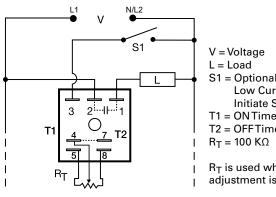






# Wiring Diagram



- S1 = Optional Low Current Initiate Switch T1 = ON Time T2 = OFFTime
- R<sub>T</sub> is used when external adjustment is ordered.

### **Description**

The PTHF4900DK can be used for a variety of applications from chemical metering, to temperature regulating, to energy management. The infinite adjustability from 1 to 99% provides accurate percentage on control over a wide factory fixed cycle period. When mounted on a metal surface, it can be used to drive solenoids, contactors, relays, or lamps, up to 20A steady, 200A inrush. The PTHF4900DK is the suggested replacement for the PT Series.

### Operation (Percentage)

Upon application of input voltage, the output energizes and the T1 ON time begins. At the end of the ON time, the output de-energizes and the T2 OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied. Increasing the ON time decreases the OFF time. The total cycle period is equal to the ON time plus the OFF time. The total cycle period is factory fixed. ON time range is 1 to 99 percent of cycle period.

Reset: Removing input voltage resets the output and time delays, and returns the sequence to the T1 ON time.

# Features & Benefits

FEATURES	BENEFITS
Microcontroller based	Repeat accuracy + / -0.5%, Factory calibration + / - 5%
ON/OFF recycling percentange control 1 to 99%	Accurate control over a wide factory fixed cycle period
Compact, low cost design	Allows flexiblility for OEM applications and reduces component and labor costs
High load currents up to 20A, 200A inrush	Allows direct operation of motors, lamps, and heaters without a contactor
Totally solid state and encapsulated	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity
Metalized mounting surface	Facilitates heat transfer in high current applications

# Accessories



P1004-95, P1004-95-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P0700-7 Versa-Knob Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



### P1015-13 (AWG 10/12), P1015-64 (AWG 14/16) Female Quick Connect

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.

P1015-18 Quick Connect to Screw Adapter

Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

# PTHF4900DK



### **Specifications**

### **Time Delay**

Type **Range/External Adjustment Resistance Cycle Period Repeat Accuracy Cycle Period Tolerance** (Factory Calibration) **Reset Time** Time Delay vs Temp. & Voltage Input Voltage Tolerance AC Line Frequency **Power Consumption** Output Type **Maximum Load Currents** 

Voltage Drop **OFF State Leakage Current** Protection Circuitry **Dielectric Breakdown** Insulation Resistance

External or onboard knob

Adjustable from 1 - 99% /  $R_T$  = 100 K $\Omega$ Fixed from 10s - 1000m ±0.5% or 20ms, whichever is greater

≤ ± 5% ≤ 150ms

 $\leq \pm 10\%$ 

120 or 230VAC ±20% 50/60 Hz  $\leq 2VA$ 

Solid state **Steady State** 

Inrush\* 1A 10A ≈ 2.5V at rated current ≃ 5mA @ 230VAC

Encapsulated	
≥ 2000V RMS terminals to mount	ting surface
≥ 100 MΩ	

### Mechanical Mounting \*

Dimensions

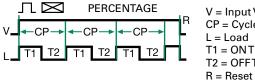
Termination **Environmental Operating/Storage** Temperature Humidity

Surface mount with one #10 (M5 x 0.8) screw **H** 50.8 mm (2"); **W** 50.8 mm (2"); **D** 38.4 mm (1.51") 0.25 in. (6.35 mm) male quick connect terminals

-40° to 60°C / -40° to 85°C 95% relative, non-condensing 6, 10, 20A units: ≈ 3.9 oz (111 g)

\*Units rated ≥ 6A must be bolted to a metal surface using the included heat sink compound. The maximum mounting surface temperature is 90°C. Inrush: Non-repetitive for 16ms.

## **Function Diagram**



V = Input Voltage CP = Cycle Period T1 = ONTime T2 = OFFTime R = Reset