MX Temperature Controller

Key Specifications

Working Temperature:	Up to 135°C
Temperature Stability:	±0.07°C

Maximum Pressure:	psi (bar)
120 VAC/60 Hz Models	1.8 (0.12)
240 VAC/50 Hz Models	1.5 (0.10)

Maximum Flow Rate:	Pressure
	gpm (l/min)
120 VAC/60 Hz Models	3.4 (12.8)
240 VAC/50 Hz Models	2.8 (10.6)

Features:

- Large, 3.25" (8.3 cm) universal icon and English display
- Single-speed pressure pump with external (closed-loop) circulation capability
- LidDock™, DuraTop™
- User-adjustable high and low temperature limits and alarms
- Single-point calibration
- Complies with DIN 12876-1 Class I safety requirements for use with non-flammable liquids

Visual alarms alert you when bath temperature falls outside your pre-set limits.

Easy-to-use calibration function makes it simple to adjust the temperature display to match that of a traceable temperature standard.

For additional information on the MX Controller's features and capabilities, see pages 26 and 27.

7-Liter: +135°C

Temperature Range:
Ambient +10° to +135°C

Working Access (L x W x D):
6.18 x 5.59 x 5"
15.7 x 14.2 x 12.7 cm

Overall Dimensions (L x W x H):
19.6 x 8.7 x 17.2"
49.9 x 22.1 x 43.7 cm

15-Liter: +135°C

Temperature Range:
Ambient +10° to +135°C

Working Access (L x W x D):
8.35 x 10.88 x 5.5"
21.2 x 27.6 x 14 cm

Overall Dimensions (L x W x H):
22.4 x 14.5 x 17.8"
56.9 x 36.8 x 45.2 cm

20-Liter: +135°C

Temperature Range:
Ambient +10° to +135°C

Working Access (L x W x D):
9.85 x 12.45 x 5.5"
25 x 31.6 x 14 cm

Overall Dimensions (L x W x H):
24 x 16.5 x 17.8"
61 x 41.9 x 45.2 cm

Reservoir Size	7 Liter	15 Liter	20 Liter
Temperature Range	Ambient +10° to +135°C		
Heater	1100 W		
Part Number 120 VAC/60 Hz	MX07H135-A11B	MX15H135-A11B	MX20H135-A11B
Part Number 240 VAC/50 Hz	MX07H135-A12E	MX15H135-A12E	MX20H135-A12E

Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Stainless Steel Open Bath Systems

Controller bridge rests securely on the deep drawn stainless steel reservoir, yet is easily removed for tank cleaning. Generous bath opening provides ready access to samples and included bath cover improves stability.

Features:

- Working temperatures from ambient +10°C up to 150°C
- Advanced Programmable, Advanced Digital, or MX Temperature Controller
- 6, 10, 20, or 28 liter reservoir
- DuraTop™ Chemical Resistant Bridge, Swivel 180™ Rotating Controller (on Advanced Programmable and Advanced Digital models)
- Lidded opening for optional cooling coil (10, 20 and 28 liter models)
- External circulation capability
- Economical alternative to integrated heating baths
- Complies with DIN 12876-1 Class I safety requirements for use with non-flammable liquids
- Includes bath cover

Our Advanced Programmable Temperature Controller combines time/temperature programming, a large touch-screen display, USB and serial communication to deliver exceptional performance and flexibility.

Open Bath Systems with the Advanced Series Controller feature Swivel 180™ for easy viewing and flexible bath placement.

