

## Explosion Proof Tumbler Switch Class I, II, III - Copper-free Aluminum - NEMA Instruction Manual

Thank you for your purchase of the Larson Electronics EPL-SW Series Explosion Proof switch.

## WARNING

TO AVOID THE RISK OF FIRE, EXPLOSION OR ELECTRIC SHOCK, THIS PRODUCT SHOULD BE INSTALLED, INSPECTED AND MAINTAINED BY A QUALIFIED ELECTRICIAN ONLY, IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES.

### TO AVOID ELECTRIC SHOCK:

• BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.

• PRODUCT MUST BE CONNECTED TO A WIRING SYSTEM WITH AN EQUIPMENT-GROUNDING CONDUCTOR.

### TO AVOID EXPLOSION:

- MAKE SURE THE SUPPLY VOLTAGE IS WITHIN THE VOLTAGE RATING.
- ENSURE THE MARKED T RATING IS LESS THAN THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERE.
- DO NOT OPERATE IN AMBIENT TEMPERATURES ABOVE THOSE INDICATED ON THE PRODUCT NAMEPLATE.
- DO NOT OPERATE IF THE LENS, CORD, SEALS, HOUSING, RECEPTACLES, ETC. IS CRACKED OR DAMAGED. IF SO, DISCONTINUE USE AND CONTACT MANUFACTURER FOR REPLACEMENT PARTS.
- ALL FASTENERS SHOULD BE PROPERLY SEATED.
- **WARNING: To avoid risk of explosion**, all flat machined surfaces must be kept clean and free from scratches, dents, debris, paint, and corrosion. The flat machined surfaces are explosion proof joints, and must be clean and undamaged on both the enclosure and cover.

The Larson Electronics EPL-SW Explosion Proof Tumbler Switch provides a safe and secure method for operators to interrupt power before connecting and disconnecting electrical equipment in hazardous locations. This 20-amp device is compatible with single-phase 120-277V AC and features lever style switch(es). Available in single and double gang box configuration.

# **Mounting and Installation**

Mounting of the EPL-SW is achieved via mounting tabs on the back of the enclosure. Mount to a clean, flat surface with customer provided mounting hardware. Hardware is not included with this switch, but is available from Larson Electronics. Contact Larson Electronics if you wish to order.

1. The surfaces of the flat ground joint are precision machined to insure an explosion proof joint and must be protected from scratches or damage during installation.

2. When switch is mounted in the enclosure, it must be mounted to agree with cover indication of operation. That is, when the cover indicates ON, the switch must be in the ON condition.

3. Before the cover is installed, the flat ground joint surface must be thoroughly wiped clean of any dirt, grit, or other foreign substances and a light thin coating of lubricant placed on the joint to prevent possible corrosion.

The joint between the box and the cover has been made accurately to .0015" to prevent the passage of this accuracy is destroyed.

4. ALL cover screws must be installed with at least five full threads engaged and must be securely tightened. All cover openings must be closed with a suitable cover.

5. Gaskets must not be added to these devices. Only gaskets designed for and permanently installed in these devices may be used.

6. In accordance with the hazardous location information specifying Class and Group listing marked on the device, sealing fittings must be added that will comply with requirements in the latest issue of the Canadian Electrical Code or National Electrical Code and any special requirements that are stated in the instruction sheet with the enclosure.





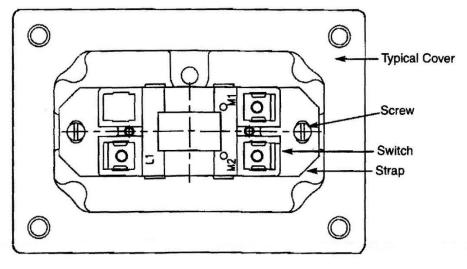
#### MAINTENANCE

Before removing the cover from any such device for inspection or maintenance, the power supply circuit must be OFF.

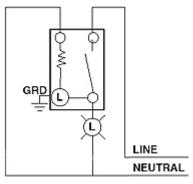
WARNING: To prevent risk of explosion, hammers and prying tools must not be used to remove covers off enclosures. Damage to the explosion proof flat machined surfaces on cover and enclosure may result. Handle covers carefully. Do not place them on surfaces that might damage or scratch the flat machined surfaces.

Before replacing the cover, after it has once been removed, the flat ground joint surfaces must be cleaned as described in step 3 under installation.

WARNING: To prevent risk of explosion, replace devices if the flat machined surface is damaged, scratched, dented, or corroded. Field rework of flat machined surfaces is not possible.



CAUTION: Use 12 AWG copper conductors only. Insert the bare wire conductor(s) under the terminal clamp and securely tighten the screw(s). Note: Do not exceed 35 in-lbs. of torque.



THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT <u>SALES@LARSONELECTRONICS.COM</u> OR BY PHONE AT 1-877-348-9680 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR WARRANTY AND RETURN INFORMATION.