

# Advanced Programmable Temperature Controller

## Key Specifications

Working Temperature: From -40°C to +200°C

Temperature Stability: ±0.01°C

Maximum Pressure: psi (bar)

120 VAC/60 Hz Models 4.3 (0.3)

240 VAC/50 Hz Models 3.6 (0.25)

Maximum Flow Rate:	Pressure	Suction
	gpm (l/min)	gpm (l/min)
120 VAC/60 Hz Models	5.3 (20.1)	3.9 (14.7)
240 VAC/50 Hz Models	4.4 (16.7)	3.2 (12.2)

120 VAC/60 Hz Models 5.3 (20.1) 3.9 (14.7)

240 VAC/50 Hz Models 4.4 (16.7) 3.2 (12.2)



## Features:

- Time/temperature programming (ten 100-step programs)
- Intuitive 4.3" (10.9 cm) SmartTouch display
- 6 languages: French, German, Spanish, Chinese, Arabic, English
- Variable-speed pressure/suction pump with external circulation and temperature control capability
- Swivel 180™, LidDock™, DuraTop™, WhisperCool™, Cool Command™
- On-board connectivity: USB-A & B, RS232/485, Ethernet and external temperature probe
- Event scheduling (time & date), real-time clock and temperature trends for up to 10 days
- Selectable "home" screens and on-screen help
- Automatic and/or user-adjustable performance optimization
- 5-point calibration capability
- Complies with DIN 12876-1 Class III safety requirements for use with flammable liquids



Special features, such as the ability to select time or temperature as the priority and preview the resulting temperature profile, eliminate the guesswork when creating time/temperature programs.

Extensive communication capability enables you to easily check circulator status.

For additional information on the Advanced Programmable Controller's features and capabilities, see pages 18 and 19.



7-Liter: -20°C, Low-Profile	7-Liter: -20°C	7-Liter: -40°C	15-Liter: -30°C
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Temperature Range:  
-20° to +200°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):  
23.2 x 16.2 x 16.2"  
58.9 x 41.1 x 41.1 cm

Temperature Range:  
-20° to +200°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):  
21.3 x 8.7 x 24.3"  
54.1 x 22.1 x 61.7 cm

Temperature Range:  
-40° to +200°C

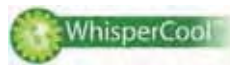
Working Access (L x W x D):  
6.18 x 5.59 x 5"  
15.7 x 14.2 x 12.7 cm

Overall Dimensions (L x W x H):  
21.3 x 8.7 x 24.3"  
54.1 x 22.1 x 61.7 cm

Temperature Range:  
-30° to +200°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 26.9"  
56.9 x 36.8 x 68.3 cm



15-Liter: -40°C	20-Liter: -30°C	28-Liter: -30°C	45-Liter: -25°C
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Temperature Range:  
-40° to +200°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 26.9"  
56.9 x 36.8 x 68.3 cm

Temperature Range:  
-30° to +200°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 16.6 x 26.9"  
61 x 41.9 x 68.3 cm

Temperature Range:  
-30° to +200°C

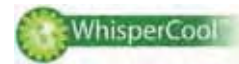
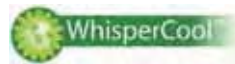
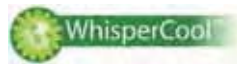
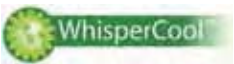
Working Access (L x W x D):  
12.35 x 14.13 x 5.5"  
31.4 x 35.9 x 14 cm

Overall Dimensions (L x W x H):  
26.5 x 18 x 26.9"  
67.2 x 45.7 x 68.3 cm

Temperature Range:  
-25° to +135°C

Working Access (L x W x D):  
21.6 x 15.68 x 5.5"  
54.9 x 39.8 x 14 cm

Overall Dimensions (L x W x H):  
35.8 x 22.4 x 42.1"  
90.9 x 56.8 x 107 cm



Reservoir Size	7 Liter Low-Profile	7 Liter		15 Liter		20 Liter	28 Liter	45 Liter <sup>1</sup>
Temperature Range	-20° to +200°C	-20° to +200°C	-40° to +200°C	-30° to +200°C	-40° to +200°C	-30° to +200°C	-30° to +200°C	-25° to +135°C
Cooling Capacity @ 20°C	200 W	200 W	505 W	915 W	1000 W	915 W	915 W	1400 W
Heater	1100 W (60 Hz)/2200 W (50 Hz)							2200 W (50/60 Hz)
Part Number 120 VAC/60 Hz	AP7LR-20-A11B	AP07R-20-A11B	AP07R-40-A11B	AP15R-30-A11B	AP15R-40-A11B	AP20R-30-A11B	AP28R-30-A11B	AP45R-20-A13D
Part Number 240 VAC/50 Hz	AP7LR-20-A12E	AP07R-20-A12E	AP07R-40-A12E	AP15R-30-A12E	AP15R-40-A12E	AP20R-30-A12E	AP28R-30-A12E	AP45R-20-A12E

1. 45 liter bath is 208-240 VAC, 50/60 Hz

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