



**ARCHON Industries, Inc.**

### **Model EX20 Luminaire**

Instruction No. 1043 August 2021\_REV\_A

## **Installation / Operating / Maintenance Instructions**

### **1. SUITABILITY**

- 1.1 Our EX20 luminaire has been designed to provide continuous illumination of process vessels, tanks, distillation columns, and other industrial items located in hazardous (Haz-Loc) and non-hazardous areas.
- 1.2 Approved hazardous operating environments are Class I Division I Group C&D, and Class I Division II Group C&D locations only.
- 1.3 Model EX20 is UL listed within US and Canada and is IP66 rated for strong water jet service.
- 1.4 During continuous operation, the luminaire body could get hot to the touch. Allow to cool prior to handling or servicing.

### **2. INSTALLATION**

- 2.1 Verify the shipped contents are correct. Do not proceed with the installation if damage is found. Contact ARCHON Industries in such an event.
- 2.2 Refer to Fig. 1 & Fig. 2 of this document prior to beginning work. Also, refer to the markings on the luminaire to ensure proper operation.
- 2.3 This luminaire is designed to operate in an open environment with at least some air circulation. Operating in an enclosed space without air circulation will reduce its lifespan and may void the warranty.
- 2.4 Install and use in accordance with all applicable electrical and fire safety codes.
- 2.5 Ensure electrical service leads are properly protected against mechanical damage.
- 2.6 Use only ARCHON supplied mounting brackets & flange adapters, and ensure the mounting assembly is complete and properly secured to the luminaire before energizing the electrical supply circuit.
- 2.7 See INST\_1043-EX20\_MTG\_ACCESSORIES

### **3. ELECTRICAL CONNECTION**

- 3.1 All work shall be performed by a qualified electrician in accordance with the National Electrical Code, and local codes & ordinances.
- 3.2 Confirm the operating voltage of your luminaire prior to beginning work. The operating voltage will be laser engraved on the luminaire.
- 3.3 **CAUTION:** Use wires rated for 105°C minimum for supply connections.
- 3.4 Two (2) 1/2" NPT threaded ports have been provided for a strain relief electrical connector. This connection must remain water-tight.
- 3.5 Access the wiring compartment by removing the threaded cap at the rear of the luminaire.
- 3.6 Connect the supply positive and negative wires to the luminaire positive and negative wires, making sure the connections are correct.
- 3.7 Connect the supply ground wire to the ground connection found in the wiring compartment.
- 3.8 With the wiring complete, carefully bundle the wires within the wiring compartment, being careful not to pinch or damage any wires. Replace the rear cover and tighten.
- 3.9 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.

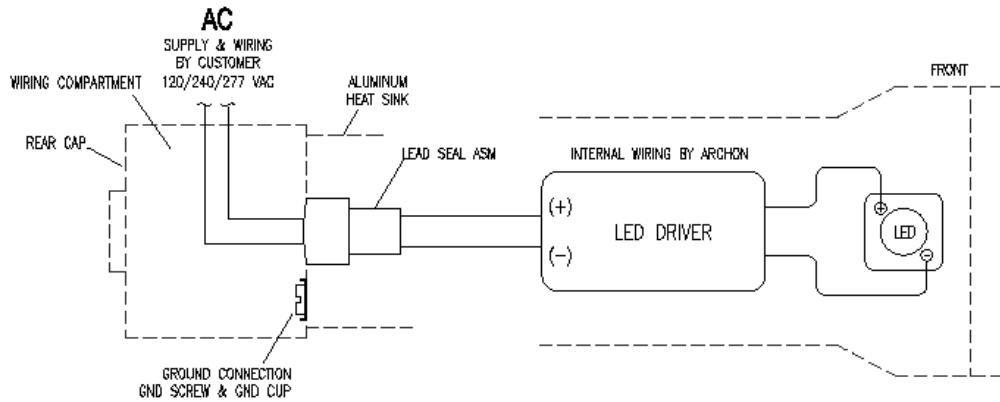
### **4. OPERATION**

- 4.1 The EX20 has been designed for operation and control by the customer's control system. Switches for on/off operation are customer supplied, configured, and wired.
- 4.2 **CAUTION:** Do not energize the luminaire if any 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.

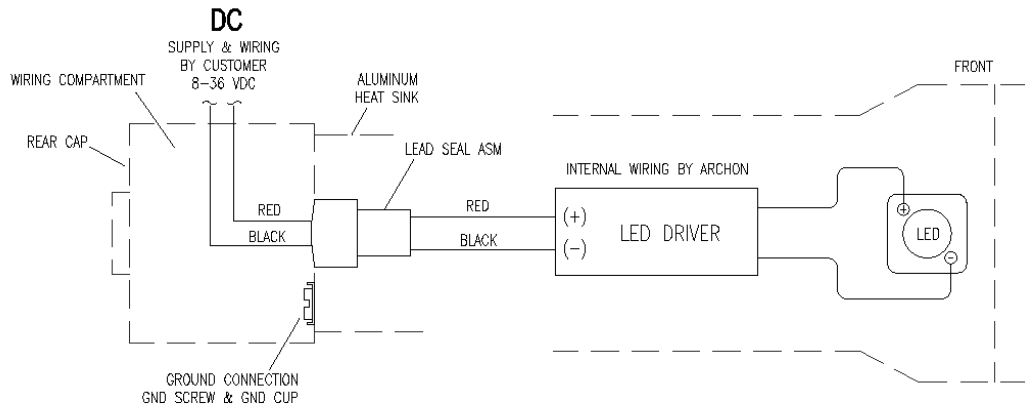
#### **PRECAUTIONS:**

- Do not modify luminaire in any way or operate with dimmers or other non-approved control circuits unless prior approval is granted by ARCHON.
- Do not look directly into the LED light source.
- Do not touch the LED light source.
- Do not allow objects to contact LED light source.
- Do not operate luminaire in packing carton.
- Ensure that the rear cover is properly secured to the luminaire prior to operation.
- Use original ARCHON packing when transporting luminaire or returning to ARCHON for service.

## WIRING DIAGRAMS (AC & DC OPERATION)



**Figure 1**  
**AC Operation**



**Figure 2**  
**DC Operation**

### NOTE:

Please contact ARCHON for additional information regarding our LED drivers, and available options.

## LIGHT ENGINE SERVICE

The light engine for our EX20 can be ordered directly from ARCHON and replaced if necessary. Follow the steps below to remove the light engine. Contact ARCHON if additional assistance is required.

1. Disconnect the main electrical supply to the luminaire
2. Remove the end cap to access the wiring compartment
3. Fully disconnect the internal electrical connection, including strain relief connection
4. Loosen the contact clip found in the wiring compartment (otherwise light engine will not slide out)
5. Now that the electrical service has been disconnected, remove luminaire from vessel if attached
6. Remove front lens cap by rotating counterclockwise (threaded connection)
7. Remove lens and PTFE cushion
8. Remove retaining ring securing light engine to housing
9. The light engine will now slide out of the housing
10. To install the new light engine, reverse this process
11. Replace only with original ARCHON parts

### EXPLODED VIEW OF EX 20 LUMINAIRE

