Temperature Controllers







Benchtop Point-of-Use Temperature Control Consoles

2

CONSOLE TYPES

Type 1—Self-Powered "Plug & Play" Output
Heater power is drawn from console input power.

Maximum current available for heaters: 12 Amps/console

Optional models available to 16 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-9400 1/16 DIN auto-tuning fuzzy logic PID temperature controllers with user-friendly programming and bright LCD displays using NFPA/IEC standard colors.



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



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

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. Other country standards available.
- * Miniature jack and plug for temperature sensor input (one per zone)
- * Power output plug (one per zone)
- * Can customize with high limits, alarms, etc.
- * Fast cycling solid state relay

Console Advantages

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



Model TPC-2000

2-Zone Control Console 4-7/8" H × 9" D × 8-1/4" W

Typical Applications

- → Dryers
- Platen Heating
- Ovens and Furnaces
- Heating of Tanks



Model TPC-4000

4-Zone Control Console

4-7/8" H × 10" D × 14-13/16" W

- → 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 NEW DESIGN



For these consoles the customer must have access to receptacles rated at 20 amps. For 120 volt operation these are NEMA 5-20, for 240 volt operation these are NEMA 6-20.

Zones				Part Number Type J Input	
1	120	16	1920	PCM10084	PCM10085
1	240	16	3840	PCM10086	PCM10087

Design Features

- * 16 Amp Rated, 20 Amp Fused
- * 1920W/120V, 3840W/240V Maximum load capacity
- * Ideal for Race Teams & Construction Site Heaters
- * Hooded overhang front and rear for protection
- * Plug & Play
- * Agency Approvals:



File #: E307875



Heater Wiring Supplied by Customer, 2- or 3-Wire (W/GND)

> Cartridge Heater



Temperature Controllers

Console Systems

Benchtop Point-of-Use Temperature Control Consoles

TYPE

1

Self-Powered Output (True Plug & Play Operation)

Heater power is drawn directly through the console's 15 amp line cord. Our standard TPC is also fused at 15 amps (12 amps useable). For 120 volt operation these are NEMA 5-15, for 240 volt operation these are NEMA 6-15. See pg13-52 for units fused at 20 amps (16 amps usable).

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

	Console Voltage Input	Controlled Voltage per Zone	Output per Zone Amps	Watts per Zone	Part Number and Sensor Input		
Zones			(max)	(max)	Type J Input	Type K Input	RTD Input
1	120	120	12	1440	TPC10062	TPC10063	TPC10064
1	240	240	12	2880	TPC10065	TPC10066	TPC10067
2	120	120	6	720	TPC20051	TPC20052	TPC20053
2	240	240	6	1440	TPC20054	TPC20055	TPC20056
3	120	120	4	480	TPC30024	TPC30025	TPC30026
3	240	240	4	960	TPC30027	TPC30028	TPC30029
4	120	120	3	360	TPC40031	TPC40032	TPC40033
4	240	240	3	720	TPC40034	TPC40035	TPC40036

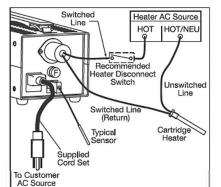
Stock Items Are Shown In RED

TYPE

Typical

To Customer





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)		mber and Sens	or Input RTD Input
2	120	240	12	2880	TPC20057	TPC20058	TPC20059
2	240	240	12	2880	TPC20060	TPC20061	TPC20062
3	120	240	12	2880	TPC30030	TPC30031	TPC30032
3	240	240	12	2880	TPC30033	TPC30034	TPC30035
4	120	240	12	2880	TPC40037	TPC40038	TPC40039
4	240	240	12	2880	TPC40040	TPC40041	TPC40042

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 4 weeks.

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

★ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

