

GEN™ Series Fluorescent Backup Ballasts

Frequently Asked Questions

1. What are GEN Series fluorescent backup ballasts, and how do they differ from fluorescent emergency ballasts?

GEN Series fluorescent backup ballasts are ballasts designed for use in conjunction with auxiliary standby generator systems. Their purpose is to provide interim lighting for uninterrupted illumination between the time normal power is lost and the time a standby generator powers lighting. It may take a standby generator as long as 10 seconds to bring up lighting after normal power has failed. GEN Series backup ballasts keep the lights on until the generator takes over.

To ensure constant illumination, GEN Series backup ballasts provide at least four minutes of backup lighting should the generator fail to bring up lighting. Because GEN Series backup ballasts provide interim lighting, they have a smaller battery and a shorter runtime than conventional emergency ballasts, which provide a minimum of 90 minutes of emergency lighting and are designed as primary, rather than backup, emergency lighting sources.

2. What products are included in the GEN Series?

The GEN Series includes the GEN1 and GEN3 fluorescent backup ballasts.

3. How are the GEN1 and GEN3 different?

Differences include the following:

The GEN1 is designed to operate one lamp with 1050 to 3200 lumens initial light output, while the GEN3 operates two or three lamps with 4700 to 7900 lumens initial light output.

The GEN1 provides up to five minutes of backup illumination, while the GEN3 provides up to four minutes of backup illumination.

The GEN3 is compatible only with instant start, parallel 2-, 3- and 4-lamp electronic AC ballasts.

The GEN3 is equipped with an audible alarm (optional) that sounds during backup operation, signifying that the backup ballast is powering lighting.

For differences in features such as charging current, AC input power rating and physical dimensions, refer to the specification sheets for the individual products.

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4. How do GEN Series backup ballasts work?

When AC power fails, GEN Series backup ballasts immediately switch to the backup mode, keeping one or more lamps illuminated at high lumen output for a minimum of four minutes. When AC power is restored via the main supplier or standby generator, the backup ballasts automatically return to charging mode.

NOTE: If GEN I is installed in a fixture with a rapid start AC ballast, there will be a slight break in lamp illumination when AC power is restored by either the main AC power source or the generator. This break is a function of the starting method employed by rapid start AC ballasts.

5. What are the appropriate applications for GEN Series backup ballasts?

GEN Series backup ballasts are ideal for environments in which standby generators are used to support lighting fixture circuits. Applications include – but are not limited to – hospital and healthcare facilities; institutional and correctional facilities; labs; educational settings; manufacturing and other industrial locations; warehouses; distribution centers; offices; and public buildings.

6. GEN Series backup ballasts are described as providing “continuous illumination” and “uninterrupted interim lighting.” What do these terms mean?

These terms mean the backup ballasts ensure there is no interruption in lamp illumination regardless of the source powering the lamp – utility AC power, standby generator AC power or GEN Series backup ballasts.

7. Because GEN Series backup ballasts are installed in fixtures supported by a standby generator, how many power sources are supplying the lamps in the fixtures?

The answer is three (3).

1. Utility AC power – normal daily use; the GEN Series backup ballast will be in charging mode
2. GEN battery power – between the time utility AC power is lost and standby generator power is in place
3. Standby generator AC power – after utility power is lost; the GEN Series backup ballast will be in charging mode

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8. Where can I install GEN Series backup ballasts?

GEN Series backup ballasts can be installed inside the ballast channel, on top of the fixture or remote from the fixture. For details concerning lamp and ballast compatibility, please refer to the specification sheets for GEN1 and GEN3.

9. There are no wall switches controlling the fixtures with GEN Series backup ballasts. Can I use the circuit breaker to turn my lights on and off?

Yes, but only if the AC ballast and the GEN Series backup ballast are on different circuit breakers. Furthermore, the circuit breaker supplying the GEN Series backup ballast should be mechanically locked ON to prevent inadvertent battery discharge. Refer to the GEN Series installation instructions for more information.

10. What happens if both the AC ballast and the GEN Series backup ballast are on the same circuit breaker and I use the breaker to turn the lights on and off?

When the breaker is ON, the lights are on utility AC power and the GEN Series backup ballast is charging its internal battery. When the breaker is OFF, the GEN Series backup ballast operates the selected lamp or lamps from internal battery power until the battery is discharged. When utility AC power is restored, the GEN Series backup ballast returns to charging mode. Battery recharge time is 24 hours.

NOTE: Frequent deep discharge cycles (e.g., deep discharges on a daily basis) may shorten the life expectancy of GEN Series backup ballasts, which is normally seven to 10 years – the typical life expectancy of a high-temperature nickel-cadmium battery.

11. What is the warranty period for GEN Series backup ballasts?

GEN Series products are warranted for five years from the date of purchase. This warranty covers only properly installed Bodine backup ballasts used under normal conditions. Refer to the specification sheets for complete warranty information.

Any Questions? Call 800-223-5728, Fax 901-853-5009 or E-mail info@bodine.com