

# Performance Programmable Temperature Controller

## Key Specifications

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

Temperature Stability: ±0.005°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:

- OpenMode time/temperature programming (no restriction on number of programs or steps)
- Intuitive 4.3" (10.9 cm) SmartTouch display
- 11 languages: French, German, Spanish, Chinese, Portuguese, Russian, Hindi, Arabic, Italian, Korean, 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, Ethernet, RS232/485, remote on/off, external temperature probe
- Event scheduling (time & date), real-time clock and temperature trends for up to 10 days
- Multiple, selectable "home" screens and on-screen help
- Automatic and/or user-adjustable performance optimization and 10-point calibration capability
- Complies with DIN 12876-1 Class III safety requirements for use with flammable liquids
- Includes Enhanced Performance Hardware & Software Package
- Available with DeviceNet™/CANbus, Modbus®, and Profibus® options



Temperature control is easily fine-tuned through the selection of a specific fluid, entry of a fluid's specific heat capacity, or even the adjustment of the controller's PID values.

Simple and intuitive time/temperature programming makes it easy to create and run special test protocols and/or ramp and soak profiles.

Selectable "Home" screens allow you to display as much or as little temperature information as you need – including 4 minute to 10 day temperature trend data.

For additional information on the Performance Programmable Controller's features and capabilities, see pages 16 and 17.



**7-Liter: -20°C, Low-Profile**

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

**7-Liter: -20°C**

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

**7-Liter: -40°C**

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

**15-Liter: -30°C**

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**

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

**20-Liter: -30°C**

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

**28-Liter: -30°C**

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 18.0 x 26.9"  
67.2 x 45.7 x 68.3 cm

**45-Liter: -25°C**

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 | PP7LR-20-A11B                 | PP07R-20-A11B  | PP07R-40-A11B  | PP15R-30-A11B  | PP15R-40-A11B  | PP20R-30-A11B  | PP28R-30-A11B  | PP45R-20-A13D         |
| Part Number 240 VAC/50 Hz | PP7LR-20-A12E                 | PP07R-20-A12E  | PP07R-40-A12E  | PP15R-30-A12E  | PP15R-40-A12E  | PP20R-30-A12E  | PP28R-30-A12E  | PP45R-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.