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)

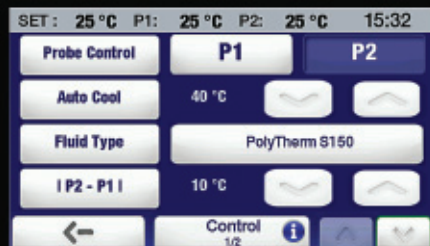| Maximum Flow Rate:	Pressure	Suction
	gpm (l/min)	gpm (l/min)
120 VAC/60 Hz Models	5.3 (20.1)	3.9 (14.7)
240 VAC/50 Hz Models	4.4 (16.7)	3.2 (12.2)

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

WhisperCool™

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

WhisperCool™

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

WhisperCool™

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

WhisperCool™

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

WhisperCool™

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

WhisperCool™

Reservoir Size	7 Liter Low-Profile	7 Liter		15 Liter		20 Liter	28 Liter	45 Liter[1]
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.