

Airfield Lighting Safety Cutout (ALSC)

The Freedom Series™ Airfield Lighting Safety Cutout (ALSC) is used to isolate the field circuit from the constant current regulator (CCR) for testing or maintenance. The ALSC replaces the industry standard “S1 Cutout” and provides additional features designed specifically for maintenance personnel.

The ALSC consists of a base unit and a series of removable handles that provide a convenient means of testing the field circuit without disconnecting the field cables from the CCR. The ALSC can be installed next to or within a CCR, or in a separate cutout enclosure.

Design Features

- Compatible with all types of L-828/L-829 CCRs and L-847 circuit selectors operating at 6.6A or 20A output current.
- Designed to operate at 5000 Volts and withstand a hi-pot test of 23KV for 1 minute (required for a 30KW CCR operating at 6.6A output). Most series cutouts are not able to meet this requirement.
- Designed for reliable operation from -55°C to +55°C and in areas of high humidity.
- Constructed from a special flame retardant cast epoxy resin for superior insulating properties, impact strength, crack and shatter resistance, and chemical resistance.
- With its high insulation properties and the smallest footprint on the market, the ALSC can be installed within a CCR, or multiple units can be installed in close proximity in a compact cutout enclosure.
- Designed as a replacement for existing S1 cutouts, the ALSC will fit in the space available.

Standards Compliance

- FAA Advisory Circular AC 150/5340-30, Design and Installation Details for Airport Visual Aids.
- ICAO Aerodrome Design Manual Doc 9157, Part 5.
- Transport Canada Aerodrome Standards and Recommended Practices, Volume 1, TP-312E.
- Canadian Department of National Defence Standards.



Fig. 1 ALSC Safety Cutout with In-Service Handle Installed.

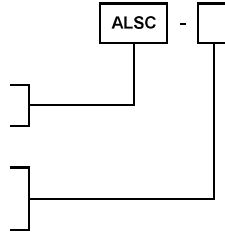
Maintenance & Safety Features

- The base unit comes complete with a removable “In-service” handle. When removed, the field circuit is isolated from the CCR.
- Removing the handle provides a visible means of isolation, ensuring that the field circuit is isolated from the power source (CCR).
- The ALSC can be padlocked in the open position, preventing the handle from being inserted. This is an added safety feature that can be used with the airport’s lockout / tagout procedure.
- If the “In-service” handle is rotated 90°, the output of the CCR is shorted for testing purposes. The field circuit is also shorted for maintenance continuity checks.
- Handles are ergonomically designed to make insertion and extraction effortless.
- Test Handles can be inserted into the base unit to provide the following maintenance functions:
 - Meggering of field circuit cables without the need to disconnect the cables from the CCR.
 - Intentionally grounding one side of the field cable during operation, to assist in locating a ground in the field.
 - Testing the CCR using a resistive load bank without the need to remove field cables.

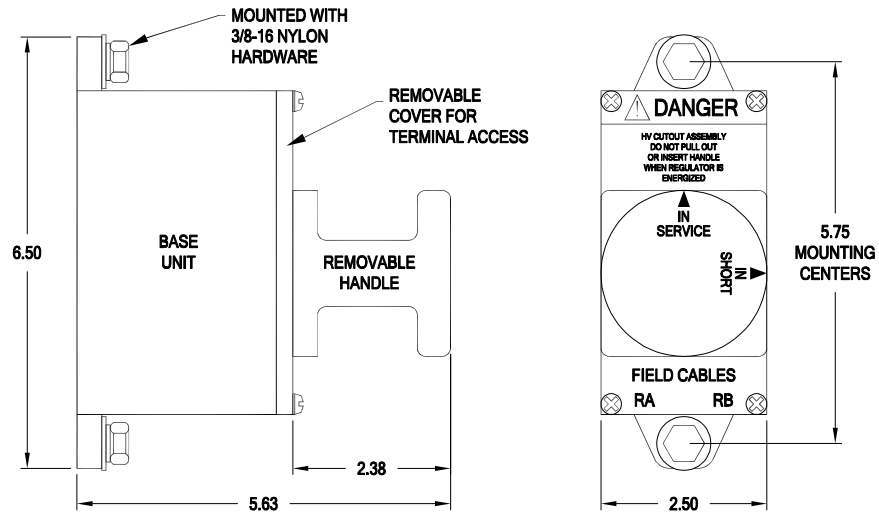
Ordering Information

Type:
ALSC - Freedom Series ALSC Safety Cutout
c/w In-Service & Shorting Plate

Optional Test Plates (Select as Many as Required):
01 - IRMS (Megger) Test Plate
02 - Circuit Grounded - Test Plate
03 - Resistive Load Bank - Test Plate



Outline Drawing



Handle Options

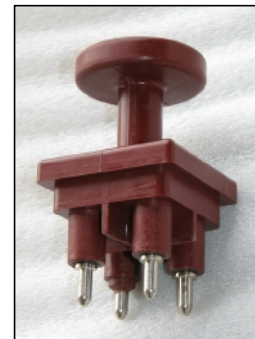
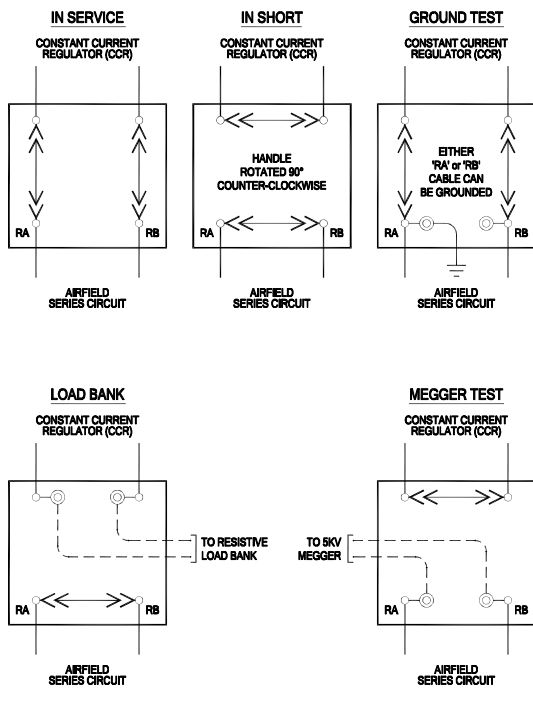


Fig. 2 ALSC In-Service Handle.



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