

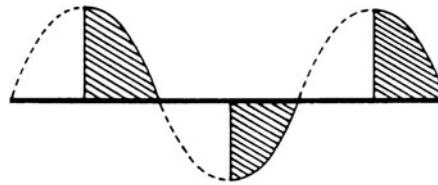
The PHS Series is an ideal method of changing lamp intensity, varying the speed of a fan/motor, or controlling the temperature of a heater. The effective output voltage is adjusted with an accessory external potentiometer suitable for line voltage applications.

For more information see:
Appendix B, page 165, Figure 4 for dimensional drawing.
Appendix C, page 172, Figure 40 for connection diagram.

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



Features:

- External adjustment - 230VAC rated potentiometer
 - 120 or 230VAC input voltages available
 - Up to 20A steady state - 200A inrush
 - Single hole surface mounting
- Approvals:

Auxiliary Products:

- **Versa-knob:** P/N: P0700-7
- **Quick connect to screw adaptor:** P/N: P1015-18
- **Female quick connect:** P/N: P1015-13 (AWG 10/12)
P/N: P1015-64 (AWG 14/16)
P/N: P1015-14 (AWG 18/22)
- **Potentiometers:** P/N: P1004-174 (100kΩ 1W)
P/N: P1004-175 (200kΩ 2W)

Available Models:

PHS120A10	PHS230A10
PHS120A20	PHS230A20
PHS120A6	PHS230A6
PHS230A1	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

PHS	X	X
	Input Voltage	Rating
	-120A - 120VAC	-1 - 1A
	-230A - 230VAC	-6 - 6A
		-10 - 10A
		-20 - 20A

Specifications

Output	Variable voltage phase angle control	Mechanical	
Type	Variable voltage phase angle control	Mounting *	Surface mount with one #10 (M5 x 0.8) screw
Rating	Steady State (at 100% On)	Dimensions	2 x 2 x 1.51 in. (50.8 x 50.8 x 38.4 mm)
	1A	Termination	0.25 in. (6.35 mm) male quick connect terminals
	6A	Environmental	
	10A	Operating / Storage Temperature	-20° to 60°C / -40° to 85°C
	20A	Humidity	95% relative, non-condensing
Minimum Load Current	100mA	Weight	1A: ≅ 2.4 oz (68 g) 6, 10, & 20A: ≅ 3.9 oz (111 g)
Voltage Drop	≅ 2.0V at rated current	External Adjustment Potentiometer	
Input		120VAC	100KΩ rated at 1W
Voltage	120 or 230VAC	230VAC	200KΩ rated at 2W
Tolerance	±20%		Must have insulation resistance suitable for line voltage applications.
AC Line Frequency	50/60Hz		
Protection			
Dielectric Breakdown	≥ 2000V RMS terminals to mounting surface		
Insulation Resistance	≥ 100MΩ		

*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.