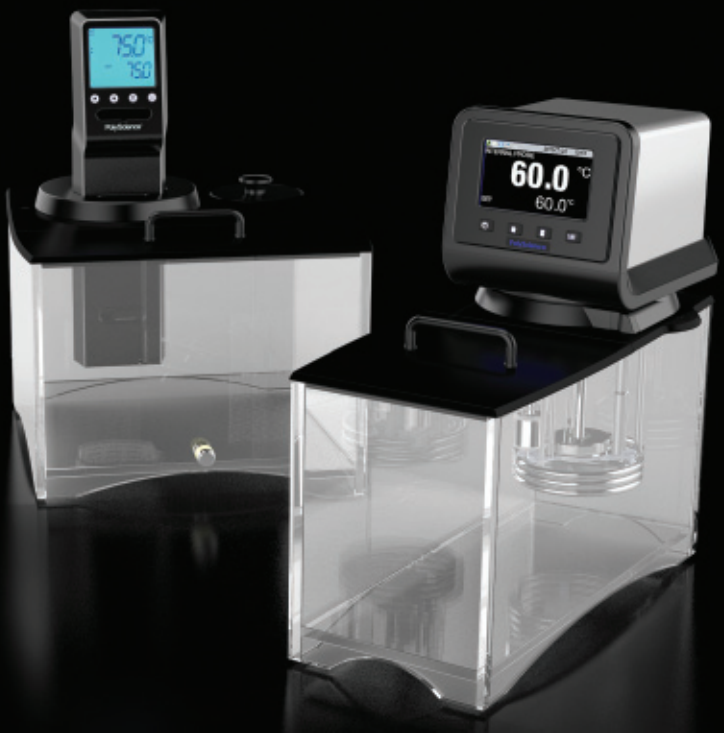
See pages 18 through 27 for Controller features and capabilities.

Reservoir Size		6 Liter	10 Liter	20 Liter	28 Liter
Maximum Temperature[1]		150°C	150°C	150°C	150°C
Working Access (L x W x D)		3.9 x 4.3 x 6" 10 x 11 x 15.2 cm	3.9 x 10.1 x 6" 9.9 x 25.5 x 15.2 cm	10.4 x 9 x 6" 26.4 x 22.8 x 15.2 cm	10.1 x 8.4 x 8" 25.7 x 21.4 x 20.3 cm
Overall Dimensions (L x W x H)		13.4 x 8.1 x 16" 34 x 20.6 x 40.6 cm	13.9 x 13.5 x 16" 35.3 x 34.2 x 40.6 cm	20.9 x 13.5 x 16" 53.1 x 34.2 x 40.6 cm	20.9 x 13.5 x 18" 53.1 x 34.2 x 45.7 cm
Advanced Programmable	120 VAC/60 Hz 240 VAC/50 Hz	AP06S150-A11B AP06S150-A12E	AP10S150-A11B AP10S150-A12E	AP20S150-A11B AP20S150-A12E	AP28S150-A11B AP28S150-A12E
Advanced Digital	120 VAC/60 Hz 240 VAC/50 Hz	AD06S150-A11B AD06S150-A12E	AD10S150-A11B AD10S150-A12E	AD20S150-A11B AD20S150-A12E	AD28S150-A11B AD28S150-A12E
MX	120 VAC/60 Hz 240 VAC/50 Hz	MX06S135-A11B MX06S135-A12E	MX10S135-A11B MX10S135-A12E	MX20S135-A11B MX20S135-A12E	MX28S135-A11B MX28S135-A12E

1. Stainless steel tank will handle temperatures up to 150°C; maximum temperature with MX controller is 135°C.
Includes Temperature Controller, bridge, stainless steel tank, and bath cover.
Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Polycarbonate Open Bath Systems

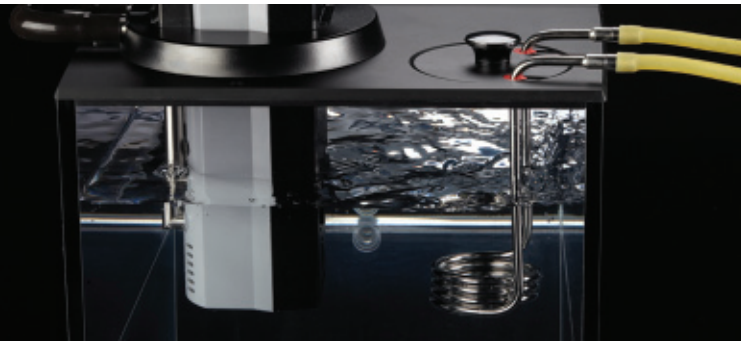
Transparent polycarbonate reservoir lets you keep samples in clear view. Elevated tank bottom provides secure handholds when lifting or relocating bath and is stable on uneven surfaces. Controller bridge removes easily for tank cleaning, rests securely on reservoir top edge when in use.



