

# XSL3 Series: LED LAMP LUMINAIRES FOR HAZARDOUS LOCATIONS

DO NOT ATTEMPT INSTALLATION UNTIL YOU ARE FAMILIAR WITH ALL WARNINGS, PRECAUTIONS, AND PROCEDURES OUTLINED WITHIN THIS INSTRUCTION SHEET.



M -WARNING- M
TURN OFF POWER

ELECTRICAL POWER MUST BE TURNED OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.

#### INSTALLATION PRECAUTIONS:

All national and electrical/building codes must be followed in the installation of the luminaire. For code interpretation, consult local code authority.



### — RISKS OF FIRE OR EXPLOSION —

- 1. DO NOT INSTALL LUMINAIRE IN ANY CLASSIFIED LOCATION WHERE THE MARKED OPERATING TEMPERATURE EXCEEDS THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERES. CONSULT LUMINAIRE NAMEPLATE FOR SUITABILITY IN SPECIFIC HAZARDOUS LOCATIONS.
- DO NOT INSTALL LUMINAIRE IN A LOCATION WHERE THE AMBIENT TEMPERATURE EXCEEDS THE MAXIMUM AMBIENT TEMPERATURE SHOWN ON THE LUMINAIRE NAMEPLATE.
- 3. REFER TO LUMINAIRE NAMEPLATE FOR MINIMUM SUPPLY WIRE TEMPERATURE RATING.
- VERIFY THAT THE SUPPLY VOLTAGE AGREES WITH LUMINAIRE RATING AS INDICATED ON NAMEPLATE.
- VERIFY THAT GROUND CONTINUITY HAS BEEN ESTABLISHED BY USING AN OHMMETER OR OTHER SUITABLE TESTING EQUIPMENT BEFORE ENERGIZING THE LUMINAIRE.



**WARNING:** 

LUMINAIRE MUST BE GROUNDED AS REQUIRED PER PARAGRAPH 410.44 AND ARTICLE 250 OF THE NATIONAL ELECTRIC CODE AND/OR SECTION 10 AND RULE 30-500 OF CANADIAN ELECTRIC CODE. FAILURE TO PROPERLY GROUND THIS LUMINAIRE WILL CREATE AN ELECTRICAL SHOCK HAZARD WHICH CAN CAUSE SERIOUS INJURY OR DEATH.



THE LED LAMP IS VERY FRAGILE TO SCRATCHES AND SKIN CONTACT. DO NOT TOUCH THE YELLOW **CAUTION:** SURFACE OF THE LAMP!

WARRANTY IS VOID IF THE YELLOW SURFACE OF THE LAMP IS TOUCHED OR SCRATCHED.

LUMINAIRE MAY BE ENERGIZED IN A HAZARDOUS LOCATION ONLY AFTER THE LUMINAIRE TANK HAS BEEN SECURED TO THE MOUNT AND THE OPTICAL CONFIGURATION (GLOBE, REFRACTOR, TYPE CUT OR "CBDL") HAS BEEN ASSEMBLED AND TIGHTENED TO THE TANK AS OUTLINED IN THIS INSTRUCTION SHEET.

#### **Warranty:**

ABB sells this product with the understanding that the user will perform all necessary tests to determine the suitability of this product for the user's intended application. Subject to the limitations set forth below, ABB warrants that the EX-Solutions™ lighting LED luminaire will be free from defects in material and workmanship for a period of five (5) years beginning on the date of installation or 90 days from the date of shipment, whichever date is earlier.

### **Warranty Limitations and Exclusions:**

The above warranty shall only apply when the product is installed in applications in which ambient temperatures are within the range of specified operating temperatures and is operated within the electrical values shown on the LED driver label. This warranty is also void if the product has been subjected to misuse, neglect, accident, fire, physical damage, improper installation, unauthorized modification, or use in violation of our instructions or any applicable laws, codes or ordinances. Upon prompt notification of a warranted defect, ABB will, at its option, repair or replace any products found to be defective under normal installation, use and service. ABB reserves the right to replace any warranted product with a substitute product of similar function if the warranted product is no longer available.

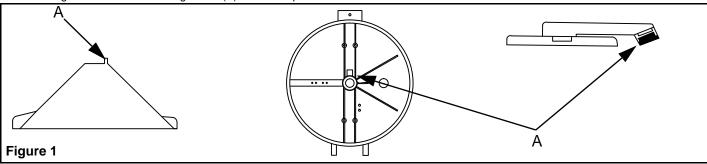
THE ABOVE WARRANTY IS THE SOLE WARRANTY CONCERNING THIS PRODUCT, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY DISCLAIMED. LIABILITY FOR BREACH OF THE ABOVE WARRANTY IS LIMITED TO COST OF REPAIR OR REPLACEMENT OF THE PRODUCT, AND UNDER NO CIRCUMSTANCES WILL ABB BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Fax: (800) 316-4515 Tel: (888) 552-6467 solutions.abb/explosion-protection



## PENDANT AND STANCHION TYPE MOUNTS (Figure 1)

Screw the luminaire mount onto previously install conduit, a minimum of 3 threads must be engaged between the conduit and luminaire mount. Tighten the conduit locking screw (A) to 30 inch pounds.

