



T8168 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

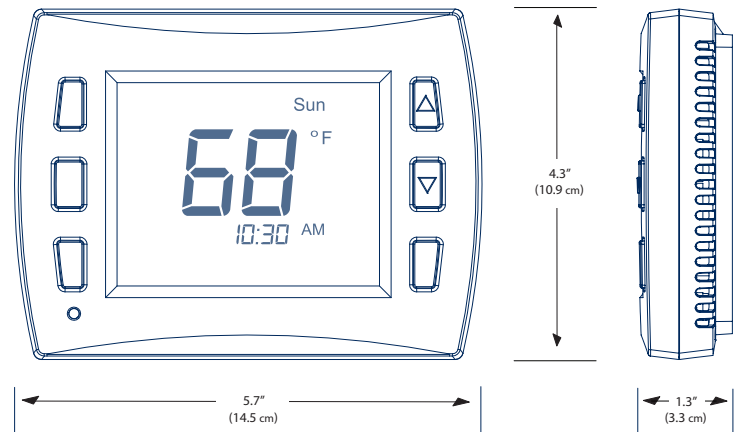
- Remote, Local or Averaged Temperature Sensing
- Control for Relays, Valves and Dampers
- Non-Programmable or Programmable Operation
- Keypad Lock out with PIN
- Seasonal Summer-Winter Change Over for Fan Coils
- Fan Coil 2-Pipe/4-Pipe Settings
- Multiple Fault Notifications
- Door Open Shut Down
-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

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 Return Air or Pipe Sensor
SP155-017	69308	Indoor Wall Mounted Remote Sensor



PRODUCT SPECIFICATIONS

Output Ratings

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

Get Started Today

For additional details, please contact PECO Control Systems.

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