

905 Series Power Switch

General

The 905 Series Power Switches are the recommended replacement for the previous 900 Series of single phase power switches that used 901-D or 901-DP Series Logic.

The 905 Series Power Switches are zero firing, multiple voltage controllers that are used for connecting line voltage potentials to resistive loads. Firing at zero voltage crossing reduces Radio Frequency Interference (RFI).

Each Power Switch controls one phase, and can be used in any connection arrangement or combination of phases disregarding phase rotation. Power Switch(es) can be used in three-phase applications, in the line, in the Delta, or in the Wye. The switch must be selected to accept the appropriate voltage potential and connected KW load.

The extruded aluminum heat sink must be located in a ventilated ambient with the fins mounted vertically (see ambient specification limitations). The control section, including power and control leads, is typically mounted inside the control panel.

The 905 Series Power Switch also includes an optional Thermal Cut Out control. The power switch temperature is monitored and the unit safely disabled if temperatures exceed rated limits.

Features

- Each Power Switch incorporates its own zero-firing Logic, providing any combination or connection arrangement for single or three phase applications.
- Up to (12) 905 Series Power Switches may be controlled from one 901-D or 901-DP Series Logic. (For applications requiring more than 12 Power Switches, consult factory.)
- No phasing of control voltages required.

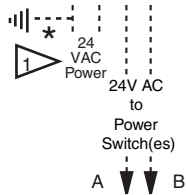
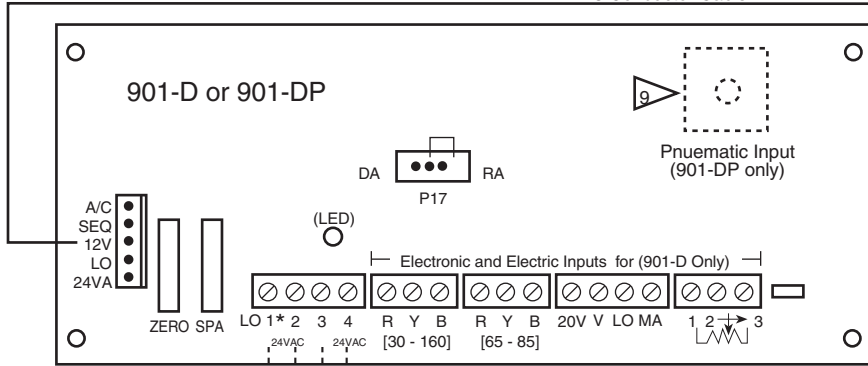
IMPORTANT

When Power Switch(es) are used in combination with the Sequencer to provide a "Vernier" control system, the Power Switch KW load should be sized to provide at least 125% of the largest sequencing KW step.

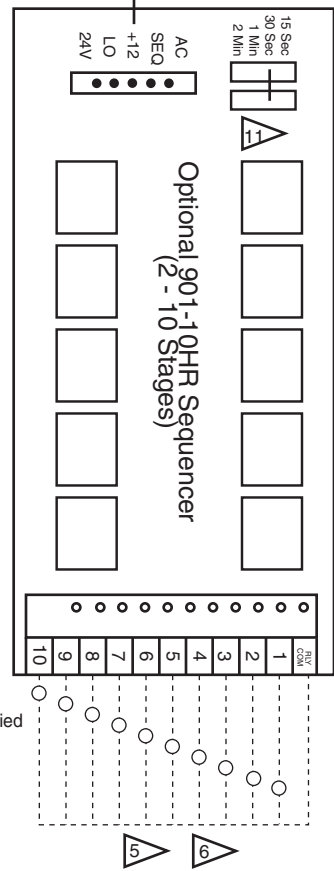
Specifications

Models	
905-120/277	120, 208, 240 or 277 Volts
905-347/480	347, 460 or 480 Volts
905-600	600 Volts
Current, Max.	48 Amps
Line Voltage Limitations	+10%, -15%
Frequency	50/60 Hz
Ambient	
Heat Sink (SCR)	50°C (120°F)
Control Panel (electronics)	75°C (167°F)
Control	
Voltage	24VAC
Power, (VA/Switch) @ 24VAC	3.5 VA
Wire	
Line, 8" Stripped, U.L. 1015	12 A.W.G.
Control, 8" Stripped, U.L. 1015	22 A.W.G.
Dimensions (L x W x H)	5.00" x 5.85" x 3.75"
Cut Out	4.50" x 2.00"

