Explosion Proof Enclosure
Instruction Manual

Do not attempt operation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet. Read carefully before operating. Retain these instructions for future reference.

WARNING:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE.

IF ANY PARTS OF THE CONTROL SYSTEM APPEAR TO BE MISSING, BROKEN, OR SHOW SIGNS OR DAMAGE, DISCONTINUE USE IMMEDIATELY. REPLACE WITH THE PROPER REPLACEMENT PART(S) BEFORE CONTINUING SERVICE.

TO AVOID POTENTIAL PERSONAL INJURY AND/OR DAMAGE TO THE GROUND-JOINT SURFACE, DO NOT REMOVE THE HINGE BOLTS PRIOR TO LOOSENING COVER BOLTS.

HAMMERS OR PRYING TOOLS MUST NOT BE ALLOWED TO DAMAGE THE FLAT GROUND-JOINT SURFACES OR COVER GASKET. DO NOT HANDLE COVERS ROUGHLY, OR PLACE THEM ON SURFACES THAT MIGHT DAMAGE OR SCRATCH THE FLAT GROUND-JOINT SURFACES.

CLEAN BOTH GROUND-JOINT SURFACES OF BODY AND COVER BEFORE CLOSING. DIRT OR FOREIGN MATERIAL MUST NOT ACCUMULATE ON FLAT GROUND-JOINT SURFACES. SURFACES MUST SEAT FULLY AGAINST EACH OTHER TO PROVIDE A PROPER EXPLOSIONPROOF SEAL.

INSTALLATION

1. Select a mounting location that will provide suitable strength and rigidity for supporting all contained wiring and control devices.
   Perform visual, electrical, and mechanical inspections on a regular basis.
   The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year.
2. Securely fasten enclosure to the mounting location, then attach into cable or conduit system. Install approved conduit sealing fittings when required by any applicable standards.
3. Remove cover bolts securing cover. Firmly grasp the bottom and right side of cover and carefully swing aside to prevent damage to the ground joint surface. Avoid striking cover, or devices in cover, or neighboring enclosures or structures.
4. To remove cover fully, two methods are recommended. Due to the potential weight of the cover, it must be supported prior to removal of hinge bolts. This can either be achieved by a second installer holding the cover or by utilizing a hoist. If a hoist is to be used, first remove all the cover bolts and locate the 5/8-11 threaded holes. Install eyebolts (not provided) into two opposing threaded holes. It is important that the eyebolts be threaded only part way through the cover, preventing damage to the machined flange on the body.
   Loosen and remove the hinge bolts. Carefully remove both sides of hinges. Lift off cover carefully and set it aside to prevent damage to the ground joint and flange gasket.
5. Pull wires into enclosure, making sure they are long enough to make the required connections. Make all electrical connections. The internal grounding terminal shall be used as equipment grounding means. The external terminal is only a supplemental bonding connection.
6. Test wiring for correctness with continuity checks and also for unwanted grounds with insulation resistance tester.
7. To install/close cover, make sure cover and body ground-joint surfaces are clean and not scratched. Lift cover to approximate position and line up bolt holes of cover with body. Avoid sliding ground-joint surface of cover over ground-joint surface of body. Cover/body bolt holes must match up. Hand start corner bolts. Fully tighten all cover bolts to torque values per Table 2. If removed previously, reinstall hinge bolts.
8. If cover bolts are damaged, only replace with bolts provided by Larson Electronics.
9. Pour sealing compound into sealing fittings (when required) in accordance with the instructions supplied with each of the approved fittings and sealing compound. We recommend Chico® compound and fiber or Chico® SpeedSeal™. Only certified conduit seals may be used.
10. The following are schedule of limitations that must be followed:
    - Rotating machines, or other devices which create turbulence, shall not be incorporated.
    - Oil filled circuit-breakers and contactors shall not be used.
    - The content of the Ex component enclosure equipment may be placed in any arrangement provided that an area of at least 40% of each cross sectional area remains free.

- Unused entries must be plugged using suitably certified blanking elements.
- Entry to the enclosure must be made by suitably certified cable gland or suitably certified conduit seal installed at the enclosure wall.
- Internal earthing connection must be provided by the end user.
- Primary and secondary cells and batteries shall only be used when suitably certified and additional assessment is carried out against the requirements of EN60079-1:2007 Annex E
- “Drilling and tapping of holes is only permitted by the enclosure manufacturer”

MAINTENANCE:

Electrical and mechanical inspection of all components must be performed on a regularly scheduled basic, determined by the environment and frequency of use. It is recommended that inspection be performed a minimum of once a year.

WARNING: ELECTRICAL POWER SUPPLY MUST BE “OFF” BEFORE AND DURING INSTALLATION AND MAINTENANCE. INSTALLATION AND MAINTENANCE PROCEDURE MUST BE PERFORMED BY A TRAINED AND COMPETENT ELECTRICIAN.

USE AND CARE

Unauthorized modification may impair the function and/or safety of the enclosure and could affect the life of the equipment. Always check damaged or worn out parts before using the unit.

Should further information not covered by these instructions be required, please contact Larson Electronics at 1-800-369-6671 or sales@larsonelectronics.com for further assistance.

Please visit LarsonElectronics.com for **Warranty** and **Return** information.