

Explosion Proof Illuminated Push Button Class I, II III - Momentary, White - 24V - NEMA Instruction Manual

Thank you for your purchase of the Larson Electronics EPCS-LPB-MS-W-XL-24V.

WARNING:

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.
CRITICAL SAFETY INSTRUCTIONS:

- INSTALLATION SHOULD ONLY BE CONDUCTED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NEC AND ANY RELEVANT LOCAL BUILDING CODES.
- RISK OF FIRE OR ELECTRIC SHOCK. FIXTURE INSTALLATION REQUIRES KNOWLEDGE OF FIXTURE'S ELECTRICAL SYSTEMS. IF NOT QUALIFIED, CONTACT A QUALIFIED ELECTRICIAN.
- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- MAKE SURE THE SUPPLY VOLTAGE IS THE SAME AS THE FIXTURE'S RATED VOLTAGE.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR SHARP OBJECTS. SUITABLE FOR DAMP LOCATIONS.

IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE EPCS-LPB-MS-W-XL-24V MUST BE WIRED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES. PROPER GROUNDING IS REQUIRED FOR SAFETY.

WE STRONGLY ENCOURAGE ONLY A LICENSED ELECTRICIAN INSTALL, OPERATE AND MAINTAIN THIS PRODUCT. IF YOU ARE NOT QUALIFIED OR UNFAMILIAR WITH ANY ASPECT OF THIS INSTRUCTION SHEET, CONSULT AN ELECTRICIAN. THERE ARE NO SERVICEABLE PARTS INSIDE.



WARNING: MAKE SURE POWER IS TURNED OFF BEFORE STARTING THE INSTALLATION OR PERFORMING ANY MAINTENANCE.

RISK OF FIRE/ELECTRIC SHOCK – DISCONNECT POWER AT BREAKER BEFORE INSTALLING OR SERVICING.

RISK OF PERSONAL INJURY – FIXTURE MAY BECOME UNSTABLE OR DAMAGED IF NOT INSTALLED PROPERLY.

RISK OF BURN – ALLOW FIXTURE TO COOL BEFORE SERVICING.

WARNING

TO AVOID THE RISK OF FIRE, EXPLOSION OR ELECTRIC SHOCK, THIS PRODUCT SHOULD BE INSTALLED, INSPECTED AND MAINTAINED BY A QUALIFIED ELECTRICIAN ONLY, IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES.

TO AVOID ELECTRIC SHOCK:

- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- PRODUCT MUST BE CONNECTED TO A WIRING SYSTEM WITH AN EQUIPMENT-GROUNDING CONDUCTOR.

TO AVOID EXPLOSION:

- MAKE SURE THE SUPPLY VOLTAGE IS WITHIN THE VOLTAGE RATING.
- ENSURE THE MARKED T RATING IS LESS THAN THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERE.
- DO NOT OPERATE IN AMBIENT TEMPERATURES ABOVE THOSE INDICATED ON THE PRODUCT NAMEPLATE.
- DO NOT OPERATE IF THE LENS, CORD, SEALS, HOUSING, RECEPTACLES, ETC. IS CRACKED OR DAMAGED. IF SO, DISCONTINUE USE AND CONTACT MANUFACTURER FOR REPLACEMENT PARTS.
- ALL FASTENERS SHOULD BE PROPERLY SEATED.

IMPORTANT NOTE

Please read these instructions carefully before installing or maintaining this equipment. When Series EPCS-LPB-MS-R-XL devices are to be installed in OEM equipment, refer to Installation Instruction Sheet that came with the OEM Sound electrical practices should be followed at all times and this data should be used as a guide only.

TECHNICAL DATA

The product is not intended to be used alone and the electrical apparatus or systems to which it was incorporated require certification as a whole, when intended for use in explosive atmospheres. The 3/4" NPSM or M22x1,5 thread joint of this product, and the thread of the equipment to which it is being incorporated, must have a female 3/4" NPSM or M22x1,5 thread meeting the requirements for threaded joints.

The operators are available in three bushing thread lengths; 25mm (0.94"), 40mm (1.57") and 57mm (2.24"). Panel thicknesses beyond 2" require a spot face to insure locknut can be installed from the inside of the enclosure.

CAUTION: Before installing, make sure you are compliant with area classifications, as failure to do so may result in bodily injury, death and property damage. Do not attempt installation until you are familiar with the following procedures. All installation must comply with the applicable Electrical Code(s).

Make sure that the circuit is de-energized before starting installation or maintenance. Verify that the installation is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.

PILOT LIGHTS:

LED SOCKET



12 V / 24 V / 120 V

Rated voltage: 250VAC/VDC

Maximum power: 2.6 W

240 VAC

Rated voltage: 240VAC

Maximum power: 2.6 W

480 VAC

Rated Voltage: 480 VAC

Maximum power: 2.6 W

NOTE 1: To reach Pilot Light voltages, the socket and LED voltage combinations must be according to Note 2.

