



**708-BVmA Series  
Electronic Fan Speed Controller**

### Description

The *NEW* 708-BVmA and 708-CVmA Series electronic Controllers are designed to provide proportional speed control of single phase motors for variable air volume applications. The Controller may be used with shaded pole or permanent split capacitor type motors from 120V to 480VAC.

The Controller phase proportions (modulates) the single phase power to regulate RPM as determined by a 2–10VDC or 4–20mA DC input signal provided by the customer.

The 708-BVmA and 708-CVmA Series Controllers provide independent “maximum” and “minimum” speed limit adjustments. Also included, a separate continuous minimum speed or “drop out” function at minimum input.

Variable Air Volume controls offer the optimum flow of air for the prevailing loads encountered. VAV provides maximum flow for effectively accomplishing sensible heat loads at design conditions. Minimum flow occurs when lighter loads are encountered. In the cooling mode, an added benefit can be obtained. As air flow decreases with load, additional latent cooling capacity is utilized to provide extra dehumidification. This function is most beneficial when light loads are experienced and increased dehumidification is required.

### Application

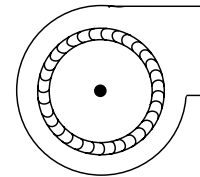
The variable speed Controller is used for adjustment of motor RPM within a limited range of operating temperatures that assure adequate ventilation of the motor. Motors should always be evaluated at minimum reduced speed at the highest ambient operating temperature anticipated. The Controller is designed for air moving applications using squirrel cage or propeller type fans.

However, it may be suitable for other, non air-moving, direct drive motor applications. Motors should be open, drip-proof types.

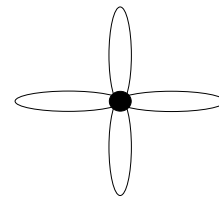
The Controller heat sink is designed to operate in ambient temperatures up to 120°F. The component housing should be enclosed inside an electrical box or wiring compartment. The Controllers should not be mounted in an airtight, unventilated panel or on a heat producing surface.

The Controller should be mounted to electrically conductive material and/or be electrically grounded.

Squirrel Cage



Propeller  
(blade type)

