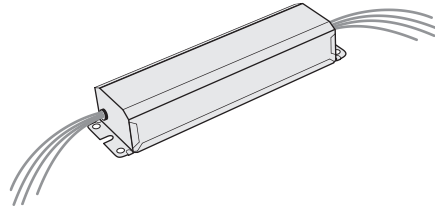


CB90-48

Installation Instructions

CENTRAL BATTERY BALLAST



PHILIPS
bodine



! IMPORTANT SAFEGUARDS !

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To prevent high voltage from being present on red & yellow output leads prior to installation, do not apply DC power until installation is complete and AC power is supplied to the Central Battery Ballast.
2. To reduce the risk of electric shock, disconnect both AC and DC power supplies before servicing.
3. This product is for use with most 13 W through 215 W single pin or bipin fluorescent lamps, including standard, energy saving, HO, VHO, PG17, circline, U-shaped and 4-pin compact lamps without integral starters.
4. The Central Battery Ballast requires a 48 VDC power source. It also requires an unswitched 120 or 277 VAC power source.
5. The Central Battery Ballast is designed for operation from a 48 VDC power source. When AC power fails, the Central Battery Ballast senses the loss of AC power and automatically switches to DC power, operating either one or two lamps.
6. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
7. This product is for use in indoor fixtures except heated air outlets, and wet, damp or hazardous locations.
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.

SAVE THESE INSTRUCTIONS

02/03/09

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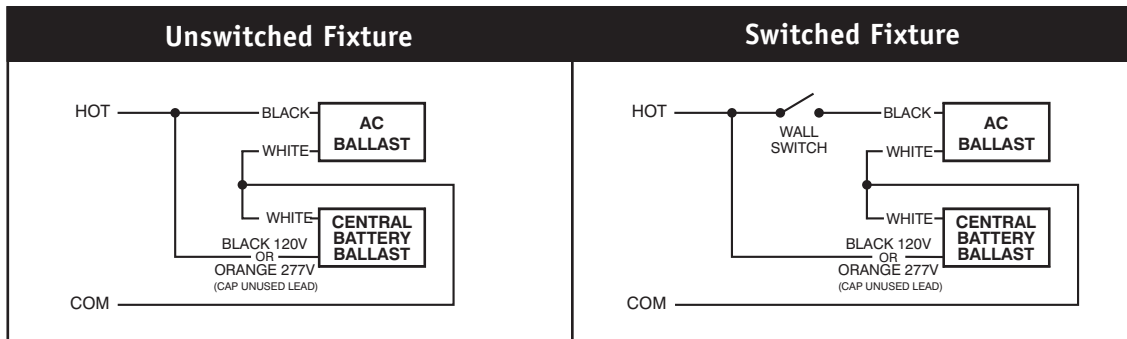
236 Mt. Pleasant Rd. • Collierville, TN USA 38017-2752 • Tech Support 888-263-4638 • Fax 901-854-1630 • www.philips.com/bodine
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INSTALLATION



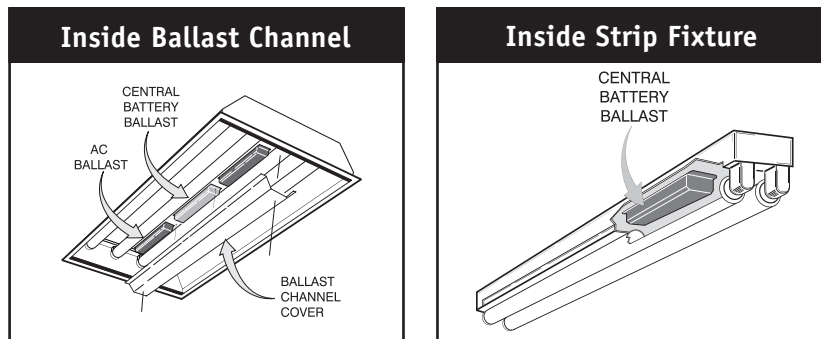
WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED & YELLOW OUTPUT LEADS PRIOR TO INSTALLATION, DO NOT APPLY DC POWER UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE CENTRAL BATTERY BALLAST.

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



STEP #1 ▶ INSTALLING THE CENTRAL BATTERY BALLAST

- > Disconnect AC power from the fixture. Remove the ballast channel cover and install the Central Battery Ballast in the ballast channel.



STEP #2 ▶ WIRING THE CENTRAL BATTERY BALLAST

- > Select the appropriate wiring diagram to connect the Central Battery Ballast to the AC ballast, AC and DC power supplies, and lamp(s). Make sure all connections are in accordance with the National Electrical Code and any local regulations. See wiring diagrams.