Features:

- Working temperatures from ambient +10°C up to 85°C
- Advanced Programmable or MX Temperature Controller
- 8, 11, 14, 17, 23, or 28 liter reservoir
- DuraTop™ chemical resistant bridge
- Lidded opening for optional cooling coil (17, 23 and 28 liter models)
- Drain port (17, 23 and 28 liter models)
- Complies with DIN 12876-1 Class I safety requirements for use with non-flammable liquids
- Includes bath cover

The compact and economical MX Temperature Controller is extremely simple to operate and maintains bath temperatures with ±0.07°C stability.



The optional cooling coil is ideal for set-points near ambient temperature or when rapid cooling is required.

See pages 18-19 and 26-27 for Controller features and capabilities.

Reservoir Size		8 Liter	11 Liter	14 Liter	17 Liter	23 Liter	28 Liter
Maximum Temperature[1]		85°C	85°C	85°C	85°C	85°C	85°C
Working Access (L x W x D)		4.1 x 6.1 x 8" 10.5 x 15.6 x 20.3 cm	8.3 x 6.1 x 8" 21 x 15.6 x 20.3 cm	12.4 x 6.1 x 8" 31.4 x 15.6 x 20.3 cm	4.1 x 12 x 8" 10.5 x 30.5 x 20.3 cm	8.3 x 12 x 8" 21 x 30.5 x 20.3 cm	12.4 x 12 x 8" 31.5 x 30.5 x 20.3 cm
Overall Dimensions (L x W x H)		12.7 x 8.2 x 17.4" 32.2 x 20.8 x 44.1 cm	16.8 x 8.2 x 17.4" 42.7 x 20.8 x 44.1 cm	20.9 x 8.2 x 17.4" 53.2 x 20.8 x 44.1 cm	13.9 x 13.6 x 17.4" 35.3 x 34.5 x 44.1 cm	18 x 13.6 x 17.4" 45.7 x 34.5 x 44.1 cm	22.1 x 13.6 x 17.4" 56.2 x 34.5 x 44.1 cm
Advanced Programmable	120 VAC/60 Hz	AP08P100-A11B	AP11P100-A11B	AP14P100-A11B	AP17P100-A11B	AP23P100-A11B	AP28P100-A11B
	240 VAC/50 Hz	AP08P100-A12E	AP11P100-A12E	AP14P100-A12E	AP17P100-A12E	AP23P100-A12E	AP28P100-A12E
MX	120 VAC/60 Hz	MX08P100-A11B	MX11P100-A11B	MX14P100-A11B	MX17P100-A11B	MX23P100-A11B	MX28P100-A11B
	240 VAC/50 Hz	MX08P100-A12E	MX11P100-A12E	MX14P100-A12E	MX17P100-A12E	MX23P100-A12E	MX28P100-A12E

1. Maximum recommended operating temperature for polycarbonate tank; Temperature Controllers capable of higher temperatures.
Includes Temperature Controller, bridge, tank, and bath cover.
Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

MX Immersion Circulator

Key Specifications

Working Temperature:	Up to 135°C
Temperature Stability:	±0.07°C
Heater:	1100 W

Maximum Pressure:	psi (bar)
120 VAC/60 Hz Models	1.8 (0.12)
240 VAC/50 Hz Models	1.5 (0.10)

Maximum Flow Rate:	Pressure
	gpm (l/min)
120 VAC/60 Hz Models	3.4 (12.8)
240 VAC/50 Hz Models	2.8 (10.6)

Part Number:

120 VAC/60 Hz)	**MX-CA11B**
240 VAC/50 Hz)	**MX-CA12E**

Features:

