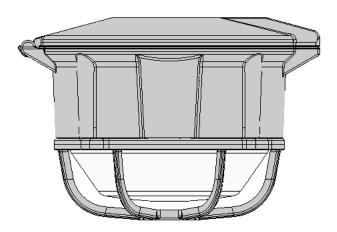


INSTALLATION, OPERATION & MAINTENANCE DATA SHEET MBLX SERIES LED LUMINAIRE

Luminaires are designed to be installed in Hazardous Locations: Class I Division 2, Class II Division 1



<u>CAUTION</u>: Before installing luminaire, make sure luminaire complies with area classifications, failure to do so may result in bodily injury and/or property damage. Do not attempt installation until you are familiar with the following procedures. All installation must comply with the applicable local and/or National Electrical Code and be performed by a qualified electrician.

Make sure that the circuit is de-energized before starting installation or maintenance.

In order to service a battery back-up fixture, the area must be non-hazardous.

The battery in a battery backup fixture is rechargeable LiFePO4 type and must be recycled or disposed of properly.

<u>CAUTION:</u> Verify that luminaire is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.

ATTENTION: Avant d'installer le luminaire, s'assurer que le luminaire est conforme à la classification des zones, le non-respect de cette règle risque d'entraîner des dommages corporels et / ou matériels. Ne pas tenter d'entreprendre l'installation avant d'être familiarisé avec les procédures suivantes. Toute installation doit être conforme au code électrique local et / ou national et être effectuée par un électricien qualifié.

Veiller à ce que le circuit soit mis hors tension avant de commencer l'installation ou la maintenance. Afin de réparer un appareil de sauvegarde batterie, la zone doit être nondangereux.

Vérifier si le luminaire est mis à la terre. S'il n'est pas mis à la terre il pourrait causer des risques de choc électrique susceptibles d'entraîner des blessures graves ou la mort.

<u>Note:</u> Due to the surge protection provided in the fixture to protect the internal electronics and LEDs, a branch circuit with the LED fixture may false fail a megohmmeter test (sometimes referred to as a megger test). If a megohmmeter test is required, the LED fixture should be removed from the branch circuit.

<u>Note:</u> Multiple fluorescent or LED fixtures attached to a single Ground Fault Circuit Interrupter (GFCI) may cause nuisance tripping of the GFCI. Regulatory agencies allow a small amount of leakage current because of the circuitry required to mitigate possible issues with electromagnetic compatibility (reference UL8750 and EN61347). The summation of these leakage currents from multiple fixtures may be enough to trip a GFCI.

NOTE - For Class I, Division 2 / Class II, Division 1 / Hazardous Locations, use rigid conduit or cable and connectors / glands rated for Class I, Division 2 Groups BCD (hazardous areas.

Do not attempt installation until you are familiar with the following procedures. All installations/maintenance to be performed by a qualified electrician and must comply with all applicable local and / or National Electrical Code.

IMPORTANT:

- 1. Luminaire is to be energized in hazardous locations only after fixture has been secured to Mount (Splice box) as indicated in this document.
- 2. Verify that luminaire is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.
- 3. Refer to luminaire nameplate for supply voltage, ambient, supply wire, and other important data and information.
- 4. All unused conduit openings must be plugged. Pipe sealant may be applied to threads in plugs and securely tightened.

DIRECTION FOR INSTALLATION: IMPORTANT NOTE:

Turn off electricity to circuit at main fuse or at circuit breaker.

NOTE IMPRORTANTE:

Mettre le circuit hors tension grâce au fusible principal ou le disjoncteur.

- 1. Using the installation images below as your guide, make sure the splice box is securely installed. Pull the wires through the conduit and secure with cable tie in splice box. (Refer to housing nameplate for supply wire rating.)
- 2. Hang the housing on the splice box hinge hook.
- 3. Attach green (ground) lead from housing securely to the splice box using grounding screw. CAUTION Connection as described below requires the use of either insulated wire nuts or, as an alternate, a factory installed terminal block assembly. See below:

ATTENION- Le raccordement decrit ci-dessous necessite l'untilisation de connecteurs rapides isoles ou, alternativement, un bloc de junction installe en usine. Voir ci-dessous:

4. Close the housing against the splice box latch and secure by tightening the screw.

Note: Before closing housing against splice box, inspect the housing gasket to be sure it is clean and free of any cuts or abrasions. Make sure no leads are pinched and the gasket is uniformly compressed.

- 5. Attach external ground if required.
- 6. Install reflector (sold separately) if desired.
 - · Attach reflector plate to guard using 4 screws provided.
 - Attach reflector to reflector plate using 4 screws provided. See figure below.
- 7. Activate supplying circuit to test the assembled luminaire.

