

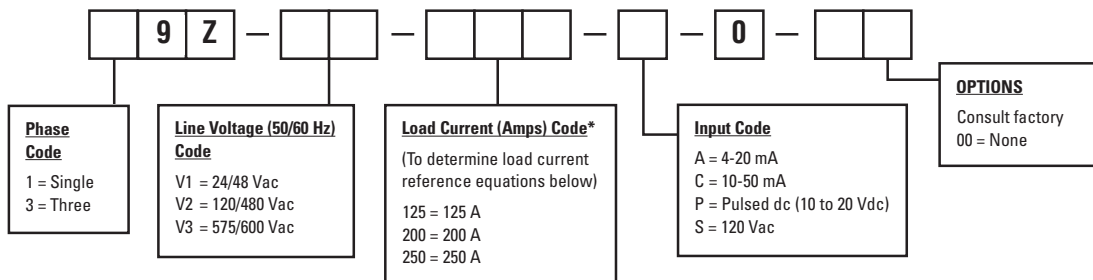
Power Controllers Series 19Z and 39Z



The Athena 19Z (single phase) and 39Z (three phase) are zero switched power controllers that can be used for control of resistive heater loads. The high amperage series provides capacity from 125 amps up to 250 amps. The controllers are designed to extend heater life while eliminating thermal shock.

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

Ordering Information



To Order: Determine proper line voltage, load current, input signal and options required, if any.

Technical Specifications

Supply Voltage	24 to 600 Vac
Frequency	50-60 Hz
Current Rating	125 - 250 A
Input Control	
Signal Isolation	2500 Vac
Transient Voltage Protection	Inherent built in immunity
Ambient Temperature	32°F to 122°F (0°C to 50°C)
Load	Resistive. 39Z Three Phase, 2 Leg Control for 3 Wire Delta or 3 Phase Ungrounded Wye 19Z Single Phase, 1 Leg Control
Diagnostic Indicators	Open or reverse input
Cooling Specification	Fan cooled, requires 120 Vac supply voltage

*Single Phase Load Current (Amps) Equation

$$\text{Total Amps} = \frac{\text{Total Watts (Load)}}{\text{Volts (Line Voltage)}}$$

*Three Phase Load Current (Amps) Equation

$$\text{Total Amps} = \frac{\text{Total Watts (Load)}}{1.73 \times \text{Volts (Line Voltage)}}$$

WARNING

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

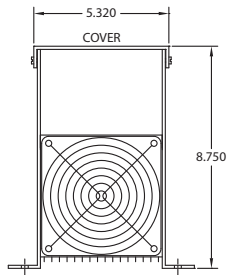
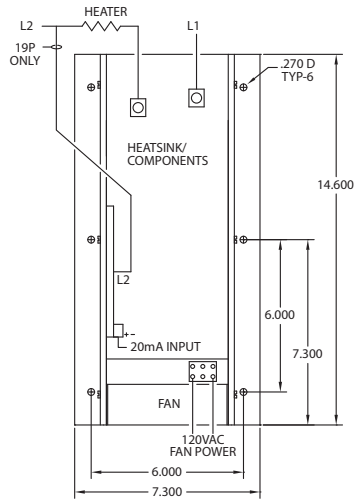




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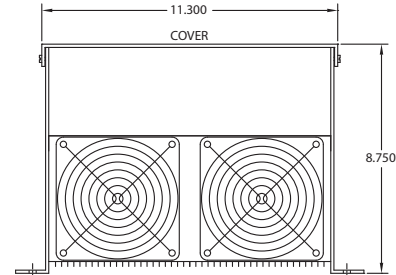
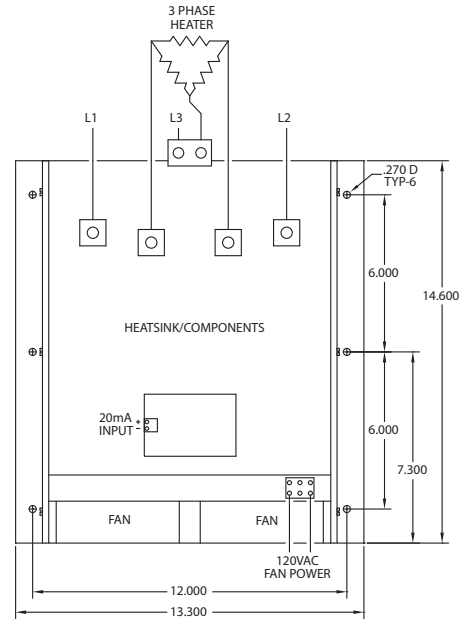
Zero Voltage Switched Controllers

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



19Z Single Phase Controller

Amperage Size 125 Amps Weight 13.5 lbs.
Amperage Size 200 and 250 Amps Weight 14.0 lbs.



39Z Three Phase Controller

Amperage Size 125 Amps Weight 27 lbs.
Amperage Size 200 and 250 Amps Weight 27.5 lbs.

Accessories:

If a different input code is required other than listed, reference the Athena 90M manual station data sheet or consult Athena for your requirements.

Spare Fuses for Line Voltage Range from 24 thru 480 Vac:

	Part Number	Single Phase	Three Phase
125 Amps	210A044U01	1 Required	2 Required
200 Amps	210A046U01	1 Required	2 Required
250 Amps	210A045U01	1 Required	2 Required

Spare Fuses for Line Voltage Range from 575 thru 600 Vac:

	Part Number	Single Phase	Three Phase
125 Amps	210A047U01	1 Required	2 Required
200 Amps	210A006U01	1 Required	2 Required
250 Amps	210A048U01	1 Required	2 Required

Trigger Boards:

Single and Three Phase Units for
Line Voltage Range from 24 thru 600 Vac
125, 200, 250 Amps

Part Number
785A430U01 - (Specify Line Voltage Range,
Single or Three Phase)

Example: 785A430U01, 240 Vac, Single or Three Phase

