



LOWER LOAD POWER CONTROLLERS SERIES 19 AND 39 SCR

The Athena 19 and 39 controllers are available as zero voltage switched controllers (19Z and 39Z) and phase-angle fired controllers (19P and 39P) that can be used for control of resistive heater loads. The controller provides capacity up to 80 Amps, and extends heater life while eliminating thermal shock.

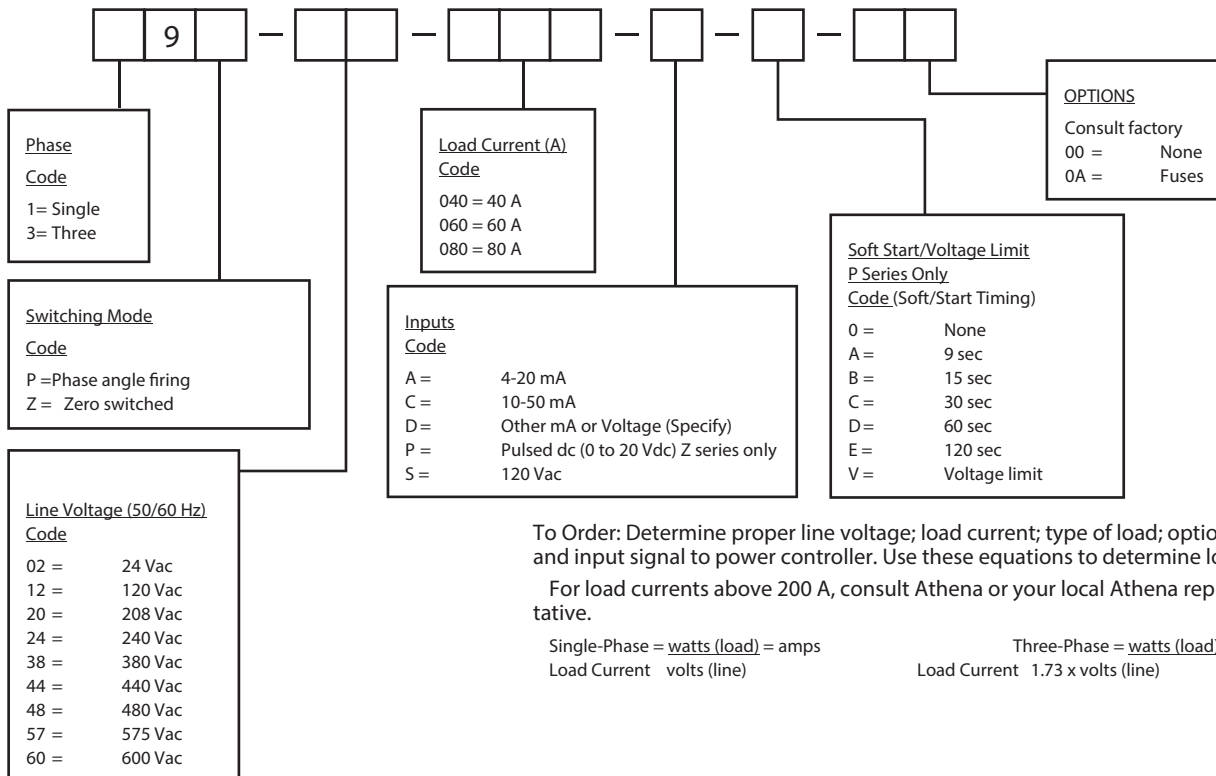
- ▲ Optically Isolated
- ▲ Diagnostic Indicators
- ▲ Self-Synchronizing to Line Frequency
- ▲ Isolated Heat Sinks
- ▲ Compact Design
- ▲ Full Protection Against Line Voltage Spikes



WARNING
Branch circuit overcurrent protection is to be provided in accordance with national and local codes.



ORDERING INFORMATION



To Order: Determine proper line voltage; load current; type of load; options required, if any; and input signal to power controller. Use these equations to determine load current.

For load currents above 200 A, consult Athena or your local Athena representative.

Single-Phase = $\frac{\text{watts (load)}}{\text{volts (line)}} = \text{amps}$

Three-Phase = $\frac{\text{watts (load)}}{1.73 \times \text{volts (line)}} = \text{amps}$

TECHNICAL SPECIFICATIONS

Supply Voltage	24 to 600 Vac
Frequency	50-60 Hz
Current Rating	40, 60 and 80 A
Control	
Signal Isolation	2500 Vac
Transient Voltage Protection	MOV and RC suppression
Ambient Temperature	32°F to 122°F (0°C to 50°C) for listed current rating
Load	Resistive. 3-phase- 3 wire Delta or Ungrounded Wye 19Z/19P-1 phase, 1 line control 39Z-3 phase, 2 lines controlled 39P-3 phase, 3 lines controlled
Diagnostic Indicators	Shorted or open SCR reversed signal input (mA/V)

Zero Voltage Switched Controllers

The 19Z and 39Z SCR controllers are zero crossover fired, high-power solid state switching devices. Zero firing eliminates the RFI generation associated with mechanical relays. With zero voltage firing, the output appears as bursts of full sine waves of line voltage which provides excellent regulation to the load.

Phase Angle Fired Controllers

The 19P and 39P phase angle fired controllers turn each SCR on for a controlled portion of a half-cycle of the line voltage. The effective load voltage is determined by the portion of the line voltage delivered which is proportional to the input control signal. Additionally, the voltage is regulated as the line voltage changes.

ACCESSORIES

Manual Station with Remote Potentiometer
(Requires Input "A" 4-20 mA)

MODEL #	DIMENSIONS		
	Height	Width	Depth
19Z	10.25"	4.75"	4.0"
19P	10.25"	4.75"	4.0"
39Z	10.25"	9.62"	4.0"
39P	10.25"	14.37"	4.0"



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