

PRICE[®]

**FC-PS3
FAN COILS
FAN RELAY BOARD**

INSTALLATION MANUAL

Date: 07/13
Reference #: F1-47

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Price FC-PS3 Fan Relay Board (250000-45X, Blue Circuit Board)

The Price FC-PS3 Controller is a fan (optional heat) relay board that provides 3 relays or triacs for high, medium and low fan speeds and one relay for heat. The fan is controlled by a 0-10V BAS input or 3 binary inputs, while the heat is controlled by a binary REHEAT input.

Note: The Price Fan Relay Board (old style) with no reheat option has a red circuit board and is part # 250000-450.

- Power requirements for FC-PS3 board – 24 VAC, polarity sensitive.
- Long life, quiet PCB relays or triacs rated from 120-277 VAC.
- High power loads up to a maximum of 15 amps at maximum 277 VAC per relay.
- Input signals from stand alone controller or BAS controller:
 - 0-10 VDC signal
- Binary 24 VAC inputs can be used instead of the BAS signal.
- LED indication for: Firmware Version, and Output Indication.
- BAS Operation
- Only one output will be turned on a time if the BAS input is used.
- A timing delay will ensure the outputs don't switch between states too quickly. This prolongs fan motor life.
- A dead band for each zone is used to combat noise on the BAS line.
- 24 VAC Binary Operation.

* Note - 24 VAC Power to the FC-PS3 is polarity sensitive. The HOT and the COM must be maintained from the 24 VAC power source to the FC-PS3. i.e. HOT to HOT, and COM to COM. Warning, the FC-PS3 will still power up if the polarity is switched, however the control signal will not function as intended.

* The Triac version(s) use silent solid state triacs to switch the fan from low, medium, high speed (up to 4 amps maximum).

Mounting Requirements and Precautions

The Price FC-PS3 will typically be factory mounted in an enclosure. The 24 VAC binary inputs drive the relays directly; therefore there is no protection from turning on multiple relays at once or cycling the relays too fast. If the binary inputs are used at the same time the BAS signal is used, there may be a conflict which may result in multiple relays being turned on. Do not use 0-10V BAS input at the same time as the binary input.

Troubleshooting/FC-PS3 Status LED Blink Sequences

Initial Power up:

Green Status LED	Relay LED indicators	Result
1 Long Blink	Relays are off	1 Long blink on initial power up indicates Firmware Version 1

During Operation (0-10 VDC input mode only):

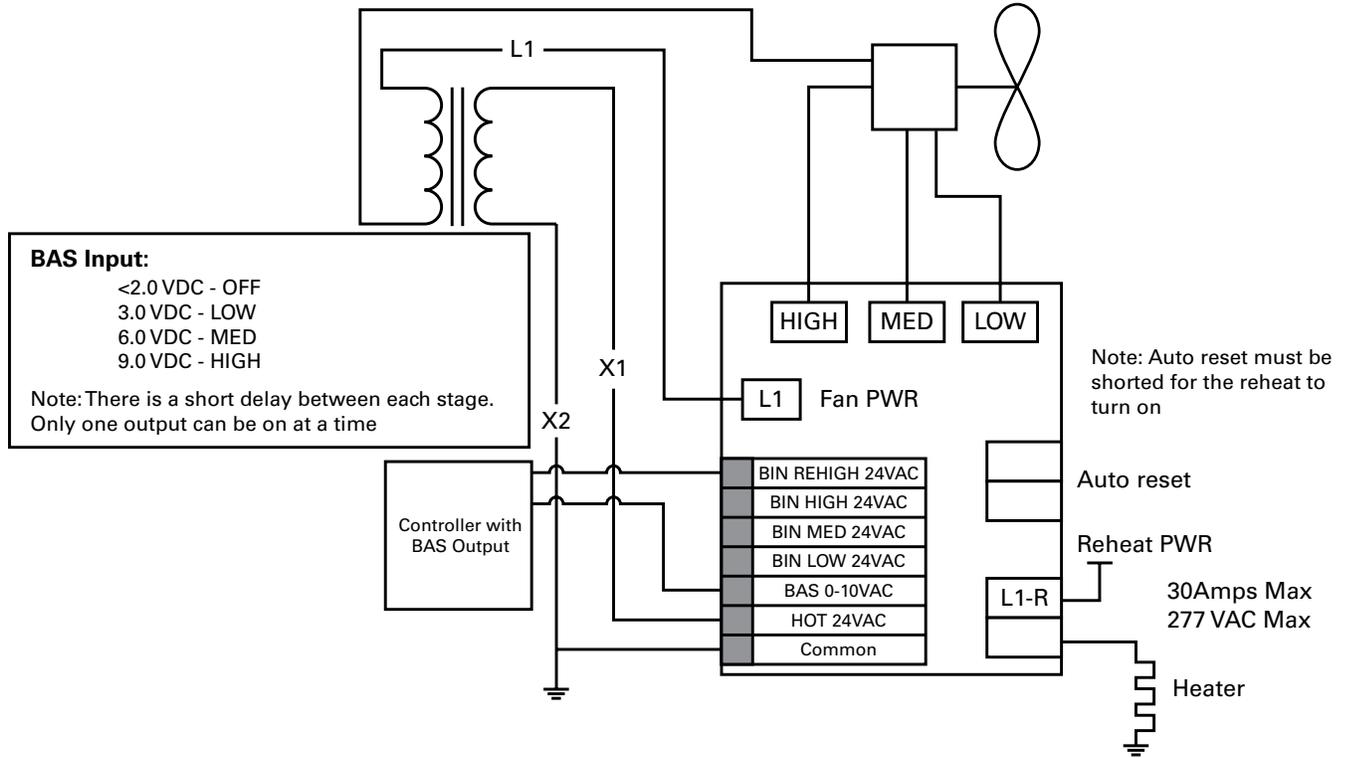
Green Status LED	High Relay LED	Medium Relay LED	Low Relay LED
1 Blink	Relay is off	Relay is off	Relay is engaged
2 Blink	Relay is off	Relay is engaged	Relay is off
3 Blink	Relay is engaged	Relay is off	Relay is off
4 Blink	Relay is off	Relay is off	Relay is off

