

L-847 Circuit Selector Switch

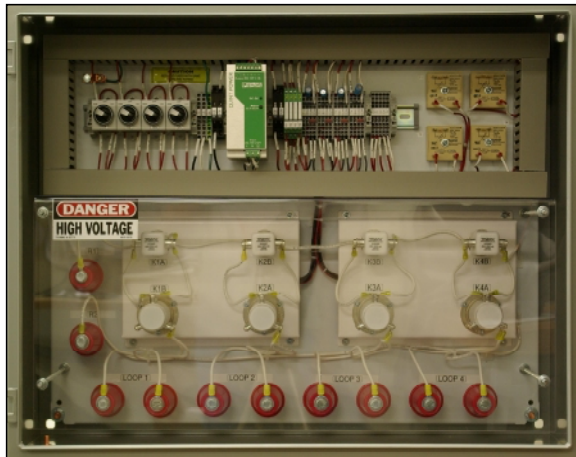


Fig. 1 L-847-4 Circuit Selector

The *Spirit Series™* Circuit Selector Switch (CSS) was designed to provide an economical solution for indoor or outdoor circuit switching applications. The *Spirit Series™* CSS is a result of over forty years experience developing power and control solutions.

System Application

The *Spirit Series™* L-847 Circuit Selector Switch is designed to switch the output of a 6.6 or 20A constant current regulator into one or more series lighting loops. Control can be from the CSS (local) or from a control and monitoring system (remote). Typical applications include:

- Switching of PAPI, VASIS, and approach circuits from one approach end to the opposite end. Reduces number of regulators required in half.
- Provides individual control of multiple small circuits from a single regulator (ie. taxiways). Allows standardization of regulator sizes while still providing individual circuit control.
- Control of stopbars, lead-on lights and directional taxiway centerlines as part of a Surface Movement and Guidance Control System (SMGCS).

Features and Capabilities

- 5000V rated for use with 6.6A or 20A regulators.
- Input voltage 100 to 240V, 50 / 60Hz, 120VA.
- All versions are NEMA 4 rated and are suitable for indoor or outdoor installation. Operating range -40°C to +55°C, 0 to 100% relative humidity, and 0 to 3000m altitude.
- The circuit selector can be mounted directly on an existing wall, on unistrut, on frangible couplings (for field mounting next to the taxiways), or supported on rigid conduit.
- High voltage vacuum switch technology provides maintenance free operation. Make before break operation ensures reliable operation with any make of CCR. Vacuum switches are rated 65A.
- Reverse L-847 Option allows a single load to be powered from different regulators providing backup operation without rewiring the field circuit.
- No calibration or adjustments required.
- All high voltage connections are fully guarded for personnel safety. Enclosure can be padlocked to prevent access by unauthorized personnel.
- A safety interlock (optional) ensures power is disconnected when the door is opened. The interlock is designed to wire into the CCR control circuit to automatically trip the CCR.
- Each circuit selector can be individually configured to fail on or off upon failure of the control system.
- A latching failsafe option provides the ability for each circuit selector to remain in its last state upon failure of the control system. This option is ideally suited for SMGCS, stopbar, or taxiway routing applications using field mounted circuit selectors.

Standards Compliance

- FAA Advisory Circular 150/5345-5B, Sep 14/06, Type L-847.
- Transport Canada Standards.
- Canadian Department of National Defence Standards.
- ICAO Aerodrome Design Manual Doc 9157, Part 5.

Ordering Information

Type:

SCS - Spirit Series Circuit Selector, 6.6A or 20A

Number of Circuits:

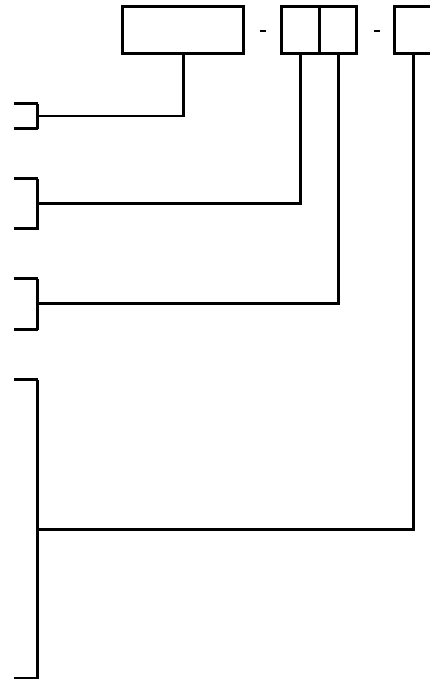
1 - One Circuit 3 - Three Circuits
 2 - Two Circuits 4 - Four Circuits

Control Voltage:

A - 24VDC Internal C - 48VDC Internal E - 120VAC Internal
 B - 24VDC External D - 48VDC External F - 120VAC External

Options (Select as Many as Required):

- 01 - Latching Failsafe Relays (maintains last state if control system fails)
- 02 - Reverse L-847 Operation
 (allows a single load to be powered from multiple CCRs)
- 03 - Door Interlock Switch (trips CCR when door opens)
- 21 - Output Current Monitoring (contact closure per loop)
- 22 - Status Monitoring (power & door ok, switch in remote (per loop))
- 92 - Enclosure Painted Aviation Orange
- 93 - Enclosure Wall Mounting Kit
- 94 - Enclosure Mounting Feet With Frangible Couplings
- 95 - Padlock Attachment
- 96 - Breather Kit (For Outdoor Applications)
- 99 - Non-metallic NEMA 4X Enclosure (custom)



Monitoring Options

- Monitoring presence of output current in each series loop for “On indication” to control system.
- Monitoring of each local control switch “remote” position, input power available and door open signals for indication to the control system. This information can provide feedback to the tower when the circuit selectors are out-of-service or in local control from the vault.

Weights & Dimensions

- L-847-1 - 24”h x 20”w x 10”d - 60 lbs
- L-847-2 - 24”h x 20”w x 10”d - 65 lbs
- L-847-3 - 24”h x 30”w x 10”d - 95 lbs
- L-847-4 - 24”h x 30”w x 10”d - 100 lbs



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