

# INSTRUCTION & SERVICE MANUAL

## E2xB05UL BEACONS

### For Use In Hazardous Locations

- 5 Joules
- Type 4 / 4X 13
- Operating Temperature Range  
-20°C to 55°C



Unit Type No. E2xB05UL

Input Voltages: DC Units 12V or 24V or 48V  
AC Units 120V or 230V 50/60Hz

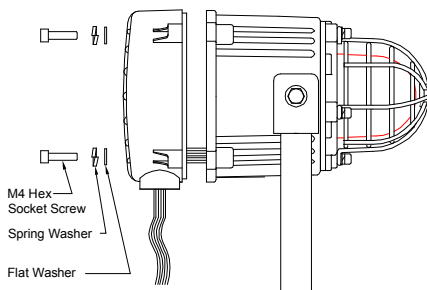
Max. Operating Temperature / Code at +55°C Ambient	
Hazardous Location	Temperature Code
Class I, Division 2, Groups A, B, C, D	T2D (215°C)
Class II, Division 2, Groups F and G	T5 (100°C)
Class III, Divisions 1 and 2	T5 (100°C)

Max. Operating Temperature / Code at +40°C Ambient	
Hazardous Location	Temperature Code
Class I, Division 2, Groups A, B, C, D	T3 (200°C)
Class II, Division 2, Groups F and G	T6 (85°C)
Class III, Divisions 1 and 2	T6 (85°C)

The equipment is suitable for use in the hazardous locations listed above or non-hazardous locations only.

#### PRE-INSTALLATION

**WARNING** - The E2xB05UL beacon is supplied with flying leads so it should not be necessary to open the unit before it is installed.

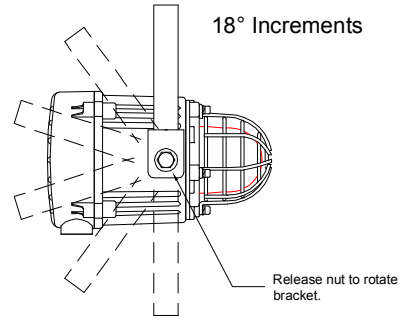


**WARNING – NOT TO BE USED AS A VISUAL PUBLIC MODE NOTIFICATION APPLIANCE**

**WARNING – HIGH VOLTAGE SHOCK HAZARD. WAIT 5 MINUTES AFTER REMOVING POWER BEFORE OPENING THE ENCLOSURE**

#### MOUNTING

The E2xB05UL beacon must be mounted using the rotating bracket as shown.



**WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, II DIVISION 2.**

#### WIRING INSTALLATION

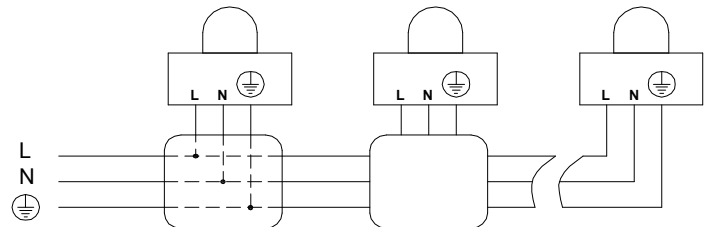
The E2xB05UL beacon has one ½ NPT cable entry, the blanking plug adjacent to the cable entry is permanently fixed and must not be removed. The beacon is pre-wired with flying leads which are colour coded and should be connected as shown in the diagram below.

The conduit running from the supply to the beacon must include an equipment grounding conductor that is at earth potential to facilitate ground connection of the device. A number of beacons can be connected in a chain to the same supply using field installed wiring compartments that are appropriate for the hazardous location, provided that the conductor at earth potential can be readily connected to the ground lead on each beacon in the chain.

**WARNING - ALL ELECTRICAL WIRING MUST BE INSTALLED IN ACCORDANCE TO THE NATIONAL ELECTRICAL CODE**

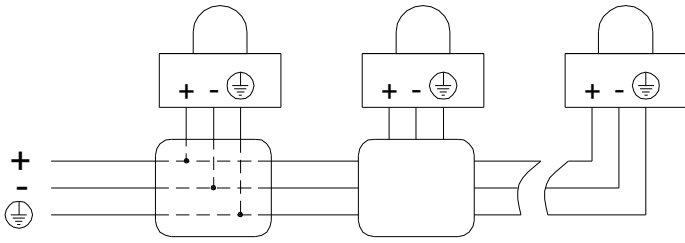
#### AC BEACONS

Black Live  
White Neutral  
Green/Yellow Ground



#### DC BEACONS

Red Positive  
Black Negative  
Green/Yellow Ground



## POWER SUPPLY SELECTION

It is important that a suitable power supply is used to run the beacons. The power supply selected must have the necessary capacity to provide the input current to all of the beacons connected to the system.

Unit Type	Input Voltage	Input Current	Max. I/P Volts
E2xB05UL	12V DC	520mA	15V
E2xB05UL	24V DC	275mA	30V
E2xB05UL	48V DC	145mA	58V
E2xB05UL	230V 50/60Hz AC	30mA	253V
E2xB05UL	120V 50/60Hz AC	80mA	132V

## END OF LINE MONITORING

On E2xB05UL DC units, dc reverse line monitoring can be used if required. All DC beacons have a blocking diode fitted in their supply input lines. An end of line monitoring resistor can be connected across the +ve and -ve terminals. If an end of line resistor is used it must have the following values:-

### 24V DC Beacons

Minimum Resistance 3k9 ohms      Minimum wattage 0.5W  
 Minimum Resistance 1k ohms      Minimum wattage 2.0W

### 48V DC Beacons

Minimum Resistance 15k ohms      Minimum wattage 0.5W  
 Minimum Resistance 3k9 ohms      Minimum wattage 2.0W

The resistor must be connected directly across the +ve and -ve terminals as shown in the following drawing. Whilst keeping its leads as short as possible, a spacing of at least 1/16 inch (1.58mm) must be provided through air and over surfaces between uninsulated live parts.

E2xB05UL DC Beacon  
End of Line Resistor

