



The FB120A and FB230A are used to monitor the operation of one two-lamp incandescent beacon and one beacon flasher (or auxiliary module). The flasher and lamps are monitored by sensing the flow of current in the circuit. If the lamp(s) or the flasher fail to operate properly, a solid-state output and an isolated SPDT relay energize. When connected to a site monitoring system, this unit provides the remote beacon monitoring protection required by the FAA/FCC. On a multiple beacon structure, one unit is required for each two-lamp incandescent beacon (one unit per beacon for LED beacons).

For more information see:
Appendix B, page 167, Figure 32 for dimensional drawing.
Appendix C, page 171, Figure 31 for connection diagram.

Operation

If one lamp in an incandescent beacon fails, the relay and solid-state lamp failure outputs energize after 10s. If the flasher fails in the ON or OFF condition, the relay and the solid-state flasher failure output energizes after 6s. If both failures occur, all three outputs energize after their trip delays.

Note: If both incandescent lamps fail, all three outputs will energize. The relay and solid-state flasher failure output energizes after 6s, and the solid-state lamp failure output energizes after 10s.

Features:

- Senses failed flashing incandescent beacon lamps & beacon flashers
- Toroidal current sensing
- One isolated, 5A, SPDT alarm output
- Two 1A, solid-state line voltage alarm outputs
- Trip delays prevent nuisance alarms

Available Models:

FB120A
FB230A

Order Table:

Input	Lamp Type	Part Number
120VAC	Incandescent Beacon	FB120A
230VAC	Incandescent Beacon	FB230A

Specifications

Input Voltage		Lamp Failure	Fixed at 10s; -0/+40%
FB120A	120VAC ±15%	LEDs	
FB230A	230VAC ±15%	Lamp Failure (Red)	Glows when one or both lamps fail
AC Line Frequency	50/60Hz	Flasher Failure (Red)	Glows when the flasher fails
Lamp Socket Voltage	±10%; 50/60Hz	Protection	
Alarm Outputs		Circuitry	Encapsulated
Type	3 total - 1 relay, 2 solid state; One isolated SPDT relay rated 5A resistive Two solid-state line voltage outputs rated 0.5A steady, 5A inrush	Mounting	Surface mount with two #6 (M3.5 x 0.6) screws
Lamp Failure Detection		Dimensions	3.5 x 2.5 x 1.75 in. (88.9 x 63.5 x 44.5 mm)
FB120A	For two 620W or 700W lamps	Termination	7 position barrier block for 20 AWG (0.5 mm ²) to 14 AWG (2.5 mm ²) wire
FB230A	For two 500W or 700W lamps	Environmental	
Trip Delays		Operating / Storage Temperature	-55° to 60°C / -55° to 85°C
Flasher Failure	Fixed at 6s; -0/+40%	Weight	≈ 7 oz (198 g)