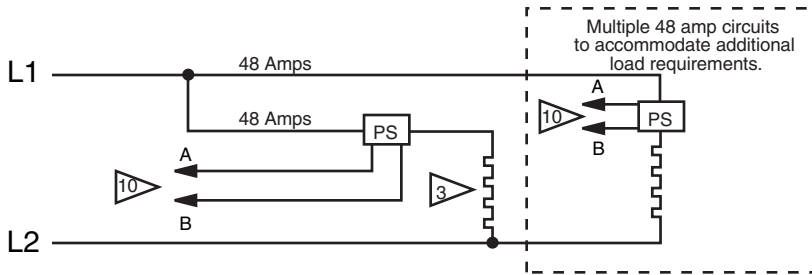
5 Conductor Cable



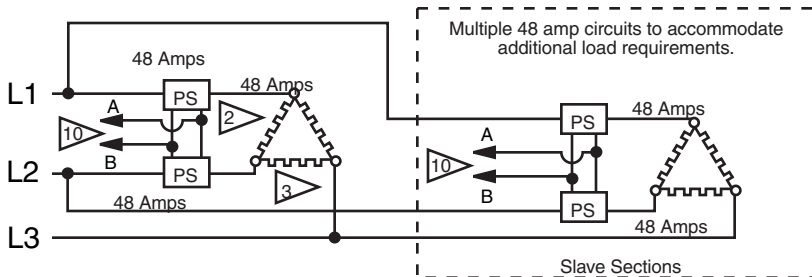
* If a 24V AC Power Input line must be grounded, ground ONLY the line connected to 24V AC IN terminal "LO 1".



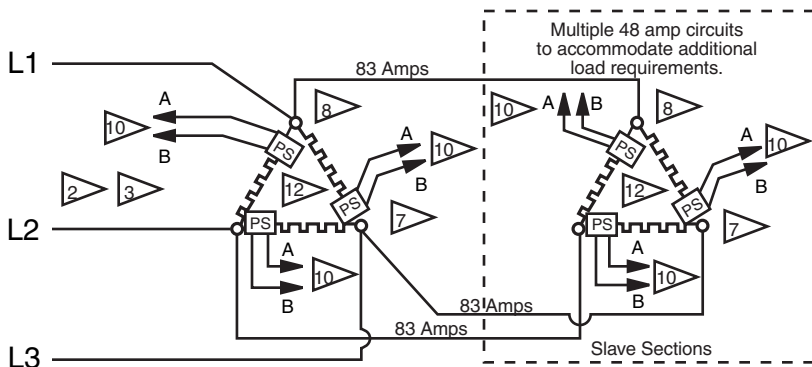
User Supplied Contactors



Single Phase



Three Phase Power Switch In Line



Three Phase Power Switch Inside Delta

LEGEND

- 1 Transformer sized for total Sequencer stages and SCRs.
- 2 No phasing required.
- 3 Each Power Switch rated at 48 Amps.
- 4 See 901-D and 901-DP Series Recalibration Instructions for inputs (page 4).
- 5 Up to 10 stages Max. — Heat only.
- 6 Each stage 1 Amp Max., 24V AC.
- 7 Inside/In-Line Wye circuit — 3 switches required. (Wye not shown)
- 8 Inside Delta connection — 3 switches required.
- 9 0 – 15 psi "on board" transducer on 901-DP.
- 10 24V AC in from Logic.
- 11 Field adjustable time delay. (15, 30, 60, 120 Seconds)
- 12 Three PSs are inside the Delta @ 48 Amps provides 83 Amps in Line of Delta.

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