

TEMPERATURE CONTROLLERS SELECTION GUIDE

Photo	Product Series	Control Type	Available Voltage ¹				Max. Amps/Zone	Application Temperature ²	Environmental Exposure ³
			120	240	277	480			
	LYNX Temperature Controller Module	PID autotune	X			-	7 at < 77°F 4 at < 104°F	0°F to 1100°F (0°C to 593°C)	14°F to 104°F (-10°C to 40°C); 80% humidity at 88°F; 50% humidity at 104°F
	MPC2 Multipoint Control Panel	Ramp/soak	X	X	X	X	60	32°F to 1922°F (0°C to 1050°C)	14°F to 104°F (-10°C to 40°C); < 90% humidity at 40°C
	SDX Digital PID	PID autotune	X	X	-	-	15 (No. American); 10 (Europe)	0°F to 999°F (0°C to 999°C)	32°F to 111°F (0°C to 44°C); < 95% humidity
	SDC Benchtop	Digital on/off	X	X	-	-	10	J -40°F to 698°F K -40°F to 899°F	32°F to 138°F; (0°C to 59°C)
	SDCE Benchtop	Digital on/off	X	X	-	-	8	J -40°F to 698°F K -40°F to 899°F R -58°F to 842°F	32°F to 100°F (0°C to 38°C)
	BH-330 Outdoor Digital (Requires Remote)	Inline with fast adaptive tuning	X			-	10	RTD -25°C to 600°C K -200°C to 1350°C	-4°F to 113°F (-20°C to 45°C) < 90% humidity
	BH-510 Outdoor Digital	Digital with fast adaptive tuning	X			-	16 (w/ext. fuse) 10 std	RTD -120°C to 850°C K -200°C to 1350°C	-4°F to 122°F (-20°C to 50°C) < 90% humidity
	BH-610 Outdoor Digital	Digital with fast adaptive tuning	X			-	40	RTD -120°C to 850°C K -200°C to 1350°C	-4°F to 122°F (-20°C to 50°C) < 90% humidity
	WEXRBL25-230ZESBH	Digital on/off with high temp and limiter	-	X	-	-	25	0°C to 450°C (°C display only)	-4°F to 104°F (-20°C to 40°C)
	BH2100	Digital	X			-	30	0°F to 300°F (-18°C to 148°C)	-22°F to 158°F (-30°C to 70°C)
	TC4000 Wet-Area	Digital on/off	X			X	30	0°F to 999°F (0°C to 999°C)	32°F to 104°F (0°C to 40°C); < 85% humidity
	TC4X Digital	Digital on/off	X			-	15 (@120 V) 10 (@240 V)	-40°F to 212°F (-40°C to 100°C)	-40°F to 140°F (-40°C to 60°C); < 95% humidity
	TTD Digital	Digital on/off	X	X	-	-	15	32°F to 175°F 32°F to 500°F 32°F to 999°F	14°F to 131°F (-10°F to 55°C)
	TB4000 Wet-Area	Bulb and capillary	X	X	X	X	50	0°F to 150°F 50°F to 300°F 150°F to 650°F	-40°F to 140°F (-40°C to 60°C)
	TB250N	Bulb and capillary	X			-	22	0°F to 150°F 100°F to 250°F	-40°F to 140°F (-40°C to 60°C); 0 to 95% humidity
	TB110N Hazardous-Area	Bulb and capillary	X			-	22	25°F to 325°F 300°F to 650°F	-40°F to 160°F (-40°C to 71°C)
	TS099 Portable	Bulb and capillary	X	X	-	-	15	60°F to 250°F 150°F to 550°F	-40°F to 160°F (-40°C to 71°C)
	HL101 Limit Controller	Temperature limit switch NOT FOR CONTROL	X	X	-	-	15	N/A	N/A
	TD101N Auto On/Off	Thermostat	X			-	25	-40°F to 200°F (specify range)	-40°F to 221°F (-40°C to 105°C)
	TD101X Auto On/Off	Thermostat	X			-	25	-40°F to 200°F (specify range)	-40°C to 221°F (-40°C to 105°C)
	TB261P	Ambient	X			-	22	30°F to 110°F	-26°F to 140°F (-32°C to 60°C)
	TPO Portable	Time percent	X	X	-	-	15	-	-40°F to 160°F (-40°C to 71°C)

Notes: ¹ Other voltages as well as 3-phase may be available. ² Application temperature may be limited by heating blanket or process requirements. ³ Temperature range is during operation. Humidity values shown are for non-condensing temperatures.

