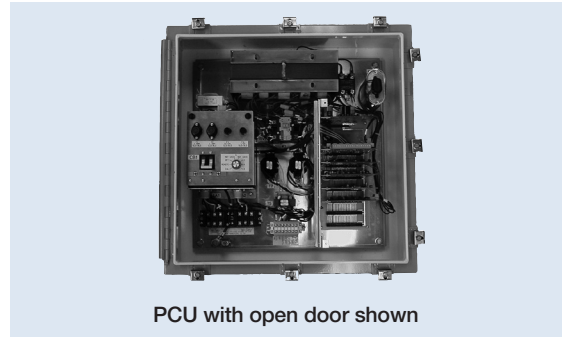


LAHSO

Land and Hold Short Lighting System Power and Control Unit (PCU)

Compliances:
FAA, AC 150/5345-54: L-884



PCU with open door shown

Applications

The L-884 power and control unit (PCU) is a power supply designed to power and simultaneously pulse all lights in a land and hold short operations (LAHSO) light bar.

Features

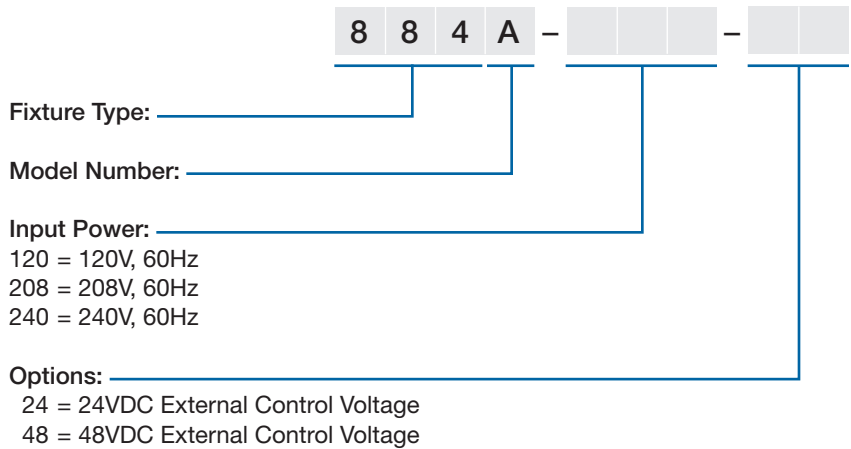


- ETL Certified
- Style I: For indoor use (all units include photo cell)
- Unit can be field configured for MIRL or HIRL (HIRL, configured from factory) operation
- Alarm relays provided for discrete alarm indication for each monitored parameter
- Plug-in printed circuit cards with LED diagnostic indicators
- Unit can operate 6 or 7 light LAHSO light bar (Reference LHS P1 version, page 4.21)
- -55°C to +70°C temperature operation range
- Optional 24VDC or 48VDC circuit boards for user supplied external control voltage. 120VAC internal/external control voltage circuit board is factory supplied.
- Tower control panel available as an accessory for installation in ATC tower

Ordering Information

The Power and Control Unit (PCU) is sold as a separate piece of equipment and all other LAHSO system components are sold separately.

How to Order PCU: To the basic catalog number, add the symbols for Input Power, and Options (if required).



LAHSO System Description

The lighting system consists of six (6 or 7) unidirectional in-pavement light fixtures conforming to FAA L850F, a Power and Control Unit and a tower control panel. The six or seven lights are flashed synchronously when activated by Air Traffic Control. Each Power and Control Unit supplies power to the six or seven lights, adjusts the brightness level and detects the failure of a lamp or the failure of the lamps to flash.

The brightness level of the six or seven flashing in-pavement lights is determined by the Power and Control Unit after receiving inputs from a photoelectric control and detecting the existing brightness level of the runway edge lights. During daytime, the lights are always operating at maximum brightness level.

At night, the intensity is varied and depends on the brightness level of the runway edge lights. See Table 1 for the various brightness levels utilized. Monitoring of the runway edge lights is accomplished by inserting a 45 watt 6.6/6.6 amp or 20/6.6 amp isolating transformer in the runway circuit and feeding the secondary current back to the Power and Control Unit. Figure 1 below is a system diagram depicting a functioning system. The input circuit breaker for each PCU should be sized approx. 25% above the actual peak input current (7 Amps) for any specified voltage (120VAC, 208VAC or 240VAC).