NOTE: The Central Battery Ballast will not operate if the polarity of the DC input leads is reversed; however, it is protected from damage if this situation occurs.

STEP #3 ▶ MARKING AND TESTING OF FIXTURE WITH THE CENTRAL BATTERY BALLAST

- > In a readily visible location, attach the label "CAUTION - This Unit Has More Than One Power Supply Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses and DC Power Supply Before Servicing.:"
- > After installation is complete, supply AC power and then 48 VDC power to the fixture.
- > A short-term test may be conducted. Refer to MAINTENANCE.

OPERATION

The Central Battery Ballast is designed for operation from a 48 VDC power source. When AC power fails, the Central Battery Ballast senses the loss of AC power and automatically switches to DC power, operating either one or two lamps.

MAINTENANCE

Although no routine maintenance is required to keep the Central Battery ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended. Test the DC operation of the fixture at 30-day intervals for a minimum of 30 seconds by removing AC power from the fixture. Either one or two lamps should operate from the 48 VDC supply.

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

Table 1

Lamp Diameter	Base Type	Power (Length)	Number of Lamps DC Operation	Brown Connector
1", 1¼", 1½" T8, T9, T10, T12	Single or Bipin	17 - 40 W (2'-4')	1	CLOSED
			2	OPEN
		40 - 215 W (5'-8')	1	OPEN
Long Compact	4-pin (2G11)	18 - 39 W	1	CLOSED
			2	OPEN
		40 - 55 W	1	OPEN
Compact	4-pin (G24q, GX24q)	13 - 42 W	1	CLOSED
			2	OPEN

CENTRAL BATTERY 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 DC OPERATION ONLY FIXTURES

FIG CB1a ONE (1) 17-215 W LAMP WITHOUT AC BALLAST

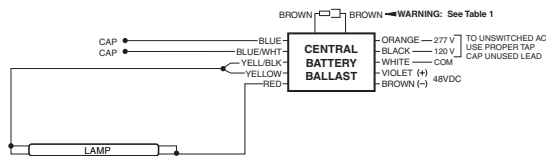


FIG CB2a TWO (2) LAMPS WITHOUT AC BALLAST

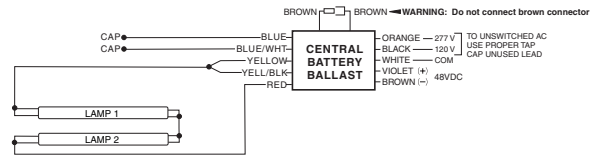


FIG CB3a ONE (1) COMPACT LAMP WITHOUT AC BALLAST

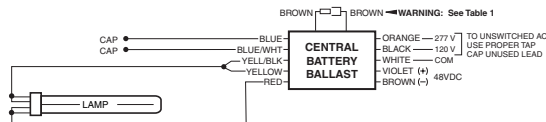
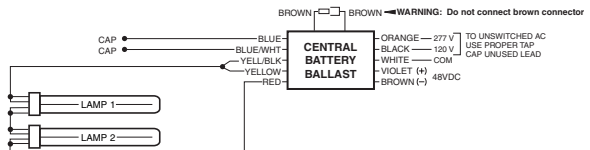


FIG CB4a TWO (2) COMPACT LAMPS (13-42 W) WITHOUT AC BALLAST



CENTRAL BATTERY 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 2-LAMP OPERATION

TWO-LAMP OPERATION IS NOT POSSIBLE WITH ALL BALLASTS.
CONSULT THE FACTORY FOR ANY BALLAST OTHER THAN THOSE SHOWN.

