B33 Installation Instructions

EMERGENCY LIGHTING EQUIPMENT



bodine

! IMPORTANT SAFEGUARDS !

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- To prevent high voltage from being present on red, yellow, yellow/black, and yellow/red output leads prior to installation, inverter connector must be open. Do not join inverter connector until installation is complete and AC power is supplied to the emergency lighting equipment.
- 2. This product is for use with two or three 32 W (4') T8 fluorescent lamps without integral starters. This product is for use with instant start parallel AC ballasts only.
- 3. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
- 4. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and inverter connector of the emergency lighting equipment before servicing.
- 5. This emergency ballast is for factory or field installation.
- 6. This product is suitable for damp locations where the ambient temperature is +5°C minimum, +50°C maximum. Not suitable for heated air outlets and wet or hazardous locations.
- 7. An unswitched AC power source is required (120 or 277 VAC, 60 Hz).
- 8. Do not install near gas or electric heaters.
- 9. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 10. Do not use this product for other than intended use.
- 11. Servicing should be performed by qualified service personnel.

CAUTION: Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this inverter/charger pack.

SAVE THESE INSTRUCTIONS

THIS PRODUCT CONTAINS A RECHARGEABLE NICKEL-CADMIUM BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.

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WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED, YELLOW, YELLOW/ BLACK, AND YELLOW/RED OUTPUT LEADS PRIOR TO INSTALLATION, INVERTER CONNECTOR MUST BE OPEN. DO NOT JOIN INVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY LIGHTING EQUIPMENT.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency lighting equipment must be fed from the same branch circuit as the AC ballast.

STEP #1 INSTALLING THE EMERGENCY LIGHTING EQUIPMENT

- > Disconnect AC power from the fixture. Install the emergency lighting equipment as shown. Remote mounting distance must be less than half the maximum remote mounting distance for the AC ballast. Consult AC ballast manufacturer before remote installation.
- > Mounting Height: This product meets or exceeds the NFPA minimum light requirements with all loads, down to the smallest rated lamp load, at heights up to 7.17ft (2.2m). Many factors influence emergency illumination levels, such as the lamp load selected, luminare design, and environmental factors

therefore end use verification is necessary. For field installations, when the attached luminaire is mounted at heights greater than 7.17ft (2.2m), the level of illumination must be measured in the end application to ensure the requirements of NFPA 101 and local codes are satisfied.

STEP #2 NSTAL

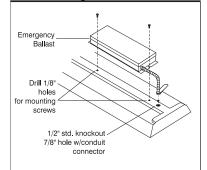
► INSTALLING THE TEST SWITCH

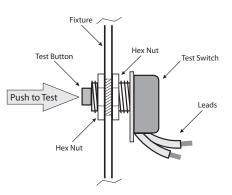
- Install the test switch through the ballast channel cover of a troffer or through the side of a strip fixture.
- > Drill a 1/2" hole and install the switch as shown.
- > Wire the test switch so that it removes AC power from both the emergency lighting equipment and AC ballast at the same time (see wiring diagrams).

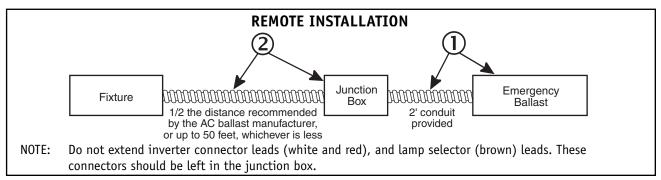
STEP #3 INSTALLING THE CHARGING INDICATOR

> Install the CHARGING INDICATOR LIGHT as shown so that it will be visible after the fixture is installed.

On Top of Fixture





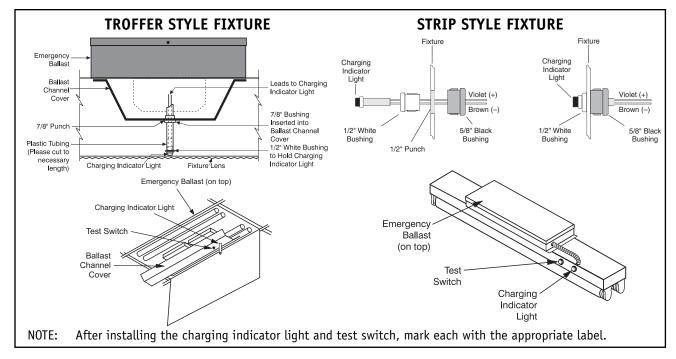


1 Emergency lighting equipment with flexible conduit.

2 Conduit and junction box (not supplied), but necessary for remote installation.

STEP #4 WIRING THE EMERGENCY BALLAST

- > Determine the type of AC ballast installed in the fixture.
- > Select the appropriate wiring diagram on back to connect the emergency lighting equipment to the AC ballast and lamps. Make electrical connections in accordance with the National Electrical Code and any local regulations.
- > After installation is complete, supply AC power to the emergency lighting equipment and join the inverter connector.
- > At this point, power should be connected to both the AC ballast and the emergency lighting equipment, and the Charging Indicator Light should illuminate indicating the battery is charging.
- > A short-term discharge test may be conducted after the emergency lighting equipment has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.
- In a readily visible location, attach the label "CAUTION This Unit Has More Than One Power Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And Emergency Power Supplies Before Servicing."



OPERATION

When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged. When power fails, the emergency lighting equipment automatically switches to emergency power (internal battery), operating either two or three lamps at reduced illumination for at least 90 minutes.

MAINTENANCE

Although no routine maintenance is required to keep the emergency lighting equipment functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

- 1. Visually inspect the charging indicator light monthly. It should be illuminated.
- 2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. Two or three lamps should operate at reduced illumination.
- 3. Conduct a 90-minute discharge test once a year. Two or three lamps should operate at reduced illumination for at least 90 minutes.
- 4. The life expectancy of the battery is 7 to 10 years. If the battery fails to provide 90 minutes of illumination, it should be replaced.

! REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL !

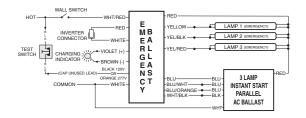
CAUTION: FOR USE WITH INSTANT START PARALLEL AC BALLASTS ONLY.

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

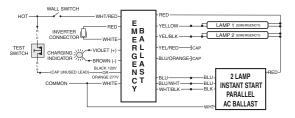
WIRING DIAGRAMS for 3-LAMP emergency operation

A. THREE (3) LAMP INSTANT START PARALLEL BALLAST

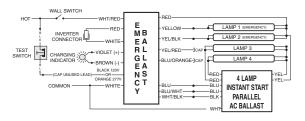


WIRING DIAGRAMS for 2-LAMP emergency operation

B. TWO (2) LAMP INSTANT START PARALLEL BALLAST

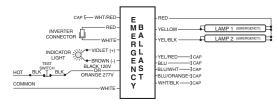


D. FOUR (4) LAMP INSTANT START PARALLEL BALLAST

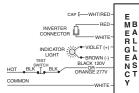


WIRING DIAGRAMS for Emergency-Only fixtures

E. TWO (2) LAMPS WITHOUT AC BALLAST



F. THREE (3) LAMPS WITHOUT AC BALLAST



- RED	LAMP 1 (EMERGENCY)
	LAMP 2 (EMERGENCY)
BLU ————] CAP BLU/WHT ——] CAP BLU/ORANGE-] CAP - WHT/BLK ——] CAP	

C. THREE (3) LAMP INSTANT START PARALLEL BALLAST

