a HEICO company

ANALOG MODULES, INC.

MODEL 864A
FLASHLAMP SIMMER SUPPLY

FLASHLAMP SIMMER SUPPLY

- **Adjustable Current to 500 mA**
- **Adjustable Open Circuit Voltage to 1500 V**
- **Automatic Boost to Maintain Arc**
- **Up to 60 W Output**
- **SCR Drive for Trigger Transformer**
- **Directive 2011/65/EU (RoHS) Compliant**

DESCRIPTION:

The ***Model 864A*** Simmer Supply is designed to strike and maintain a low-level current discharge in flashlamps. Initially, the simmer output open circuit voltage rises to a stabilized 1500 V. The simmer trigger output provides an SCR discharge of 520 V at 63 mJ to drive a trigger transformer. When the lamp is struck, the trigger pulses are inhibited and the supply provides a constant current to the flashlamp. Immediately after PFN discharge, the current is boosted automatically to maintain the arc. An external ballast is not normally required.

SPECIFICATIONS:

Input	
Voltage	+22 VDC to +32 VDC at 3 A typical
Simmer Output	
Voltage	Up to 300 V (depending on flashlamp) Flashlamps should be processed for simmer operation.
Open Circuit	Up to 1500 V, ±75 V
Current	Up to 500 mA
Current Control	Internal multi-turn trimpot
Boost Current	Up to 800 mA for 8 ms.
Enable	+5 V at 10 mA enables simmer, 470 Ω impedance.
Efficiency	75% typical including material ballast

Simmer Trigger	
Voltage	-520 V pulse at 63 mJ
Pulsewidth	≥1 µs
Repetition Rate	Automatic restrike at ≈30 Hz, if flashlamp is not lit.
Temperature	0° to 70°C, with output current derating.
Connections	
Input/Output/ Power	Molex, 39-01-2101
Mating	Molex, 39-01-2100
Size	5.78" x 3.75" x 2.03"
Weight	1.41 lbs.

RoHS

Specifications subject to change without notice.

APPLICATIONS:

Full Simmer Supply with SCR Trigger Drive for Flashlamps

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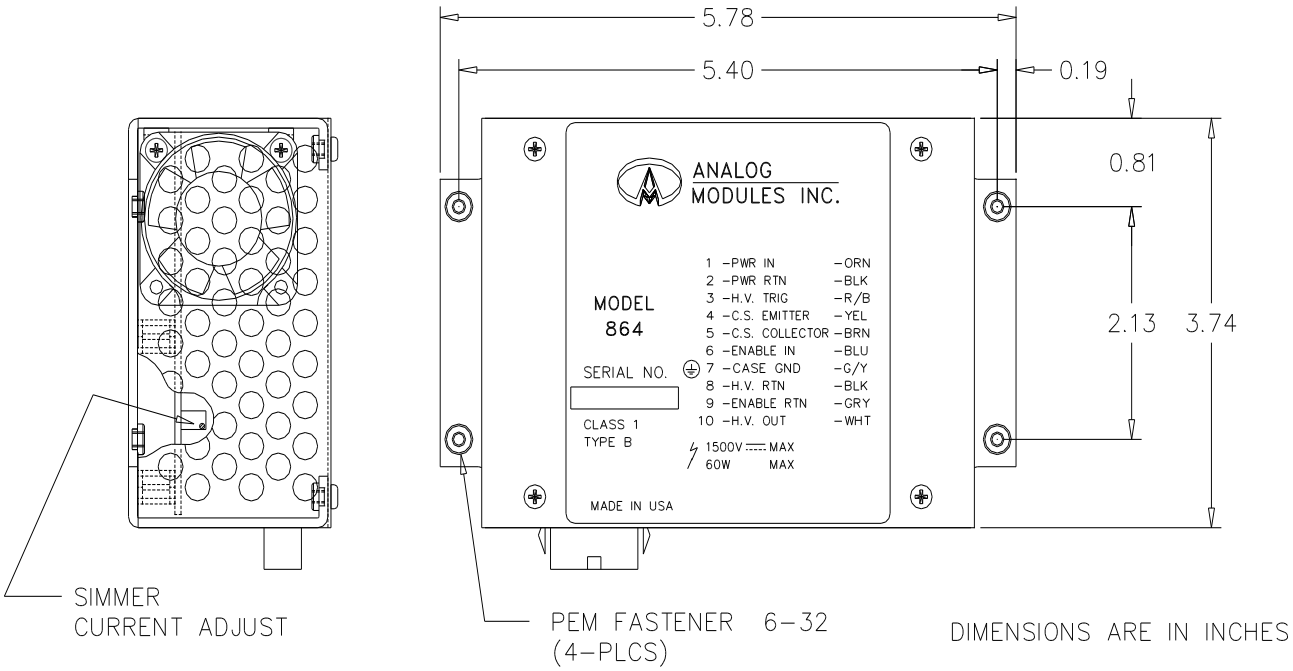
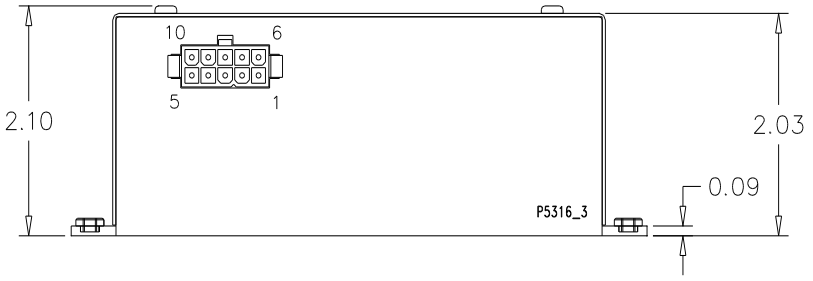
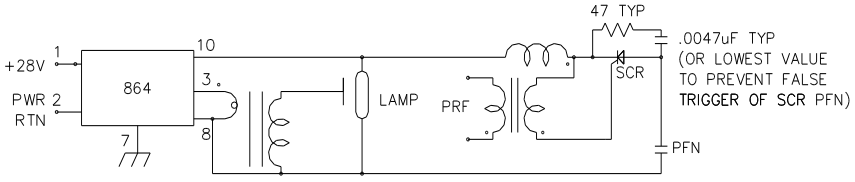
		MODEL NUMBER
		OUTPUT CURRENT
		500 mA
INPUT VOLTAGE	+22 TO +32 VDC	**864A**

Typical Part Number: *864A* = Input Voltage: +22 to +32 VDC
Output Current: 500 mA



PIN #	SIGNAL NAME	WIRE COLOR
1	PWR IN	ORANGE
2	PWR RTN	BLACK
3	H.V. TRIGGER	RED/BLACK
4	C.S. EMITTER	YELLOW
5	C.S. COLLECTOR	BROWN
6	ENABLE IN	BLUE
7	CASE GND	GREEN/YELLOW
8	H.V. RTN	BLACK
9	ENABLE RTN	GREY
10	H.V. OUT	WHITE





TYPICAL EXTERNAL TRIGGER CIRCUIT

NOTE: BECAUSE OF THE WIDE VARIATIONS IN FLASHLAMPS, ANALOG MODULES, INC. CANNOT GUARANTEE SIMMER OPERATIONS WITH ALL LAMPS.