

# T8168-1 Proportional Controller

0-10 VDC / Three Wire Floating / ON-OFF

# **Precision Digital Outputs**

The T8168 Thermostat delivers precision digital outputs for valves, dampers, relays and fans.

Easy single set point technology provides simple accurate control of temperature settings.

# System Configurations

Designed to meet a variety of configuration needs.

### Temperature

- 2 Heat/2Cool ON/OFF
- 1Heat/1Cool TWF
- 1Heat/1Cool 0-10 VDC

#### Fan

- One 0-10 VDC Fan
- Up to Three 24 VAC Fan Speeds

### Applications

Highly versatile control for a variety of applications.

- Fan Coil
- Conventional HVAC
- Proportional Control

The T8168 includes an easily configurable service menu to allow fast system set up of requirements to limit operation, match user preferences or meet local codes.

### **Controller Application Support**

Contact PECO to optimize feature selection that meet your requirements at Controls@astronics.com.

### **KEY BENEFITS**

- Remote, Local or Averaged Temperature Sensing
- Control for Relays, Valves and Dampers
- Non-Programmable or Programmable Operation
- Keypad Lock out with PIN
- Seasonal Summer-Winter Change Over for Fan Coils
- Fan Coil 2-Pipe/4-Pipe Settings
- Multiple Fault Notifications
- Door Open Shut Down
- Occupancy based Fan Selection
- Holiday Scheduling
- NO/NC Heat W1 configuration



## Wiring

Terminal	Description	
24 VAC-1	24 VAC 1 (UNSWITCHED)	
24 VAC-2	24 VAC 2	
24 VAC-2	24 VAC 2	
Y1	COOL 1	COOL Open (TWF)
W1	HEAT 1	HEAT Open (TWF)
Y2	COOL 2 or FAN 3 (MED)	COOL Close (TWF)
W2	HEAT 2	HEAT Close (TWF)
G	FAN 1 (HI)	
G1	FAN LO or DAMPER Configurable	
YD	0-10VDC COOL (4-20mA)	
WD	0-10VDC HEAT (4-20mA)	
GD	0-10VDC FAN (4-20mA)	
S1	REMOTE SENSOR, FAULT	DETECTION
S2	PIPE SENSOR	
SC	DC /SENSOR COMMON	
4A	Unused	
4B	Unused	
4C	Unused	

\*TWF = Three Wire Floating valve operation

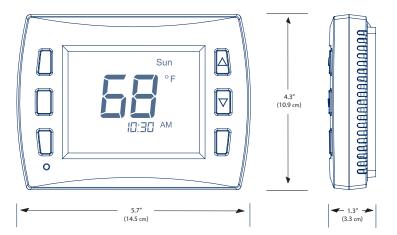
Model	Part No.	Description
T8168-1	73671	Performance PRO Proportional Controller
Remote Sensor	68671	Temperature Probe for Retun Air or Pipe Sensor
SP155-017	69308	Indoor Wall Mounted Remote Sensor

## Get Started Today

For additional details, please contact PECO Control Systems.

11241 SE Highway 212 Clackamas, OR 97015 503-387-6410 Controls@astronics.com pecocontrolsystems.com





## PRODUCT SPECIFICATIONS

#### **Output Ratings**

Output Natings		
Outputs:	Y1, Y2, W1, W2, G, G1	
	24 VAC (20-30 VAC); 50/60 Hz	
	10 VA	
Outputs:	WD, GD, YD	
	0-10 VDC: Loads must be 1.2K ohms minimum	
	4-20 mA: Loads must be 600 ohms maximum	

#### **Technical Data**

- Temperature Control Range: 50° to 90° F (10° to 32° C)
- Differential: 1° F (0.5°C)
- Input Power: 24 VAC (20-30 VAC) 50/60 Hz (+/- 10%)
- Operating Temperature: 0° to 120°F (-18° to 49°C)
- Operating Humidity: 5% to 95% RH, non-condensing
- Physical Dimensions: 4.3" H x 5.7" W x 1.3"D
- Terminal Connections: 14-24 AWG stranded or solid wire
- Proportional Output Band Width: 2°F (1°C)
- Proportional Stroke Time Default: 2 Minutes (Configurable)

The PECO<sup>®</sup> Performance PRO<sup>™</sup> T8168 APPLICATIONS INCLUDE fan coil, PTAC and Conventional system with a single, multi speed or 0-10 VDC Fan.