

SERIES PH

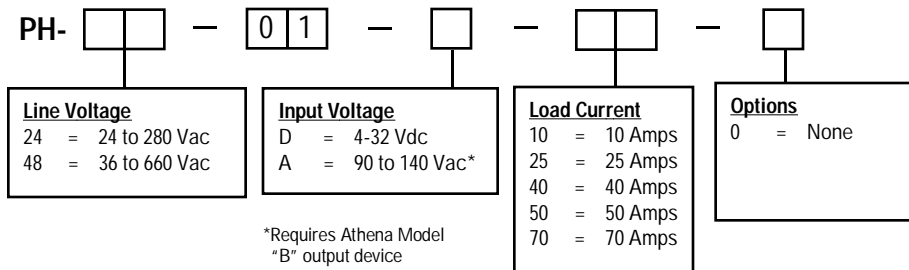
Power Relays

The PH Series of solid-state power relays provide back-to-back SCR output for severe inductive loads. They feature superior false turn-on immunity and positive turn-off at high dV/dT.

- Current ratings to 70 A
- Output voltage rating to 660 Vac
- AC or DC inputs
- 4 kV optical isolation
- Zero AC turn-on eliminates EMI/RFI
- Maintenance free, no moving parts
- Replaces mechanical contactors
- Eliminates thermal shock and extends heater life
- RC snubber network for inductive loads
- Thermal foil provided for mounting on the base of the relay to improve heat transfer
- UL recognized; CE and CSA approved



Ordering Information



CAUTION: DO NOT OPERATE A SOLID-STATE POWER RELAY IN FREE AIR, OR WITHOUT A PROPER HEAT SINK.

Accessory Part Numbers	
Code	
222A006U01	= 3"(76 mm) Heat Sink (1.3° C/w)
222A007U01	= 5"(127 mm) Heat Sink (1.1° C/w)
123C005U03	= Plastic Finger-Safe Cover
HSP1	= Thermal Foil



SPECIFICATIONS

INPUTS

	Model A (AC)	Model D (DC)
Control Voltage	90 to 140 Vac	4-32 Vdc
Drop Out Voltage	10 V _{rms}	1.0 dc
Maximum Input Current	10 mA _{rms}	34 mA _{dc}
Turn-On Time	20 ms	0.5 cycle, max.
Turn-Off Time	30 ms	0.5 cycle, max.

GENERAL

Operating Temperature Range	-4 to 176° F (-20 to 80° C)
Storage Temperature Range	-40 to 212° F (-40 to 100° C)
Input to Output Isolation Voltage	4000 V _{rms}
Input/Output to Ground Isolation Voltage	2500 V _{rms}
Line Voltage	24 to 280 Vac or 36 to 660 Vac
Line Frequency Range	47 to 80 Hz

Specifications subject to change without notice.

Note: In an ideal condition (no other heat input), 1 ft² (9.29 cm²) of 1/8" (3.2 mm) aluminum is equivalent to an Athena-supplied 5" (127 mm) heat sink.

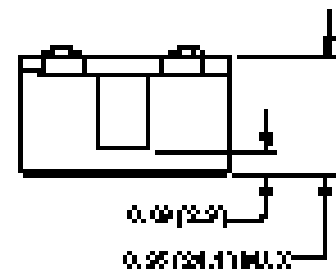
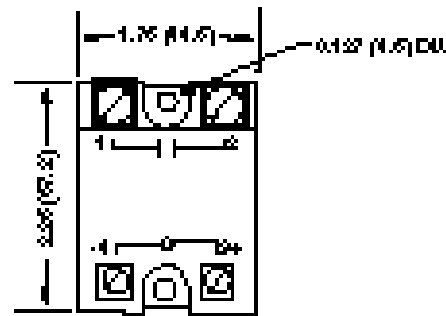
PLEASE READ: IMPORTANT NOTES ON PANEL MOUNTING OF SOLID-STATE RELAYS.

To avoid overheating and possible damage to the relay's circuitry, care must be taken to provide adequate heat dissipation. NEVER OPERATE A SOLID-STATE POWER RELAY IN FREE AIR OR WITHOUT A PROPER HEAT SINK.

Make sure that the mounting surface is clean, and free of paint or oxidation. If mounting to a metal surface, use an approved thermal grease, or place a thermal foil (HSP1) onto the relay's metal mounting plate. Take care to use proper torque when tightening the mounting screws.

Under normal operating conditions, the relay's case temperature should not exceed 113° F (45° C). To monitor temperature, a thermocouple may be connected to one of the relay's mounting screws. Additional heat sinking or a cooling fan must be provided if the relay's operating temperature exceeds its optimum rating under load. Where there is any question about the relay's ability to maintain a normal operating temperature, a higher current, thermally derated relay should be specified.

Your Athena representative or one of our applications engineers will be glad to assist you with any particular or special power relay requirements.



DIMENSIONS: INCHES (MILLIMETERS)
TOLERANCE: ±0.005 (±0.127)