FIG CB5a TWO (2) LAMP INSTANT START BALLAST

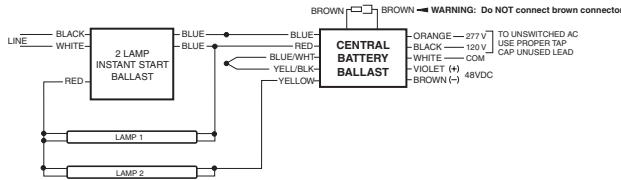


FIG CB6a TWO (2) LAMP RAPID START BALLAST

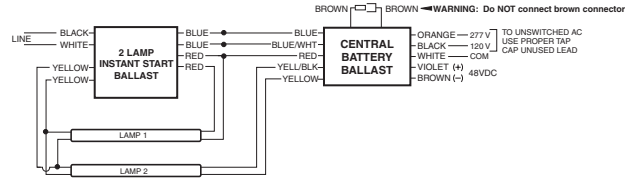


FIG CB7a THREE (3) LAMP INSTANT START ELECTRONIC BALLAST

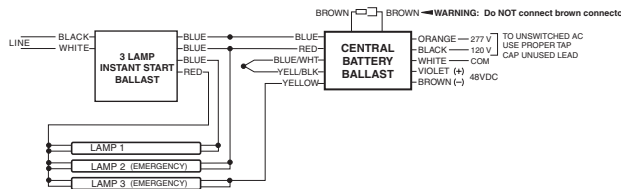


FIG CB8a THREE (3) LAMP RAPID START BALLAST

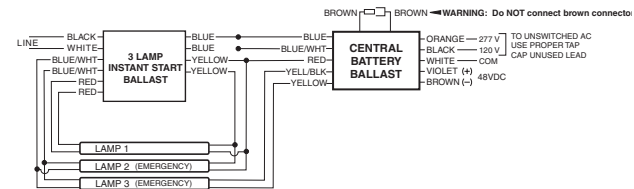


FIG CB9a FOUR (4) LAMP INSTANT START BALLAST

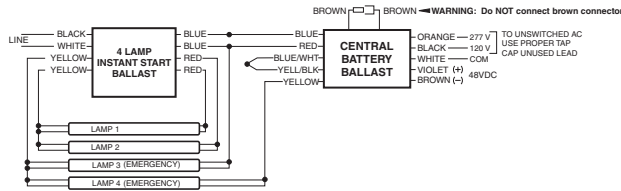


FIG CB10a FOUR (4) LAMP RAPID START BALLAST

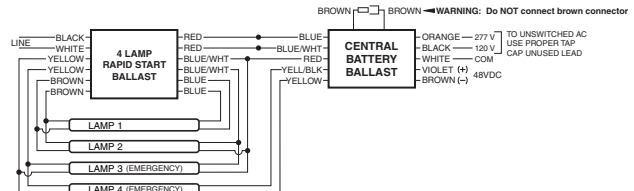
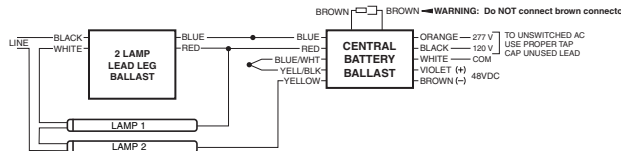


FIG CB11a TWO (2) LAMP LEAD/LAG INSTANT START SLIMLINE BALLAST



CENTRAL BATTERY 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 1-LAMP OPERATION