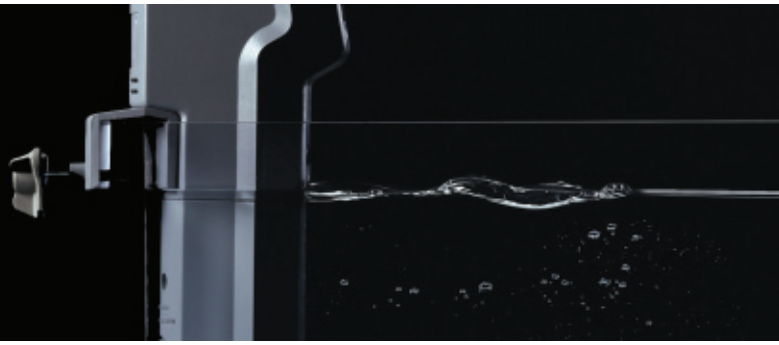
- Create a circulating bath using your own vessel or a PolyScience open bath tank
- Large, 3.25" (8.3 cm) universal icon and English display
- Single-speed pressure pump
- Adjustable flow
- User-adjustable high and low temperature limits and alarms
- Integral pump and heater coil protection
- Complies with DIN 12876-1 Class I safety requirements for use with non-flammable liquids
- Single-point calibration

Build Your Own Refrigerated Circulator

Create an economical refrigerated circulator by combining an MX Immersion Circulator with our 13 Liter Refrigerated Open Bath (page 75).

The MX Immersion Circulator should be mounted only to tanks with a working depth of 7.25"/18.4 cm or more.

Convenient slide control allows you to easily adjust the flow rate.



Clamps securely to both straight and curved tank walls.

Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.
For additional information on the MX Immersion Circulator's features and capabilities, see pages 26 and 27.

Open Tanks

Stainless Steel Open Tanks

Features:

- Liquid temperatures up to 150°C
- One-piece deep drawn stainless steel
- Rounded internal corners for easy cleaning

Stainless Steel	Temperature Limit 150°C	
Reservoir Size	13 Liter	28 Liter
Working Access (L x W x D)	9 x 6.5 x 8" (22.9 x 16.5 x 20.3 cm)	16.5 x 8.5 x 8" (41.9 x 21.6 x 20.3 cm)
Dimensions (L x W x H)	12.63 x 10.38 x 9.62" (32.1 x 28.9 x 24.4 cm)	20.87 x 12.87 x 9.62" (53 x 32.7 x 24.4 cm)
Part Number	T13SA1	T28SA1

Polycarbonate Open Tanks

Features:

- Liquid temperatures up to 85°C
- Drain port (17, 23, and 28 liter models)
- Elevated tank bottom with secure handholds

Polycarbonate	Temperature Limit 85°C					
Reservoir Size	8 Liter	11 Liter	14 Liter	17 Liter	23 Liter	28 Liter
Working Access (L x W x D)	11.2 x 6.13 x 8" 28.4 x 15.6 x 20.3 cm	15.3 x 6.13 x 8" 38.9 x 15.6 x 20.3 cm	19.4 x 6.13 x 8" 49.3 x 15.6 x 20.3 cm	12.3 x 12 x 8" 31.2 x 30.5 x 20.3 cm	16.4 x 12 x 8" 41.7 x 30.5 x 20.3 cm	20.6 x 12 x 8" 52.3 x 30.5 x 20.3 cm
Overall Dimensions (L x W x H)	11.9 x 6.87 x 9.13" 30.2 x 17.4 x 23.2 cm	16 x 6.87 x 9.13" 40.6 x 17.4 x 23.2 cm	20.2 x 6.87 x 9.13" 51.3 x 17.4 x 23.2 cm	13.8 x 12.75 x 9.13" 35.1 x 32.4 x 23.2 cm	17.9 x 12.75 x 9.13" 45.5 x 32.4 x 23.2 cm	21.1 x 12.75 x 9.13" 56.1 x 32.4 x 23.2 cm
Part Number	T08PA1	T11PA1	T14PA1	T17PA1	T23PA1	T28PA1

Model 210 Heated Recirculator

Key Specifications

Working Temperature:	Ambient to +70°C
Temperature Stability:	±0.2°C
Heater:	750 W
Pump:	Single-speed, Centrifugal
Maximum Pressure:	2 psi (0.13 bar)
Maximum Flow Rate:	3.0 gpm (11.4 l/min)

Features:

- Low-cost pumping and heating for closed-loop applications
- Provides accurate control within a frequently used temperature range
- Ideal for applications such as thawing plasma, tempering photographic solutions, or circulating to an external device

Part Number (120 VAC/50/60 Hz): 040300
Part Number (240 VAC/50/60 Hz): 040301