Specifications

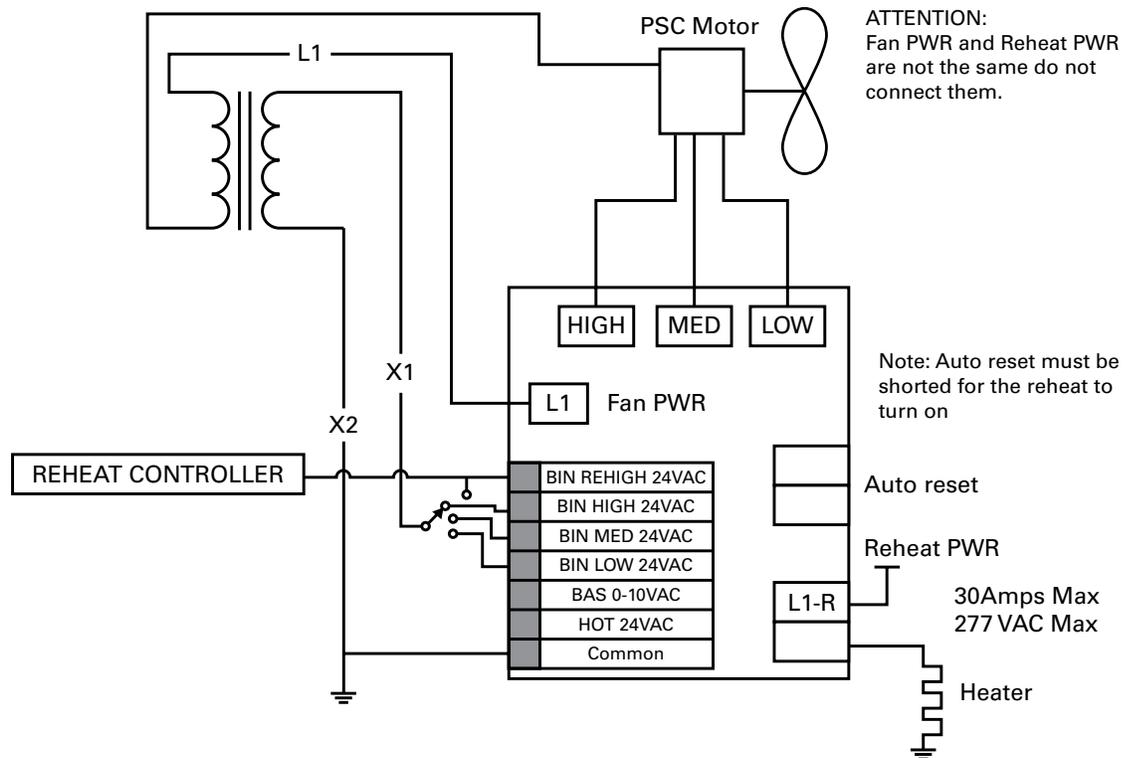
- FC-PS3 Board input power: 24 VAC +/-10% (5 VA)
- 0-10 VDC BAS input: 20k ohm input impedance

Part #	Description	Maximum Fan Voltage	Maximum Fan Current	Maximum Heater Voltage	Maximum Heater Current
250000-451	FC-PS3 - Relays - no reheat option	277 VAC	10 amps	277 VAC	30 Amps
250000-452	FC-PS3 - Relays - with reheat option	277 VAC	10 amps	277 VAC	30 Amps
250000-453	FC-PS3 - Triacs - no reheat option	277 VAC	High - 4 amps, Medium 3.5 amps, Low - 3 amps	277 VAC	30 Amps
250000-454	FC-PS3 - Triacs - with reheat option	277 VAC	High - 4 amps, Medium 3.5 amps, Low - 3 amps	277 VAC	30 Amps

Price FC-PS3 Control Wiring for BAS Operation



Price FC-PS3 Control Wiring for Binary Operation



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All goods described in this brochure are warranted as described in the Limited Warranty shown at the web site www.price-hvac.com.

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