

# 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 Applications

- ↔ Dryers
- ↔ Platen Heating
- ↔ Ovens and Furnaces
- ↔ Heating of Tanks
- ↔ R & D Laboratory
- ↔ Educational Facilities
- ↔ Packaging Sealing Equipment
- ↔ Semiconductor Processing Equipment

### 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 Rear View  
Switched Plug Output



Supplied Power Cord  
and plugs

**NEW DESIGN**

**Extra Rugged 20 Amp Unit with Mechanical Relay and 12 Gauge 3-Wire Cord**

**NEW DESIGN**

#### Design Features

- \* 2000W/120V, 4000W/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           | 17              | 2000  | PCM10024                 | PCM10026                 |
| 1     | 240           | 17              | 4000  | PCM10027                 | PCM10028                 |





### Benchtop Point-of-Use Temperature Control Consoles

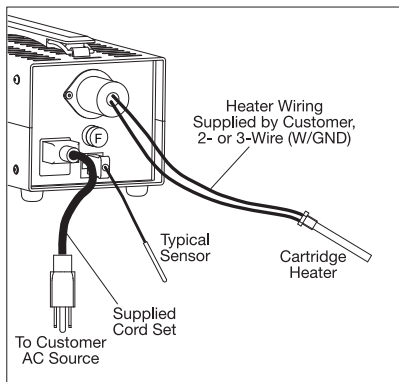
#### TYPE

# 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                  | <b>TPC10007</b>              | <b>TPC10008</b> | TPC10009  |
| 1     | 240                   | 240                         | 8.0                        | 1920                 | <b>TPC10010</b>              | TPC10011        | TPC10012  |
| 2     | 120                   | 120                         | 4.0                        | 480                  | <b>TPC20009</b>              | 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

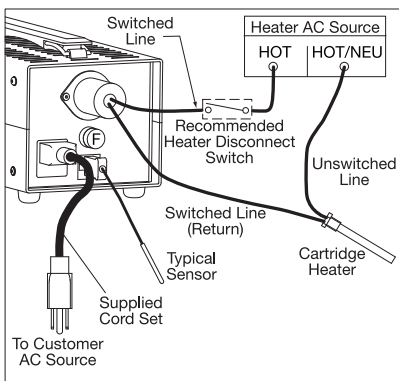
#### Switched Plug Output Only

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                 | <b>TPC10001</b>              | TPC10002        | TPC10003  |
| 1     | 240                   | 240                               | 12                         | 2880                 | <b>TPC10004</b>              | <b>TPC10005</b> | TPC10006  |
| 2     | 120                   | 240                               | 12                         | 2880                 | <b>TPC20001</b>              | <b>TPC20002</b> | TPC20003  |
| 2     | 240                   | 240                               | 12                         | 2880                 | <b>TPC20004</b>              | <b>TPC20005</b> | TPC20006  |
| 3     | 120                   | 240                               | 12                         | 2880                 | <b>TPC30001</b>              | TPC30002        | TPC30003  |
| 3     | 240                   | 240                               | 12                         | 2880                 | <b>TPC30004</b>              | TPC30005        | TPC30006  |
| 4     | 120                   | 240                               | 12                         | 2880                 | <b>TPC40001</b>              | TPC40002        | TPC40003  |
| 4     | 240                   | 240                               | 12                         | 2880                 | <b>TPC40004</b>              | 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.**