

Vacuum Retrofit for MGL Type Circuit Selector Relays

Westinghouse MGL Relays were the industry standard circuit selector relay for switching the output of a constant current regulator (CCR) into multiple loads. Commonly used to switch approach ends, PAPIs, and smaller taxiway circuits, the MGL relay allowed airports to standardize on larger 20KW regulators and use individual MGL relays to control smaller circuits. In Canada, six MGL relays were normally installed in a CSR6 Circuit Selector Relay Cell. The last production run of MGL relays occurred in 1995.

For airports that are still using MGL relays, Liberty has designed a plug and play vacuum relay retrofit kit. The MGL Vacuum Retrofit Assembly has the same physical size and plug-in mounting requirements as the old mechanical MGL relay. Simply remove the existing MGL relays and install the new MGL Vacuum Retrofit assemblies. Since the new vacuum relays operate at a nominal 24VDC instead of 120VAC coil voltage, a 24VDC adjustable power supply is installed in the upper control raceway compartment. All MGL relays installed in a CSR6 Cell must be upgraded at the same time.

The vacuum retrofit assemblies use the same electrical components that are used in our standard L-847 Circuit Selector switches.



Fig. 1 MGL Vacuum Retrofit Assembly.

Features

- 5000 V rated for use with 6.6A or 20A regulators.
- Input voltage to CSR6 Cell common power supply: 100 to 240V, 50/60 Hz, 120VA.
- Operating range -40°C to + 55°C, 0 to 100% relative humidity, and 0 to 3000m altitude.
- Up to 6 circuit selectors can be mounted in an individual CSR6 cell.
- 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.
- No calibration or adjustments required.

Benefits

- Extends the life of existing Airfield Lighting Control Center (ALCC) switchgear assembly.
- Updates airport to current technology.
- Provides longer life than MGL relays.
- Maintenance free operation. No contacts to clean or mechanical adjustments to be made.
- Quiet operation. No mechanical components to vibrate as with the MGL relay.
- Plug-in design allows relays to be installed and/or replaced by maintenance personnel.
- Plug-in design simplifies maintenance and troubleshooting - simply remove one assembly and plug in a spare if required.
- Changeover requires minimal interruption to airport operations.

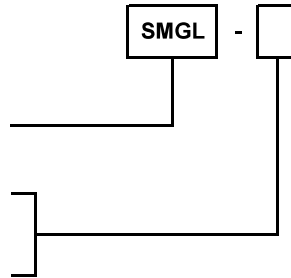
Ordering Information

Type:

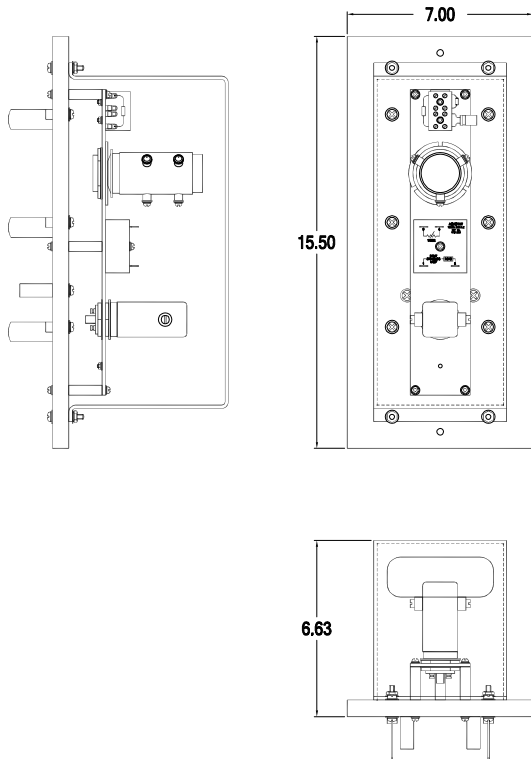
SMGL - Spirit Series MGL Vacuum Retrofit Assembly

Number of Assemblies Required:

- | | |
|--------------------|-------------------|
| 1 - One Circuit | 4 - Four Circuits |
| 2 - Two Circuits | 5 - Five Circuits |
| 3 - Three Circuits | 6 - Six Circuits |



Dimensions



New Circuit Selectors

Liberty also manufactures complete circuit selector enclosures in both switchgear and standalone configurations. The *Freedom Series™* Switchgear Style L-847 Circuit Selector Switch uses the same vacuum technology and is designed to be integrated with constant current regulators into a switchgear lineup. For more information refer to LAS-DB-015.

The *Spirit Series™* L-847 Circuit Selector Switch uses the same vacuum technology and is designed as a standalone wall mounted panel. For more information refer to LAS-DB-016.



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