

Temperature Controllers



Console Systems

Benchtop Point-of-Use Temperature Control Consoles

2

CONSOLE TYPES

Type 1—Self-Powered Output

Heater power is drawn from console input power.
Maximum current available for heaters: 8 Amps/console
Optional models available to 18 Amps

Construction Characteristics

Tempco TPC Portable Temperature Control Consoles are quality built self-contained systems for monitoring and controlling process temperatures in a wide range of fixed or portable applications.

These 1- to 4- zone units use our reliable next generation TEC-9100 1/16 DIN auto-tuning fuzzy logic PID temperature controllers with user-friendly programming.



MODEL TPC-1000
1-Zone Control Console
4-7/8" H x 9" D x 5" W



MODEL TPC-3000
3-Zone Control Console
4-7/8" H x 9" D x 11-1/4" W



MODEL TPC-2000
2-Zone Control Console
4-7/8" H x 9" D x 8-1/4" W



MODEL TPC-4000
4-Zone Control Console
4-7/8" H x 10" D x 14-13/16" W



Typical Rear View
Switched Plug Output



Supplied Power Cord
and plugs

Type 2—Switched Plug Output

Heater power is independent of console input power.
Maximum current available for heaters: 12 Amps/zone

Design Features

- * Front-mounted rocker panel switch
- * Retractable legs for easy benchtop viewing
- * Carrying handle
- * 60-inch-long power cord with standard U.S. straight-blade plug configuration for 120V or 240V
- * Miniature jack and plug for temperature sensor input (one per zone)
- * Power output plug (one per zone)
- * Can customize with high limits, alarms, etc.

Console Advantages

- * Cost Effective
- * Compact Size
- * Easy to Use
- * Safe to Operate
- * Portable
- * Three Year Warranty

Typical Applications

- ↔ Dryers
- ↔ Platen Heating
- ↔ Ovens and Furnaces
- ↔ Heating of Tanks
- ↔ R & D Laboratory
- ↔ Educational Facilities
- ↔ Packaging Sealing Equipment
- ↔ Semiconductor Processing Equipment
- ↔ Plastics – Sprue or Nozzle Bushings
- ↔ Freeze and Moisture Protection
- ↔ Sterilizers/Pasteurizers
- ↔ Food Processing Equipment

NEW DESIGN

Extra Rugged 16 Amp Unit with Mechanical Relay and 12 Gauge 3-Wire Cord

Design Features

- * 1920W/120V, 3840W/240V Maximum load capacity
- * Ideal for Race Teams and Construction Site Heaters
- * Hooded overhang front and rear for protection
- * Plug & Play

Zones	Voltage Input	Controlled Amps	Watts	Part Number Type J Input	Part Number Type K Input
1	120	16	1920	PCM10084	PCM10085
1	240	16	3840	PCM10086	PCM10087



NEW DESIGN



Benchtop Point-of-Use Temperature Control Consoles

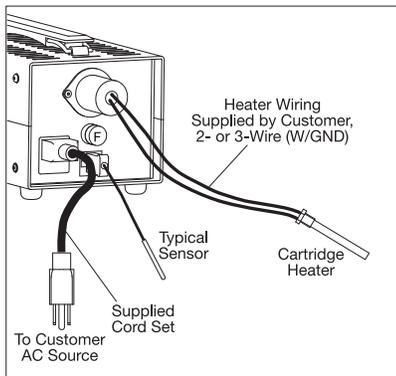
TYPE

1

Self-Powered Output (True Plug & Play Operation)

The heater power is drawn directly from the console's main line cord. The line cord is fused at 10 Amps, 240 VAC. 20 Amp units are available on special order.

True Plug & Play Operation: The heater is simply wired to the supplied plug and plugged in to the rear mounted receptacle.



Self-Powered Output Consoles

Heater Power is Drawn from Console Input Power

Zones	Console Voltage Input	Controlled Voltage per Zone	Output per Zone Amps (max)	Watts per Zone (max)	Part Number and Sensor Input		
					Type J Input	Type K Input	RTD Input
1	120	120	8.0	960	TPC10007	TPC10008	TPC10009
1	240	240	8.0	1920	TPC10010	TPC10011	TPC10012
2	120	120	4.0	480	TPC20009	TPC20010	TPC20012
2	240	240	4.0	960	TPC20013	TPC20014	TPC20015
3	120	120	2.7	324	TPC30009	TPC30010	TPC30011
3	240	240	2.7	648	TPC30012	TPC30013	TPC30014
4	120	120	2.0	240	TPC40008	TPC40009	TPC40010
4	240	240	2.0	480	TPC40011	TPC40012	TPC40013

Stock Items Are Shown In **RED**

TYPE

2

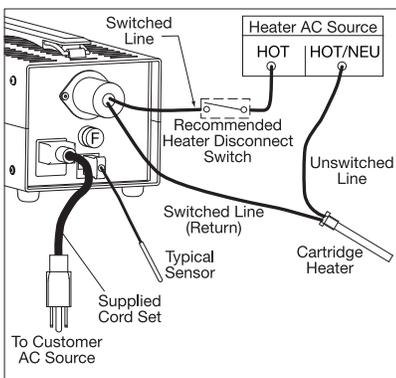
Switched Plug Output Only

The heater power is independent of the console controller input power. A Solid State Relay closure is provided per zone for external control switching.

Each zone is fused at 15 Amps. External 120, 208 or 240 VAC must be provided to the heater power circuit.



You must install a switch into the heater circuit to disconnect power to the heater output when the console is not in use. The internal solid-state relay should not be relied on to disconnect heater power.



Switched Plug Output Consoles

Heater Power is Independent of Console Input Power

Zones	Console Voltage Input	Controlled Voltage per Zone (max)	Output per Zone Amps (max)	Watts per Zone (max)	Part Number and Sensor Input		
					Type J Input	Type K Input	RTD Input
1	120	240	12	2880	TPC10001	TPC10002	TPC10003
1	240	240	12	2880	TPC10004	TPC10005	TPC10006
2	120	240	12	2880	TPC20001	TPC20002	TPC20003
2	240	240	12	2880	TPC20004	TPC20005	TPC20006
3	120	240	12	2880	TPC30001	TPC30002	TPC30003
3	240	240	12	2880	TPC30004	TPC30005	TPC30006
4	120	240	12	2880	TPC40001	TPC40002	TPC40003
4	240	240	12	2880	TPC40004	TPC40005	TPC40006

Stock Items Are Shown In **RED**

Specifications

- Output Power Switching:** Solid State Relay with heat sink
- Optional Sensor Inputs:** Consult Tempco
- Power Input:** Rear panel mounted fused power inlet, cord supplied
- Control Options:** FM High Limit Controller, 2nd Output, Alarm, Data Communications or other special requirements; consult Tempco.

Ordering Information

Standard Consoles – Order by specifying part number. Standard lead time is Stock to 2 weeks.

Custom Made Consoles. Custom consoles can be manufactured with electrical components to meet your specific requirements. **Consult Tempco.**