Phase Control

PHS Series

AC Phase Control





- External Adjustment -230 V AC Rated Potentiometer
- 120 or 230 V AC Input Voltages Available
- Up to 20 A Steady State -200 A Inrush
- Single Hole Surface Mounting

Approvals: 71 (F)





Accessories



Female quick connect P1015-13 (AWG 10/12) P1015-64 (AWG 14/16) P1015-14 (AWG 18/22)



11

Quick connect to screw adaptor P/N: **P1015-18**



Versa-knob P/N: **P0700-7**

See accessory pages for specifications.

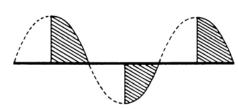
Description

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.

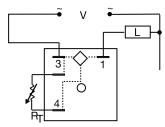
Operation

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.

Typical Output Waveform



Connection



Triac Output Device

 $V = Voltage L = Load R_{\tau} = External Adjustment$ Dashed lines are internal connections.

Available Models-

PHS120A1 •PHS120A10 •PHS120A6 PHS230A1 •PHS230A20 PHS230A6

•PHS120A20

•PHS230A10

Don't see what you need? Call us for a minimum quantity and price quote!

Ordering Table

PHS Series Input -120A - 120 V AC -230A - 230 V AC

X Rating 1 A - **6** A -10 A -**20** A

Example P/N: PHS120A10, PHS230A6

Phase Control

PHS Series

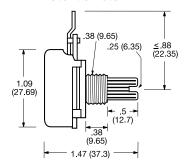




Technical Data

Output Type Rating	Variable voltage phase angle control Steady State (at 100% On) Inrush* 1 A 10 A 6 A 10 A 100 A 100 A 100 A 20 A Variable voltage phase angle control *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 16 ms.
Minimum Load Current Voltage Drop	100 mA ≅ 2.0 V at rated current
Input Voltage Tolerance Frequency	120 or 230 V AC +/-20% 50 60 Hz
Protection Dielectric Breakdown Insulation Resistance	\geq 2000 V RMS terminals to mounting surface \geq 100 $M\Omega$
Mechanical Mounting * Termination	Surface mount with one #10 (M5 x 0.8) screw 0.25 in. (6.35 mm) male quick connect terminals
Environmental Operating / Storage Temperature Humidity Weight	-20°C +60°C / -40°C +85°C 95% relative, non-condensing 1A: ≅ 2.4 oz (68 g) 6, 10, & 20A: ≅ 3.9 oz (111 g)
External Adjustment Potentiometer 120 V AC 230 V AC	100K Ω rated at 1 W 200K Ω rated at 2 W Must have insulation resistance suitable for line voltage applications

Potentiometer

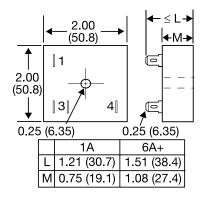


Part Number	Value (Ohms) Wattage
•P1004-174	100K	1 W
P1004-175	200K	2 W

A durable conductive plastic potentiometer. Recommended for use with the PHS Series. It is designed to withstand high temperature and harsh environments. The shaft is slotted for screwdriver adjustment and can be panel mounted.

- Resistance values 100K and 200K +/-10%
- Rated Wattage at 70°C
- Linear taper
- Shaft rotation: 312° +/-3° (effective rotation 275° +/-5°)

Mechanical View



Inches (Millimeters)