

# PHS SERIES

## Phase Control



### Description

The PHS Series is an ideal method of changing lamp intensity, varying the speed of a fan/motor, or controlling the temperature of a heater. The effective output voltage is adjusted with an accessory external potentiometer suitable for line voltage applications.

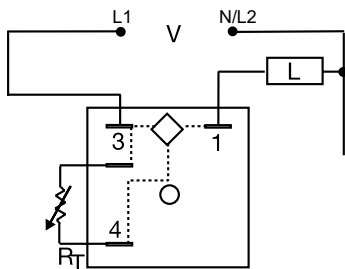
### Operation

Upon application of input voltage, effective output voltage can be varied by changing the external resistance value. As the external resistance increases, the effective output voltage decreases. The inverse is also true.

### Features & Benefits

| FEATURES  | BENEFITS  |
|---|---|
| <b>External adjustment - 230VAC rated potentiometer</b> | Allows control of heavy loads directly, solid state design will provide long life |
| <b>Up to 20A steady state - 200A inrush</b>             | Allows control of heavy loads directly, solid state design will provide long life |
| <b>Single hole surface mounting</b>                     | Provides quick and easy installation  |

### Wiring Diagram



Triac Output Device  
V = Voltage  
L = Load  
RT = External Adjustment

### Accessories



**P1004-174** (100kΩ 1W), **P1004-175** (200kΩ 2W)  
**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.



**P1015-64** (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.

### Ordering Information

| MODEL     | INPUT VOLTAGE | RATING |
|-----------|---------------|--------|
| PHS120A10 | 120VAC        | 10A    |
| PHS120A20 | 120VAC        | 20A    |
| PHS120A6  | 120VAC        | 6A     |
| PHS230A10 | 230VAC        | 10A    |
| PHS230A20 | 230VAC        | 20A    |
| PHS230A6  | 230VAC        | 6A     |

If you don't find the part you need, call us for a custom product 800-843-8848

## PHS SERIES

### Specifications

#### Output

#### Type

#### Rating

Variable voltage phase angle control

| Steady State (at 100% On) | Inrush* |
|---------------------------|---------|
| 1A                        | 10A     |
| 6A                        | 60A     |
| 10A                       | 100A    |
| 20A                       | 200A    |

#### Minimum Load Current

100mA

#### Voltage Drop

≅ 2.0V at rated current

#### Input

#### Voltage

120 or 230VAC

#### Tolerance

±20%

#### AC Line Frequency

50/60Hz

#### Protection

#### Dielectric Breakdown

≥ 2000V RMS terminals to mounting surface

#### Insulation Resistance

≥100MΩ

#### Mechanical

#### Mounting \*

Surface mount with one #10 (M5 x 0.8) screw

#### Dimensions

**H** 50.8 mm (2"); **W** 50.8 mm (2");

**D** 38.4 mm (1.51")

#### Termination

0.25 in. (6.35 mm) male quick connect terminals

#### Environmental

#### Operating/Storage

#### Temperature

-20° to 60°C / -40° to 85°C

#### Humidity

95% relative, non-condensing

#### Weight

1A: ≅ 2.4 oz (68 g)

6, 10, & 20A: ≅ 3.9 oz (111 g)

#### External Adjustment

#### Potentiometer

#### 120VAC

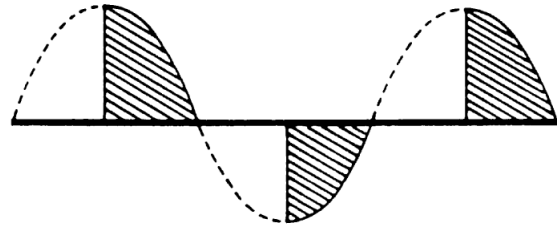
100KΩ rated at 1W

#### 230VAC

200KΩ rated at 2W

Must have insulation resistance suitable for line voltage applications.

### Typical Output Waveform



\*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.