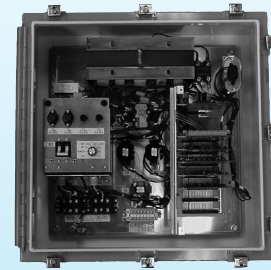


LAHSO

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



LAHSO


PCU with open door shown

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

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.

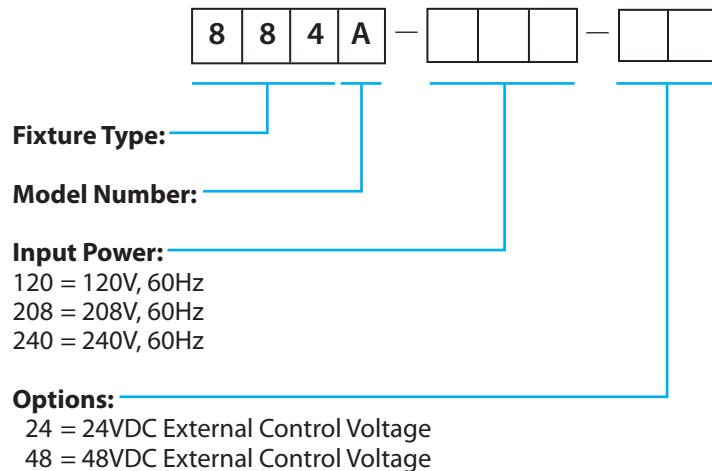
Features

- 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
- -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

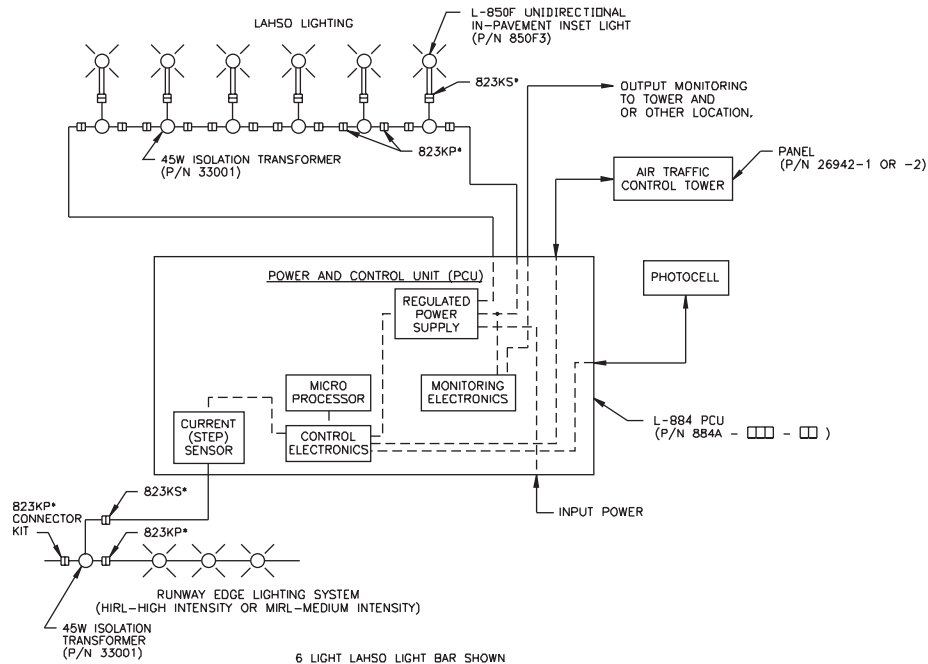


Table 1

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

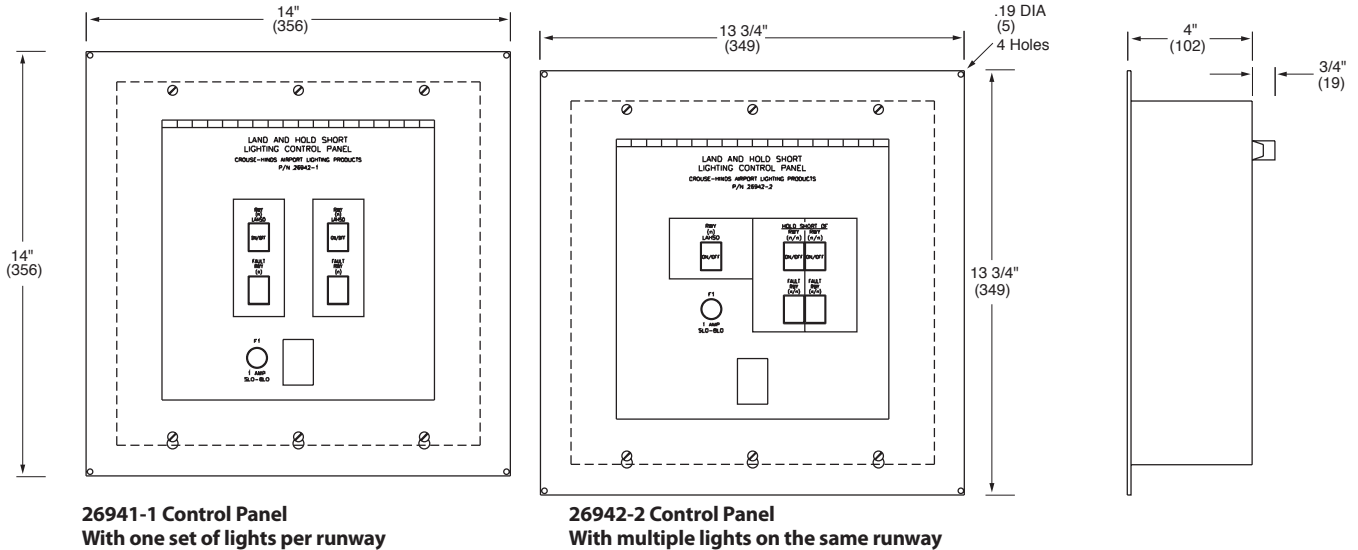
} HIRL
} MIRL

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



Instruction Manual: 2217

Dimensions: inches
(mm)



Accessories

Part Number	Suggested Quantity (per system)	Description	Shipping Weight		Shipping Volume	
			Lbs.	Kg.	Cu.Ft.	Cu.M.
850F3	6 or 7	Runway Centerline Light, L-850F, 48 Watts				
20453-1	6 or 7	Shallow Inset Light Base (For L-850F Fixture)	-	-	-	-
AC63242H200301	1	L-867, Size D Base (Isolation transformers housing)	67.0	30.3	4.30	0.006
AK200006	1	Coverplate for L-867, Size D Base	-	-	0.20	0.006
10530281	1	Gasket, 16" (406mm)	0.5	0.2	-	-
21116	6 or 7	48W, 6.6A Lamp for 850F3				
10047-409	6 or 7	Film Disc Cutout for 850F3				
33001	7 or 8	Isolation Transformer, L-830-1, 45 Watts, 6.6/6.6A	5.2	2.36	0.03	0.009
33002	7 or 8	Isolation Transformer, L-830-2, 45 Watts, 20/6.6A	5.2	2.36	0.03	0.009

Renewal Parts

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

Shipping Weights and Volumes

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