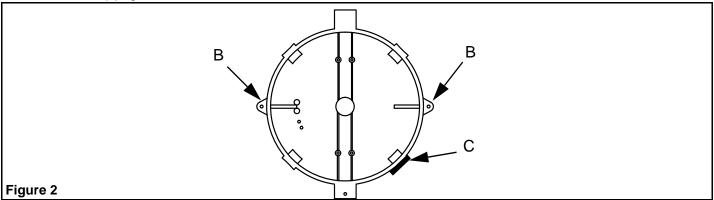


## **CEILING TYPE MOUNT (Figure 2)**

Install the luminaire mount to the appropriate mounting surface by means of the external mounting lugs (B).

Ceiling - bolt circle: 12-3/4"

Install conduits plug in any unused conduit entries with the supplied close-up plugs (C), minimum of 3 threads must be engaged between the conduit or close-up plug and luminaire mount.



#### WALL TYPE MOUNT

Wall bolt pattern: 3-3/4" X 3-3/4"

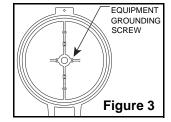


Always inspect gasket joints before closing the luminaire, if gasket shows any indication of deterioration, replace the luminaire.



#### **INSTRUCTIONS FOR INSTALLATION**

- 1. Install luminaire mount (outlet box) as per the installation instructions supplied with the luminaire mount.
- 2. Ground luminaire mount. If mount is not grounded through a metal raceway, such as metal conduit, a separate grounding conductor must be utilized. Attach this grounding conductor to the provided



"EQUIPMENT GROUNDING SCREW". Location of the equipment grounding screw is marked in each mount except cone pendant mount. See Figure 3 for location of equipment grounding screw in cone pendant mount.

3. Pull supply wires.

NOTE: Consult markings on the luminaire nameplate for required temperature rating of supply wire insulation.

NOTE: Always inspect gasketed joints before closing the luminaire. If gasket shows any indication of deterioration, replace the luminaire.

4. Hang the luminaire tank on the luminaire mount hinge (Figure 4). The luminaire is delivered with the globe already installed. Do not unscrew the globe during installation unless replacing the globe. Avoid contact with the LED lamp during installation.

#### **Electrical connections**

- 5. Attach ground bonding lead to supplied grounding screw in luminaire mount (Figure 4). Connect supply wires to luminaire driver leads. Verify that the utility voltage value comes within the AC voltage range printed
- on the luminaire template: "120 277VAC" or "347 480VAC". The LED driver module accepts any value of AC voltage within the specified range.
- 6. Dimming option: connect the incoming dimming control wires (0-10Vdc) to the Violet (+) and Grey (-) lead wires of the luminaire. Note: ensure the dimming control used is certified and suitable for the classification of the area of their installation. All field wiring (power and dimming) shall be rated for the maximum voltage.
- 7. Swing the luminaire closed. Secure it with the captive screw on the tank

# THREADED GLOBE OR REFRACTOR (Figure 5)

8. Verify that the globe is screwed in the fixture hand-tight. Non-symmetrical refractor globes come pre-aligned in the factory (Figure 6). Fixures with ceiling mount or pendant mount need to be aligned to the "Front Side" (Figure 6). Globes VGL15R1 and VGL15R3 have the marking "FRONT SIDE" molded in the globe (Figure 7).

DO NOT unscrew the globe to align the light distribution.

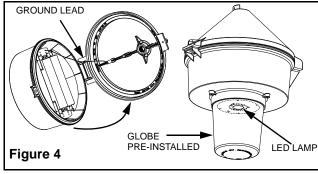
### **EXTERNAL GUARD (Figure 5)**

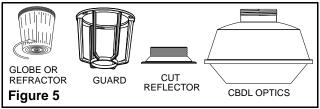
9. Back out three screws furnished in lower face of luminaire tank (around globe). Install to allow for clearance of guard. Position the keyholes of the over screws and twist in place. Tighten three screws to retain the guard.

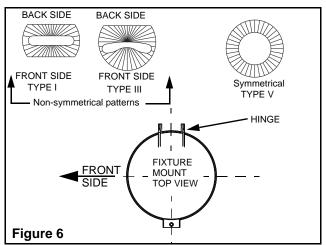
### CBDL OPTICS (Figure 5)

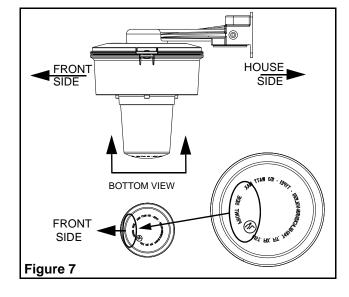
The CBDL optics is packaged separately. The luminaire is equipped with a plastic globe to protect the LED lamp.

- 10. Follow the above installation instructions (1 to 7).
- 11. Remove the platic globe and replace with the CBDL optics. Tighten to a torque of 30 ft-lbf to ensure an ingress protection type 4x (Nema-4x).











INSUFFICIENT TORQUE TIGHTENING MAY **CAUTION:** LEAD TO WATER INFILTRATION AND DAMAGE OF THE LED LAMP.

