RB-21	1/4	3 Relays, 2 Analog Outputs, 2 Digital Inputs, Heating or Cooling
H34-548-6RB-24	1/4	3 Relays, 2 Analog Outputs, RS-485 Communication, Heating or Cooling
H34-549-6RB-24	1/4	3 Relays, 2 Analog Outputs, RS-485 Communication, Heating & Cooling

The H34-550 Series is 1/16 DIN or 1/4 DIN ramp and soak controller with auto-tuning PID control capabilities. Two programs store 15 segments each for precision set point control. At the completion of a program, the controller can hold a set point, stop the outputs, or loop the completion of a program. Thus, enabling one 30 segment program to be used. Its universal input accepts 23 inputs varieties, including thermocouple, RTD, and voltage inputs can easily be configured for a 4-20 mAmp input. The relays may be programmed as alarms with 20 different high, low, and deviation alarm types which include fail-safe operation. Digital input options add the ability of external contacts to operate the controller and digital output options are available. With RS-485 serial communication options include protocols for master/slave set point control, modbus ASCII and RTU.



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H34-550 Series Ramp Soak Controllers - Specifications

Part No.	DIN Size	Description
H34-550-6RA-14	1/16	2 Relays, 1 Analog Output, RS-485 Communication
H34-558-6RA-26	1/4	3 Relays, 2 Analog Outputs & 4 Digital Inputs, RS-485 Communication

H34-570 Series Limit (On/Off) Controllers - Specifications

Part No.	DIN Size	Description
H34-570-6RA-10	1/16	1 Latching Relay, 1 Alarm Relay, 1 Analog Output
H34-578-6RA-14	1/4	3 Relays, 1 Analog Outputs & 4 Digital Inputs, RS-485 Communication

Specifications

Input Type	Thermocouple Type	Temperature Range	Accuracy*
Thermocouple	B	32 to 3,300°F (0 to 1,800°C)	> 400°C : $\pm 0.15\%$ FS ± 1 digit < 400°C : $\pm 5\%$ ± 1 digit
	C (W5)	32 to 4,200°F (0 to 2,300°C)	$\pm 0.2\%$ FS ± 1 digit
	E	-300 to 1,800°F (-199.9 to 999.9°C)	> 0°C : $\pm 0.1\%$ FS ± 1 digit < 0°C : $\pm 0.2\%$ FS ± 1 digit
	J	-300 to 2,300°F (-199.9 to 999.9°C)	> 0°C : $\pm 0.1\%$ FS ± 1 digit
	K	0 to 2,300°F (-199.9 to 999.9°C)	> 0°C : $\pm 0.25\%$ FS ± 1 digit > 0°C : $\pm 0.1\%$ FS ± 1 digit
	L	-300 to 1,600°F (-199.9 to 900.0°C)	> 0°C : $\pm 0.25\%$ FS ± 1 digit > 0°C : $\pm 0.1\%$ FS ± 1 digit
	N	-300 to 2,400°F (-200 to 1,300°C)	< 0°C : $\pm 0.25\%$ FS ± 1 digit
	Platinel II	32 to 2,500°F (0 to 1,390°C)	$\pm 0.1\%$ FS ± 1 digit
	R	32 to 3,100°F (0 to 1,700°C)	$\pm 0.15\%$ FS ± 1 digit
	S	32 to 3,100°F (0 to 1,700°C)	
	T	-300 to 750°F (-199.9 to 400.0°C)	
	U	-300 to 750°F (-199.9 to 400.0°C)	
RTD	JPtA	-199.9 to 999.9°F (-199.9 to 500.0°C)	$\pm 0.1\%$ FS ± 1 digit**
	JPtB	-199.9 to 300.0°F (-150.0 to 150.0°C)	
	PtA	-300 to 1,560°F (-199.9 to 850.0°C)	$\pm 0.1\%$ FS ± 1 digit**
	PtB	-199.9 to 999.9°F (-199.9 to 500.0°C)	
	PtC	-4.0 to 212.0°F (-19.99 to 99.99°C)	$\pm 0.2\%$ FS ± 1 digit
Process	0.4 to 2.0V	0.400 to 2.000	$\pm 0.1\%$ FS ± 1 digit
	1.000 to 5.000	1.000 to 5.000	Display range can be scaled between -1999 and 9999.
	0 to 10V	0.00 to 10.00	4 to 20 mA Input
	-10 to 20mV	-10.00 to 20.00	To accept a 4 to 20 mA signal, select 0.4 to 2.0 VDC input and connect a 100Ω resistor across the input terminals.
	0 to 100mV	0.0 to 100.0	

*Performance within recommended operating conditions (10 to 50°C, 20 to 90% RH)

**For a range scale of 0 to 100°C: $\pm 0.3^\circ\text{C} \pm 1$ digit, and for a range scale of -100 to 100°C: $\pm 0.5^\circ\text{C} \pm 1$ digit