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Nema Rating	IP Rating	Approvals ⁴	Indoor	Outdoor	Accuracy	Sensor		Page No.
						Type	Included	
-	IP10 (OI) IP20	  Dock CE (RTD only)	X	-	Type-J: $\pm 1.09^{\circ}\text{C}$ Type-K: $\pm 1.125^{\circ}\text{C}$ RTD: $\pm 0.25^{\circ}\text{C} + 0.125\%$ of temp)	Type-J or Type-K thermocouple; PT100 RTD	No	148
-	-	  (By request)	X	-	$\pm 0.2\%$ current temp	Type-J or Type-K thermocouple; PT100 RTD	No	157
-	IP30	 	X	-	$\pm 0.5\%$ full scale ± 1 digit @ 25°C	Type-J or Type-K thermocouple; PT100 RTD	Yes	160
-	-	-	X	-	$\pm 1\%$ full scale	Type-J or Type-K thermocouple	Yes	161
-	-		X	-	$\pm 0.5\%$ full scale ± 1 digit @ 25°C	Type-J or Type-K thermocouple; PT100 RTD	Yes	162
-	IP67		X	X	$\pm 2^{\circ}\text{C}$ up to 700°C ($< 0.5\%$ scale)	Type-K thermocouple; RTD	No	167
-	IP65		X	X	$\pm 2^{\circ}\text{C}$ up to 700°C ($< 0.5\%$ scale)	Type-K, Type-J, Type-N thermocouple; PT100 & PT1000 RTD	No	168
-	IP65		X	X	$\pm 2^{\circ}\text{C}$ up to 700°C ($< 0.5\%$ scale)	Type-K, Type-J, Type-N thermocouple; PT100 & PT1000 RTD	No	168
-	IP64	Gas: II 2G EX e mb IIC T3 Gb Dust: II 2D EX e mb IIIC T120°C Db TUV 10 ATEX 556065  	X	X	$\pm 0.5\%$ current temp	PT100 RTD (2 or 3 wire)	No	171
-	IP67	 (Pending)	X	X	$\pm 1\%$ @ -40°C to 105°C	Thermistor (3-wire RTD option)	Yes	172
4X	IP65	 508A	X	X	$\pm 0.2\%$ current temperature	Type-J or Type-K thermocouple; PT100 RTD	No	165
4X	IP66	 	X	X	$\pm 3^{\circ}\text{F}$ (-40°F to 4°F) $\pm 2^{\circ}\text{F}$ (5°F to 167°F) $\pm 3^{\circ}\text{F}$ (168°F to 212°F)	A99BB type PTC	Yes	166
-	IP64	-	X	X	$\pm 1\%$ full scale	Type-K thermocouple	No	170
4X	IP66	-	X	X	$\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$)	304 SS bulb and capillary	Yes	177
3R	IP24		X	X	$\pm 6^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$)	Tinned copper bulb and capillary	Yes	176
7 & 9	-	    (C1-D1&2; C2-D1&2)	X	X	$\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$)	304 SS bulb and capillary	Yes	174
-	-	-	X	-	$\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$)	Copper bulb and capillary	Yes	178
-	-	-	X	-	$\pm 1\%$ full scale	Type-J or Type-K thermocouple	Yes	163
-	-	  	X	X	$\pm 6^{\circ}\text{F}$ (50°F to 80°F) $\pm 5^{\circ}\text{F}$ (81°F to 200°F)	Bimetal thermostat	N/A	173
-	-		X	X	$\pm 6^{\circ}\text{F}$ (50°F to 80°F) $\pm 5^{\circ}\text{F}$ (81°F to 200°F)	Bimetal thermostat	N/A	173
4X	IP66	 LISTED	X	X	$\pm 3^{\circ}\text{F}$ ($\pm 1.6^{\circ}\text{C}$)	Ambient sensing bulb and capillary	Yes	175
-	-	-	X	-	N/A	N/A	N/A	179

⁴ All CE marked products comply with ROHS requirements