Figure 1

6 Light LAHSO Light Bar Shown

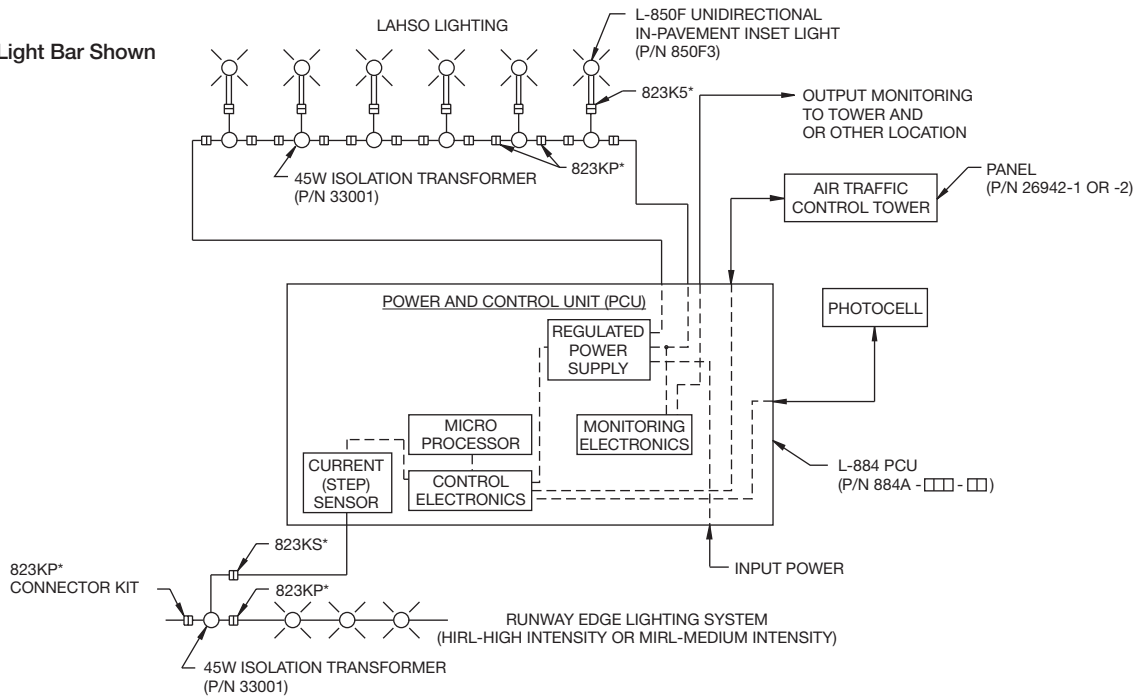


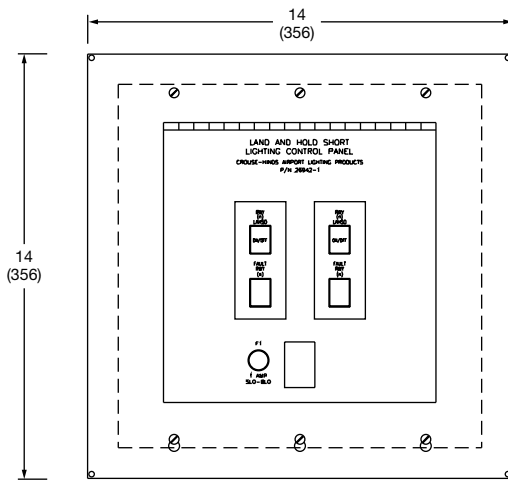
Table 1

Remote Control Performance		
Runway Edge Lighting Intensity Step	PCU Intensity Step (Day)	PCU Intensity Step (Night)
B1	5	3
B2	5	3
B3	5	4
B4	5	5
B5	5	5
OFF	5	3
B10	5	3
B30	5	3
B100	5	4

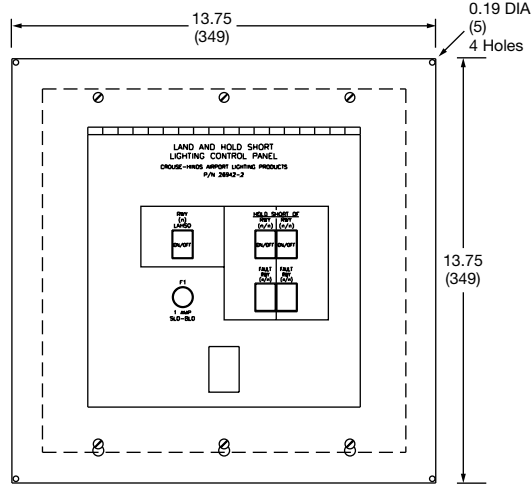
* Refer to pg. 4.32 for L-823 Connector Kits selection.



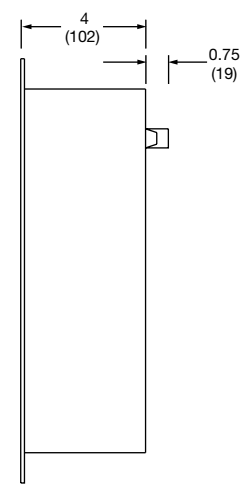
Outline Drawing



26941-1 Control Panel
With one set of lights per runway



26942-2 Control Panel
With multiple lights on the same runway



Dimensions: inches (mm)
Instruction Manual: 2217

Accessories

Description	Suggested Quantity (per system)	Part Number	Shipping Weight		Shipping Volume	
			Lbs.	Kg.	Cu.Ft.	Cu.M.
48W, 6.6A Lamp for 850F3	6 or 7	21116				
Film Disc Cutout for 850F3	6 or 7	10047-409				
Isolation Transformer, L-830-1, 45 Watts, 6.6/6.6A	7 or 8	33001	5.2	2.36	0.03	0.009
Isolation Transformer, L-830-2, 45 Watts, 20/6.6A	7 or 8	33002	5.2	2.36	0.03	0.009
L-867, Size D Base (Isolation transformers housing)	1	AC63242H200301				
Runway Centerline Light, L-850F, 48 Watts	6 or 7	850F3				

Renewal Parts

Description	Part Number	Description	Part Number
Fuse 1.0 Amp	10047-2552	P.C. Board, 48VDC External Remote Control	26984-48
Fuse, 0.4 Amp	10047-1505	P.C. Board, Ferroresonant Control	26993
Fuse, 0.5 Amp	10047-1143	P.C. Board, Load Monitor	31926-2
Fuse, 0.8 Amp	10047-1686	P.C. Board, Microprocessor	32277-4
P.C. Board, 120VAC Remote Control (Standard)	26984-120	P.C. Board, Power Supply	31971
P.C. Board, 24VDC External Remote Control	26984-24	P.C. Board, Regulation	31879-4

Shipping Weights and Volumes

Catalog Number	Shipping Weight Lbs.	Shipping Weight Kg.	Shipping Volume Cu.Ft.	Shipping Volume Cu.M.
884 A	95	46	5.0	0.142