FIG CB12a ONE (1) LAMP RAPID START BALLAST

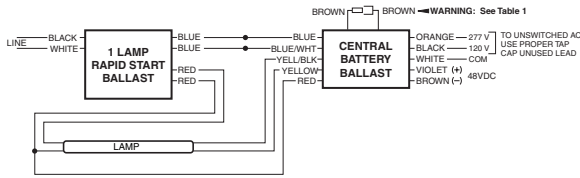


FIG CB13a TWO (2) LAMP RAPID START BALLAST

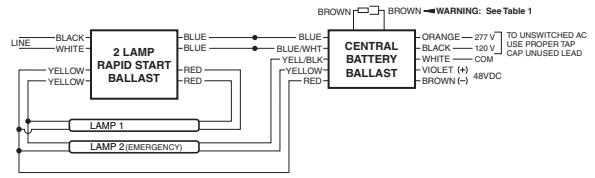


FIG CB14a ONE (1) LAMP INSTANT START SLIMLINE BALLAST

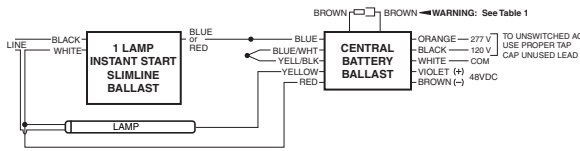


FIG CB15a TWO (2) LAMP LEAD/LAG INSTANT START SLIMLINE BALLAST

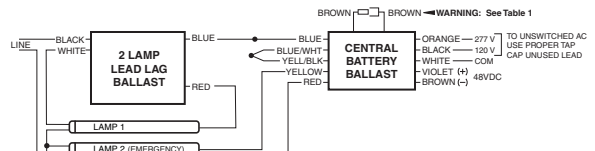


FIG CB16a TWO (2) LAMP SERIES SEQUENCE INSTANT START BALLAST WITH FOUR (4) LEADS

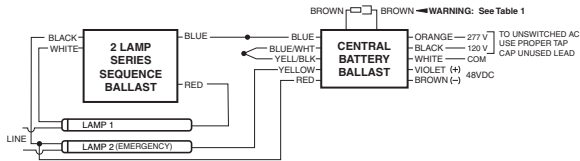


FIG CB17a TWO (2) LAMP INSTANT START BALLAST

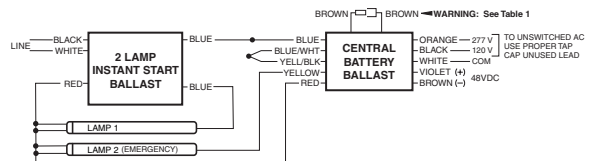


FIG CB18a ONE (1) LAMP CIRCLINE RAPID START BALLAST

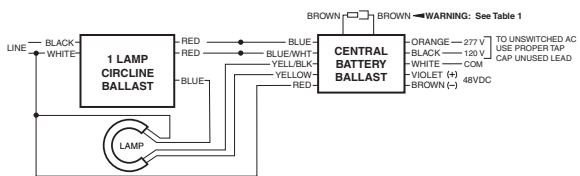
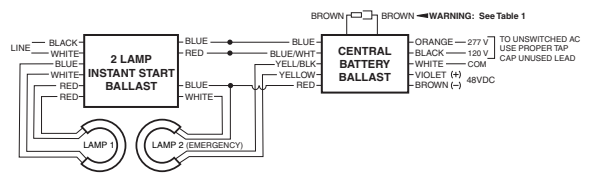


FIG CB19a TWO (2) LAMP CIRCLINE RAPID START BALLAST



CENTRAL BATTERY 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 1-LAMP EMERGENCY OPERATION

FIG CB20a ONE (1) COMPACT LAMP RAPID START BALLAST

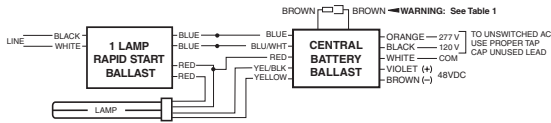


FIG CB21a TWO (2) COMPACT LAMP RAPID START BALLAST

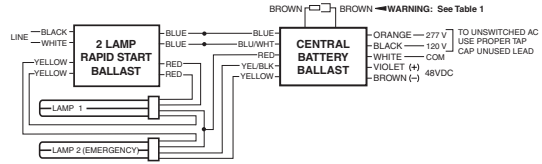


FIG CB22a THREE (3) LAMP INSTANT START BALLAST

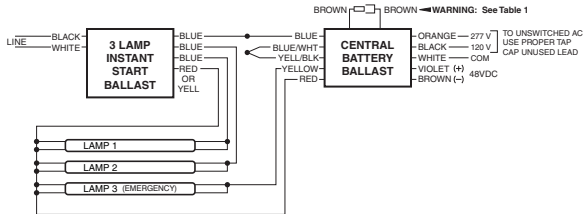


FIG CB23a THREE (3) LAMP RAPID START BALLAST

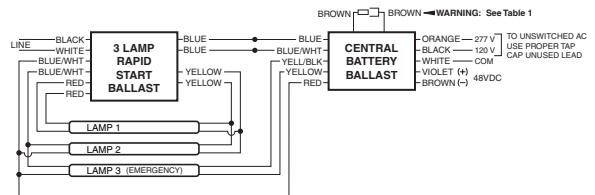


FIG CB24a FOUR (4) LAMP INSTANT START BALLAST

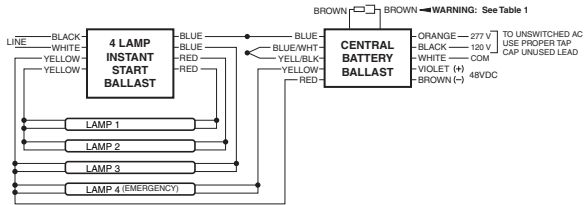


FIG CB25a FOUR (4) LAMP RAPID START BALLAST

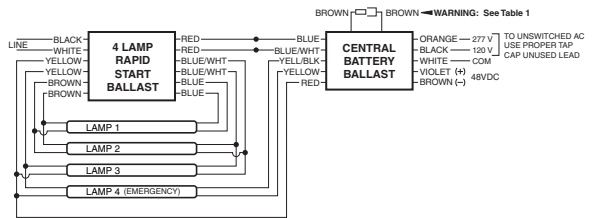


FIG CB26a ONE (1) LAMP PREHEAT START BALLAST