Battery Backup Fixtures:

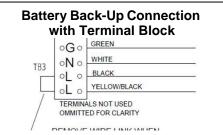
<u>IMPORTANT:</u> To turn the fixture completely off, an un-switched AC power source of 120VAC to 277VAC is required for the yellow/black and white leads. If the yellow/black and white leads are attached to switched power, the fixture will go into battery backup mode if the switch is turned off. <u>IMPORTANT:</u> A switched or un-switched AC power source of 120VAC to 277VAC is acceptable for the black lead.

Fixtures with terminal blocks are shipped with a jumper between the terminals of the black and yellow/black wire. Remove the wire link (jumper) and attach the yellow/black wire to line voltage when local switching is required.

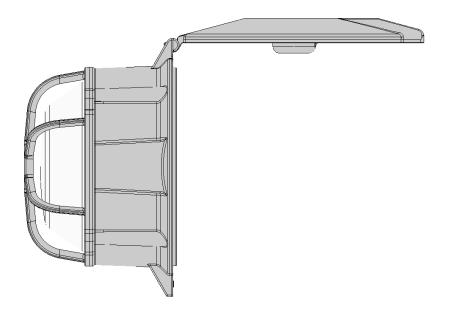
The battery must be charged for at least 12 hours prior to testing.

SELF DIAGNOSTIC INSTRUCTIONS / OPERATION: The self-diagnostic feature is set from the factory. The emergency LED driver will conduct a self-check for thirty (30) minutes every thirty (30) days; and ninety (90) minutes or one hundred eighty (180) minutes self-check every 12 months. After every self-check the LED indicator light will indicate a status signal

TABLE 1 – Self Diagnostic Indications	
LED Indicators Status	EM Driver Status/Mode
Solid Green	System OK/AC OK(Self-diagnostic Enabled or Disabled).
Slow Flashing Red, 4s on/1s off	Battery not Detected, Check Battery Switch Connection.
Flasing Red, 1s on/1s off	Battery Failure, Replace Battery.
Flashing Green, 1s on/1s off	Self-Diagnostic Test Underway.
Fast Flashing Red, 0.1s on/ 0.1s off	Abnormal Driver Performance, Replace Driver.
Very Slow Flashing Red, 4s on/4s off	Over Temperature.
None, Both LED's OFF	Normal Working EM Mode.
Green/Red Alternative Flashing, 1s Green/1s Red.	No Load or Output over Voltage Protection Triggered.



New fixtures with batteries can be stored for 2 years in a -20°C to 30°C ambient without a need of recharge. A fully discharged unit should not be stored more than 6 months without being recharged. There is low voltage disconnect of the battery to the emergency drivers, however as the batteries still have self-discharge, they should be recharged within 6 months to prevent the cells from permanent capacity loss. For long term storage, disconnect the white battery connector wire to prevent the cells from permanent capacity loss.



Hang the fixture on the splice box hook.



Reflector installation.

MAINTENANCE INSTRUCTIONS:

CAUTION:

Disconnect the supplying circuit before opening fixture or removing optics. To maintain maximum light output, this fixture should be cleaned periodically. Maintenance procedures sometimes require fixtures to be hosed down for good housekeeping. The supply circuit **must** be turned **OFF** and the fixture lens **must** be allowed to cool to the ambient room temperature before cleaning. Only mild, non-abrasive cleaning agents should be used. The force of water applied by a hose must not exceed 65 gallons per minute coming from a 1" diameter hose applied at a distance of 10 feet. These periodic cleaning procedures are important to prevent the accumulation of dust and dirt which will impair the light output of the fixture. The glass lens should be regularly inspected for scratches and chips and, if damaged, must be replaced.

HIGH VIBRATION AREAS:

Periodic inspection of lens tightness is required; recommended every six (6) months.

Technical information, advice and recommendations contained in these documents are based on information that Killark believes to be reliable. All the information and advice contained in these documents is intended only for use by persons having been trained and possessing the requisite skill and know-how and to be used by such persons only at their own discretion and risk.

The nature of these instructions is informative only and do not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation, and maintenance. Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for its intended use, and assumes all risk and liability whatsoever in connection therewith.

REMEMBER TO SAVE ONE OF THESE SHEETS FOR MAINTENANCE PERSONNEL

NOTE: Join or "lap" marks may form during the pouring of molten glass in the globe manufacturing process. It is not unusual for these marks to become visible. This is a common and normal occurrence for globes and does not affect performance.