NOTE 2:

PILOT LIGHT VOLTAGE	SOCKET	LED VOLTAGE
12 VAC/VDC	L001	12 V
24 VAC/VDC	L001	24 V
120 VAC/VDC	L001	120 V
240 VAC	LC240	120 V
480 VAC	LC480	120 V

ILLUMINATED PUSHBUTTONS:

CONTACT BLOCK INFORMATION

Rated voltage	U _i 500 V	
Rated current	I _{th} 6 A	
Contacts for AC 15	<u>Voltage</u>	<u>Current</u>
	250 V	6 A
Contacts for DC 13	<u>Voltage</u>	<u>Current</u>
	24 VDC	3 A

LED SOCKET

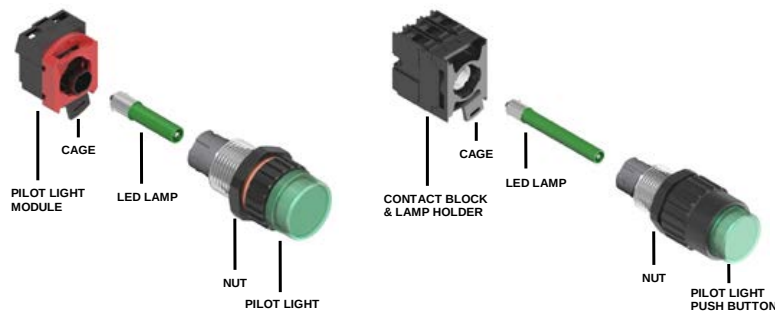
Maximum Power	2.6 W
Maximum Voltage	250 V

MOUNTING INSTRUCTIONS

To install the product correctly, follow the steps below

PILOT LIGHTS AND ILLUMINATED PUSHBUTTONS:

1. Disconnect the contact/terminal block from the assembly by sliding the cage locking tab clockwise.
2. Install LED into terminal block.
3. Remove the nut and protective sleeve from the threaded body.
4. Place the legend plate under the knob, or attach to the enclosure.
5. Make sure the operator threads and surface being attached to are clean and free of debris. Apply STL thread lubricant and screw the pushbutton assembly into the enclosures 3/4" NPSM or M22x1,5 threaded entry and torque to 3 N-m to 6 N-m (27 in.-lbs. to 53 in.-lbs.).
6. Install the nut onto the assembly threaded body and torque to 2 N-m (18 in.-lbs.) with an appropriate tool.
7. Installing the contact block to the assembly:
 - a. With the cage locking tab oriented in the bottom, ensure it is slid to the left position.
 - b. Align the assembly channel with the locking cage ID tabs on the contact block and slide the block onto the assembly.
 - c. Move the cage tab counterclockwise to lock switch in place.
 - d. Verify orientation of block is such that control wires and certification tag won't be directed into flame path of cover/body.

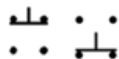


After performing the connections described above, the product can be safely used, and the ingress of protection is assured.

TYPICAL CONTACT POSITIONS

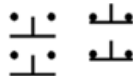
2 POS. SELECTOR SWITCH
ONE POLE DOUBLE THROW
GZ25-2A3, GZ5-2A3,
GZL52A3

LEFT POS. RIGHT POS.



2 POS. SELECTOR SWITCH
TWO POLE DOUBLE THROW
GZ25-2A6, GZ5-2A6,
GZL52A6

LEFT POS. RIGHT POS.



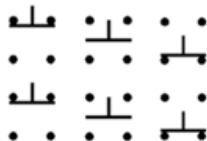
3 POS. SELECTOR SWITCH
ONE POLE DOUBLE THROW w/ OFF
GZ25-3C3, GZ5-3C3, GZL53C3

LEFT POS. CNTR POS. RIGHT POS.



3 POS. SELECTOR SWITCH
TWO POLE DOUBLE THROW w/ OFF
GZ25-3C8, GZ5-3C8, GZL53C8

LEFT POS. CNTR POS. RIGHT POS.



3 POS. SELECTOR SWITCH
ONE POLE DOUBLE THROW w/o OFF
GZ25-3G3, GZ5-3G3, GZL53G3

LEFT POS. CNTR POS. RIGHT POS.



STORAGE

Upon receiving the product, the parts must be stored in a covered, clean and dry place so that there is no contact between threads of the products. **INSPECTION AND MAINTENANCE**

Inspection and maintenance must be performed in accordance with the applicable codes of practice by an appropriately trained person. **REPAIR**

A properly trained person shall perform the repair of equipment in accordance with the manufacturer's instructions and applicable codes of practice. Repair/modification must be performed only with manufacturer original parts and should be limited to the replacement of the following parts:

- Gasket
- Contact blocks
- Power supply module for pilot light
- Color calotte for signaling

IMPORTANT:

Technical information, advice and recommendations contained in these documents is based upon information that Larson believes to be reliable. All the information and advice contained in these documents is intended for use only 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 does 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 Larson, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.

MAINTENANCE

There are no serviceable parts inside the fixture. However, it is good practice to routinely clean and check the fixture for proper function.

- Disconnect power running to the fixture and be sure the fixture is cool to the touch.

USE AND CARE

Unauthorized modification may impair the function and/or safety of this device and could affect the life of the equipment. Always check for damaged or worn out parts before using the device. Store it in a secure place out of the reach of children when not in use. Inspect for good working condition prior to storage and before re-use.

REPLACEMENT PARTS

The EPCS-LPB-MS-W-XL-24V is designed to provide years of reliable performance. Should the need for replacement parts arise, please contact Larson Electronics.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-877-348-9680 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.