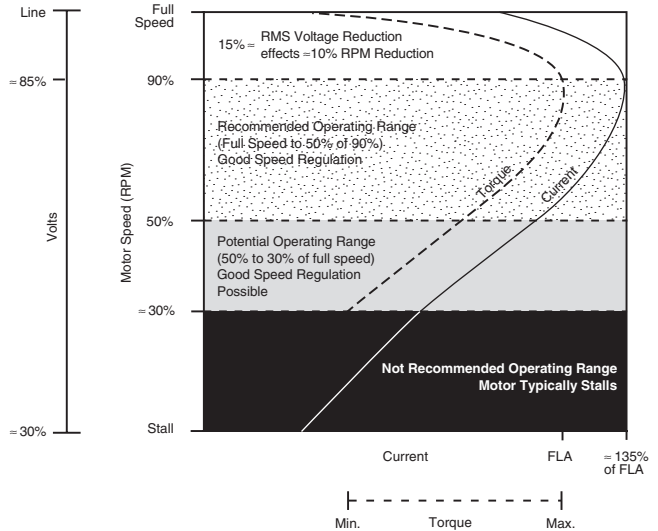


### Features and Benefits

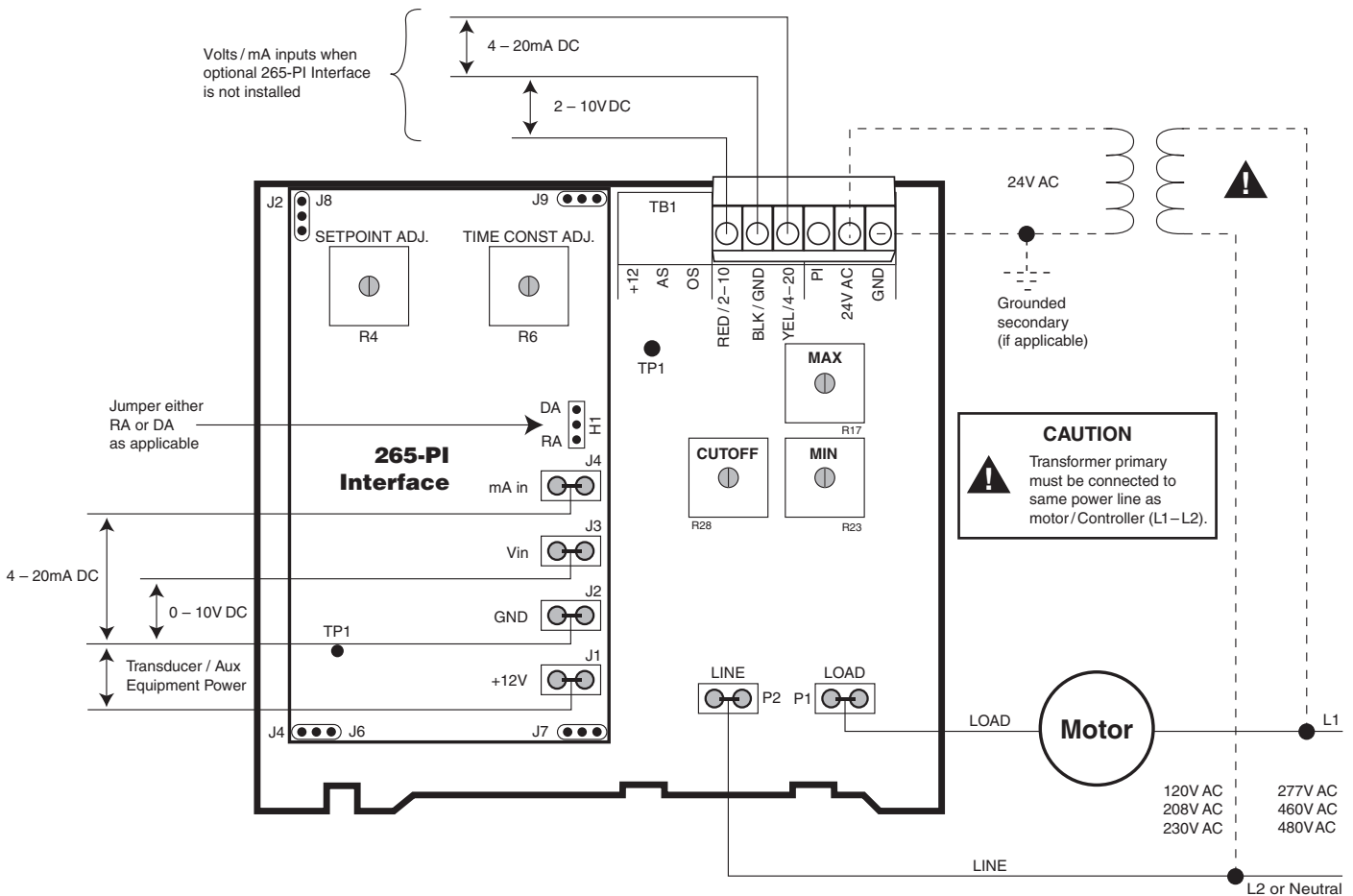
- Applicable for shaded pole or permanent split capacitor motors.
- Multi-voltage applications.
- Minimum/Maximum speed adjustments.
- Motor cut-out adjustment.
- Optional **265-PI Interface** (Proportional Integration).
  - Shown in Product Illustration.

# Specifications

Voltage, Input (nominal)	24VAC
Power	1.0 VA
Frequency	60 Hz
Voltage, Line (nominal)	120 – 480VAC
Current (maximum)	
708-BVmA	10 Amps
708-CVmA	15 Amps
Input Signals	
DC Volts	2 – 10V DC
Load Impedance	10,000 Ohms Min.
DC milliAmps	4 – 20 mA DC
Load	500 Ohms
Operating Ambient	32°F to 120°F
Humidity	Non-condensing
Dimensions (L x W x H)	5.52" x 4.15" x 3.15"



Typical Motor Volts / RPM vs. Current / Torque



708-BVmA and 708-CVmA Series Product Illustration with Optional 265-PI Interface Installed

## Hoffman|Controls