**FEATURES:**

- Burst Firing and Phase Angle Control versions
- Directly mounted to SSR
- LED output indication
- Remote or local control

BF100 Series modules are time proportional "Burst Firing" controllers for use with zero crossing solid state relays which provide multiples of whole cycles to the load over a pre-selected period of 4 secs or 400 msec (suffix F) in increments of 200 or 20 cycles. Burst Firing is ideally suited for the control of long time constant loads such as heating elements. The technique reduces radiated and conducted interference to a minimal level.

PA 100 Series modules are phase angle controllers used in conjunction with phase controllable (suffix -10) solid state relays. Effectively they allow variation of voltage to an ac load from zero to fully supply voltage by conducting for a variable set period of 0 - 180° in each mains half cycle.

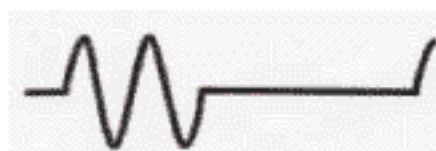
Both types are available with industry standard 4-20mA or 0 - 10V control inputs, and are mounted directly to the SSR input terminals. The modules require an external supply voltage of 24VAC.

An internal 10V dc power source allows manual control using a potentiometer, if required. BF100 Series is also available for use with zero crossing three phase solid state relays (suffix 3).

	Burst Firing	Phase Angle
Part Number	BF100	PA100
Control Signal	0 - 10V (Zin 100Kohm) - Letter V	4 - 20mA (Zin 330ohm) - Letter C
Output	0 - 200 cycles 0 - 20 cycles (suffix F)	0 - 180° electrical
Temperature Operating	0 to +50° C	
Output	10V to SSR input terminals	
Cycle Time at Half-power	2sec (200mS suffix F)	
Auxillary supply	24Vac ±10% max. 80 Ma	
Local Control	10K ohm potentiometer	
Transfer Characteristics	Time Proportional to 0 - 10V I/P	Phase Angle Linearly Proportional I/P

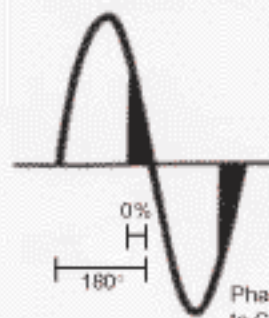
Notes:
 BF100V - 0-10V input
 BF100C - 4-20mA input
 PA100V - 0-10V input
 PA100C - 4-20mA input
 } add suffix F for fast cycle time, add suffix 3 for 3 phase SSR
 } add suffix 6 for 60Hz operation
ORDERING EXAMPLE: BF100C-F3 has 4-20mA input, fast cycle time (200ms half-power), for use with 3 phase SSR

Burst Firing Control HCQ & HVQ



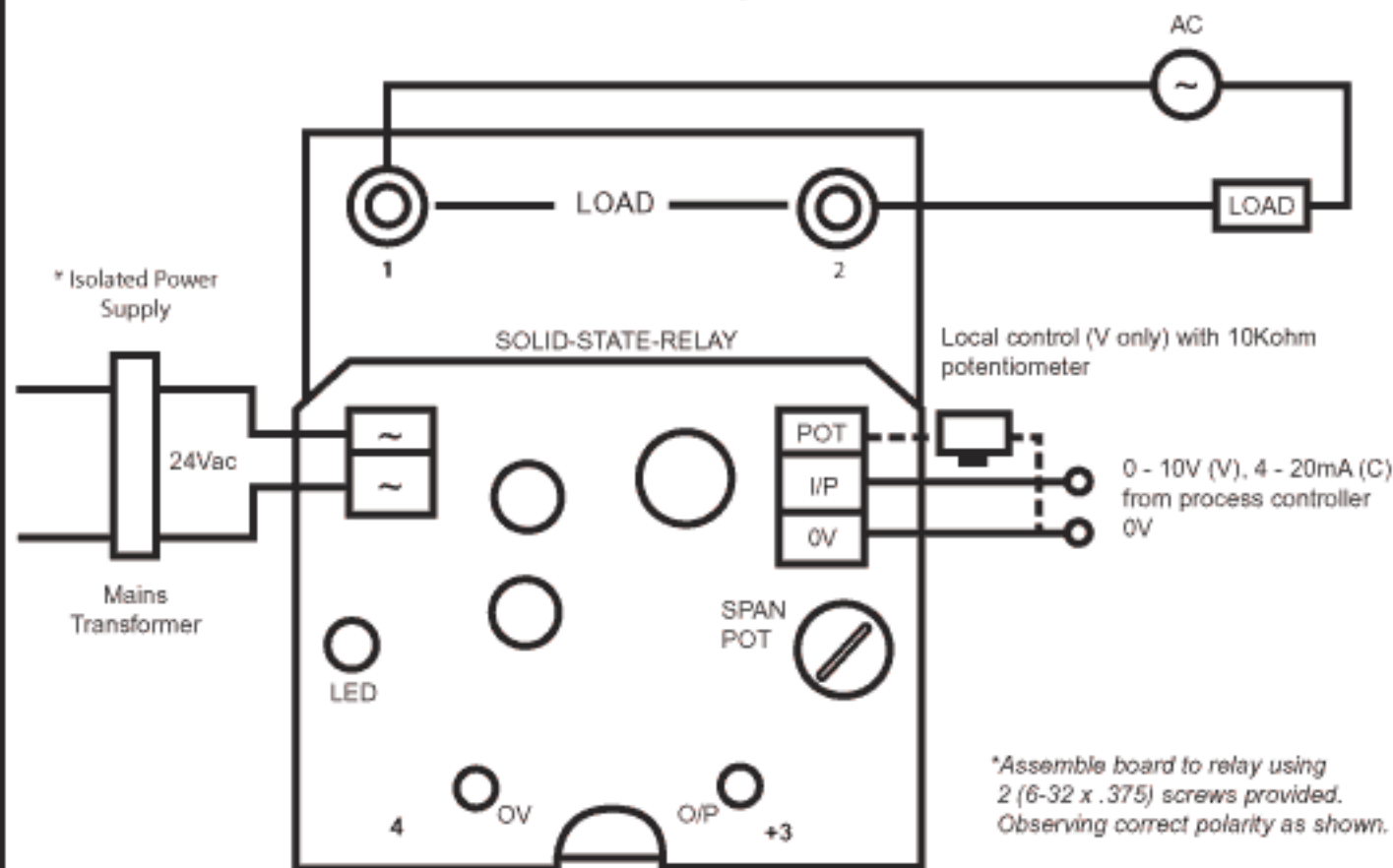
ON Time
Cycle Time
ON Time Proportional to Control Signal

Phase Angle Control HCP & HVP



Phase Angle 0% Proportional to Control Signal

For 3-Phase Applications Using Phase Angle Control, Auxillary Supply Must Be In Phase With LOAD Being Controlled



* **WARNING** - Grounding power supply and control signal will result in ground loop condition and damage control board.