

# MASTERTEMP<sup>®</sup>

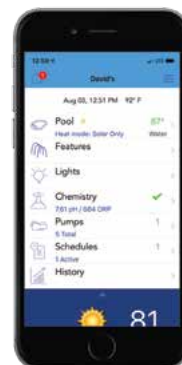
## High Performance Heaters

## Control? Automate. Savings? Checkmate.

The MasterTemp High Performance Heater has earned a reputation for being dependable, easy to use and efficient. Now with smart connectivity and energy-saving automation, it's easier than ever to get the pool warm and ready whenever it's needed.

- **Smart connectivity:**  
Ready to connect to the Pentair IntelliCenter<sup>®</sup> Control System for anytime, anywhere management.
- **Full-text digital display:**  
Combines new functions and a user-friendly menu for easy operation and diagnostics.
- **Optional Smart Heater Bypass Valve:**  
Automatically diverts water flow when the heater isn't firing to save up to 35% per year in operational costs.\*

[pentair.com/mastertemp](http://pentair.com/mastertemp)



MASTERTEMP HIGH  
PERFORMANCE HEATER

# Help save money and energy with the next generation of pool heaters.

MasterTemp heaters offer all the efficiency, convenience and reliability features you want in a pool heater, plus a lot more. As easy to use as your home heating system, plus, user-friendly LCD display and troubleshoot icons make system operation and monitoring a snap. The compact design and super-quiet operation won't intrude on your poolside leisure time. Available with optional heavy duty (HD) cupro-nickel heat exchanger to help stand up to harsh, demanding applications.

## FEATURED HIGHLIGHTS

- **New automation functionality and ignition control module with flame strength sensor for always-optimized performance.**
- **Heats up fast; no long wait before enjoying your pool or spa.**
- **Eco-friendly MasterTemp Heater is certified for low NOx emission and outperforms industry standards.**
- **Multi-position top panel allows digital display to be re-positioned for convenient operation.**
- **Tough, rustproof exterior handles the heat and weathers the elements.**
- **Certified for outdoor and indoor installations.**

Part #	Description	Fuel Type	BTU Rating (000)	Shipping Weight lbs. (kg)
461000	MasterTemp 200 ASME	Natural	200	142
461001	MasterTemp 200 ASME	Propane	200	142
461032	MasterTemp 200 ASME HD	Natural	200	144
460771	MasterTemp 250 ASME	Natural	250	144
460772	MasterTemp 250 ASME	Propane	250	144
461020	MasterTemp 250 ASME HD	Natural	250	144
460775	MasterTemp 400 ASME	Natural	400	149
460776	MasterTemp 400 ASME	Propane	400	149
461021	MasterTemp 400 ASME HD	Natural	400	149
460792	MasterTemp 175	Natural	175	128
460793	MasterTemp 175	Propane	175	128
460730	MasterTemp 200	Natural	200	128
460731	MasterTemp 200	Propane	200	128
460732	MasterTemp 250	Natural	250	133

Part #	Description	Fuel Type	BTU Rating (000)	Shipping Weight lbs. (kg)
460733	MasterTemp 250	Propane	250	133
460806	MasterTemp 250 HD	Natural	250	136
460734	MasterTemp 300	Natural	300	136
460735	MasterTemp 300	Propane	300	136
460736	MasterTemp 400	Natural	400	136
460737	MasterTemp 400	Propane	400	136
460805	MasterTemp 400 HD	Natural	400	136
EC-462026	MasterTemp 250, Ecommerce	Natural	250	153
EC-462027	MasterTemp 250 HD, Ecommerce	Propane	250	153
EC-462028	MasterTemp 400, Ecommerce	Natural	400	159
EC-462029	MasterTemp 400, Ecommerce	Propane	400	159
461031	Air Intake Kit			5
462048	Smart Heater Bypass Kit			12

### FEATURES

Copper or Cupro-Nickel-Fin Tube  
50 lb. Pressure Relief Valve  
Small Footprint  
Indoor/Outdoor

### HEAT EXCHANGER

Silicone O-Rings  
Fixed high limit, manual reset 160°F  
Fixed high limit, auto reset 135°F  
50 PSIG Pressure Relief Valve  
Flow configuration (two-pass)

### GAS CONTROL TRAIN

Fuel  
• Natural gas  
• Propane (minimum grade HD-5)

ANSI Z223.1/NFPA 54 and/or CSA B149.1  
Designed Certified

### CONSTRUCTION

Stainless steel burners  
  
Polymer enclosure (Polyurethane Resin)  
• Rodent resistant enclosure  
• Gas line and PR Valve Escutcheons  
  
Indoor/outdoor installation  
Listed for installation on a combustible services.

### CONTROLS

Automation  
• Multiple Heater Connections  
• Digital display with diagnostics  
• Single mechanical temperature control

- 126 Error Messages on LCD
- Runtime (Hours heater is active)
- Cycles (Heater On/Off cycles)
- Stack Flue Sensor Temperature
- Flame Sensor status
- Fireman's Switch
- Input Power
  - 115/240V, 60Hz, 1 Ph Power supply
  - 115/240/24V Transformer
- Safety Interlocks
  - Electronic, Intermittent Ignition
  - High limit switch (HLS)
  - Auto Gas Shut-OFF (AGS)
  - Stack Flue Sensor shut down (SFS)
  - Water pressure switch (PS)
  - Safety Interlocks

### VENTING

- Category I (Vertical only)
- Category III (Vertical or Horizontal)
- Indoor Heater Installation
- Direct Air Intake Duct with 3-inch PVC Pipe
  - Vertical Negative Pressure (positive draft)
  - Type B vent pipe
  - Clearances from combustible surfaces: 6 in (15 cm) for top and for all sides
- Outdoor Heater Installation
- Built-In Stackless Venting System
  - Exhaust Grill Vent

\*Savings based on lab testing conducted using MasterTemp 400 heater in conjunction with IntelliFlo VSF Pump and Bypass Kit which includes IntelliValve controlled by heater. Test Conditions: Pump flow rate: 50gpm. Pump run time: 3000 hours/yr. Heater run time: 100 hours/yr. Electrical Cost: \$0.21 per kWh. System TDH: Heater and Bypass Kit added to Standardized 'Curve C' System Curve performance data as per California Energy Commission Title 20 Appliance Efficiency Regulations. Test conditions assume pump flow rate of 50gpm and Constant Flow operation utilizing a lower motor RPM when flow is bypassing the heater due to lower system TDH. Actual performance and any subsequent energy consumption/savings are dependent upon various characteristics of the plumbing system, including but not limited to; pipe size, pipe lengths, filter type, fittings, system design, equipment run time/settings, and more.

