

ARCHON Industries, Inc.

Model LUM17 Luminaire

Instruction No. 1038 May 2018

Installation / Operating / Maintenance Instructions

1. SUITABILITY

- 1.1 The LUM17 luminaire is suitable for providing illumination to the inside of vessels, tanks, distillation columns, and other normally enclosed containers in nonhazardous locations. It is UL listed within US and Canada and is intended for use in dry or damp locations only.
- 1.2 The LUM17 luminaire has been designed for continuous operation.
- 1.3 When operated continuously, the outside surface of the luminaire body will get hot to the touch. Allow to cool prior to handling.

2. INSTALLATION

- 2.1 Refer to ARCHON installation drawings for both AC and DC units prior to beginning work.
- 2.2 Install and use in accordance with all applicable electrical and fire safety codes.
- 2.3 Ensure electrical service leads are properly protected against mechanical damage.
- 2.4 If using the ARCHON Tri-Clamp mounting adapter, ensure the adapter assembly is complete and properly secured to the luminaire before energizing the electrical supply circuit.
- 2.5 Ensure that the rear cover is properly secured to the luminaire prior to operation.

3. ELECTRICAL CONNECTION

- 3.1 Confirm the operating voltage of your luminaire prior to beginning work. The operating voltage will be listed on the rear cover of the luminaire.
- 3.2 Refer to *Figure 1* through *Figure 4* of this document prior to beginning work.
- 3.3 **CAUTION:** Use wires rated for 105°C minimum for supply connections.
- 3.4 The LUM17 luminaire is provided with a terminal block for supply power connection.
- 3.5 The terminal block can be accessed by first removing the rear cover from the luminaire.

- 3.6 Remove the rear cover by first removing (2) #10-32 screws that secure the cover in place.
- 3.7 With the rear cover removed, gently pull the wiring out to access the terminal block.
- 3.8 Connect the supply positive and negative leads to their corresponding locations on the terminal block, making sure the connections are correct.
- 3.9 Connect the supply ground lead to the ground connection found on the inside of rear cover.
- 3.10 With the wiring complete, carefully bundle the wires and place back into the wiring cavity being careful not to pinch or damage any wires.
- 3.11 Secure the rear cover with the (2) #10-32 screws supplied by ARCHON. Do not substitute with other screws. These screws seal the luminaire against the outside environment.
- 3.12 Test the luminaire for proper operation. If problems are encountered with its normal operation, check that the wiring is correct, and the supply voltage is correct. If problems persist, contact ARCHON.

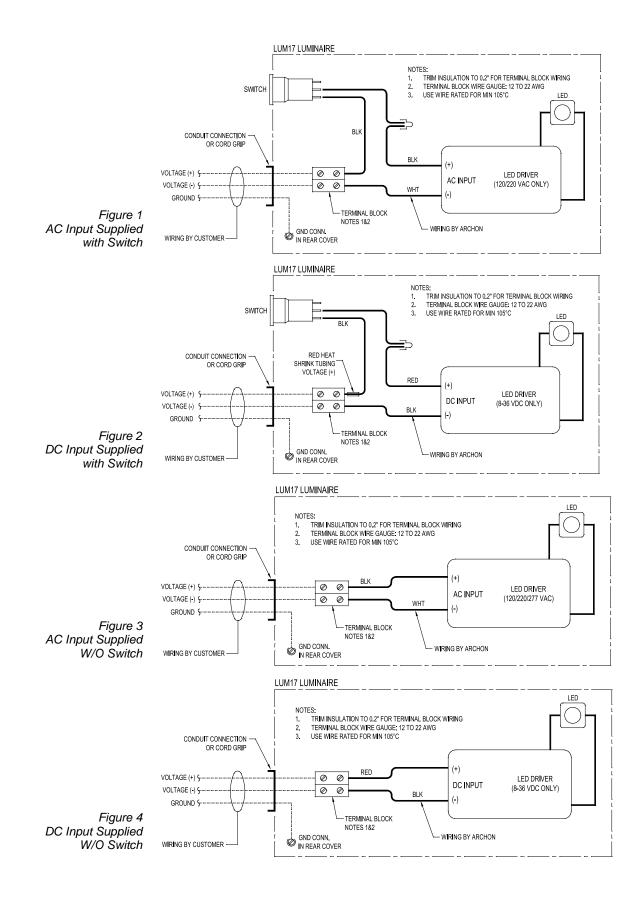
4. OPERATION

- 4.1 Pushbutton: Push to energize luminaire. Push again to de-energize luminaire.
- 4.2 **CAUTION:** Do not energize the luminaire if the glass lens is cracked or broken.
- 4.3 **CAUTION:** Do not energize the luminaire if any problems are encountered with its normal/safe operating state.

PRECAUTIONS:

- Verify the shipped contents are correct. Do not proceed with the installation if damage is found. Contact ARCHON Industries in such an event.
- All work should be performed by a qualified electrician in accordance with the National Electrical Code, applicable local codes and ordinances.
- Do not look directly into the LED light source.
- Do not touch the LED light source.
- Do not allow contact with the LED light source.
- Do not modify luminaire in any way or operate with dimmers or other non-approved control circuits unless prior approval is granted by ARCHON.
- This luminaire is designed to operate in an open environment. Operating in enclosed spaces without air circulation will reduce its lifespan and may void the warranty.
- Do not operate luminaire in packing carton.
- Use supplied original packing for protection when transporting luminaire.

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5. LENS ASSEMBLY, TRI-CLAMP ADAPTER

See Figure 5 below for Tri-clamp adapter and lens components. It should be noted that the Tri-clamp adapter does not need to be removed from the luminaire body to install the Tri-clamp lens and gaskets.

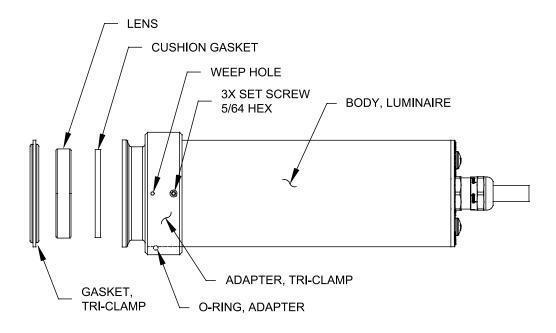
Prior to installing the lens components, ensure the adapter set screws (#8-32) are tightened to the body. Once installed on your process vessel, the luminaire body can be removed (without loosening the tri-clamp assembly) by loosening the three set screws and separating the luminaire body from the Tri-clamp adapter. To re-install, reverse the process. If resistance is encountered with sliding the luminaire body in and out of the adapter, apply a light coat of lubricant to the adapter o-ring, such as MOLYKOTE 111, by Dow Corning.

6. WEEP HOLE, ADAPTER

All ARCHON Tri-clamp adapters have been provided with a weep hole for safety. If the Tri-clamp gasket to lens seal develops a leak, process fluid can exit through the weep hole, indicating to the operator that a leak has occurred. If this happens, power to the luminaire should be turned off immediately and the leak should be fixed by replacing the gaskets and lens.

It is recommended to install the luminaire with the weep hole pointing in a safe direction, that is visible to an operator, should a leak develop.

Figure 5



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