



## CA-LED-EM EXIT FIXTURE

### BATTERY BACK UP VERSION, ELECTRONIC FEATURES

**Electronic control components and batteries are completely contained within the exit housing. No components are located in mounting canopies.**

**The Nickel-Cadmium battery** is continuously monitored by the built-in diagnostics circuit which detects an open or shorted cell, causing the AC status light to pulse, indicating that the battery needs inspection or replacing.

**The constant current charger** is self-compensating, maintaining the battery at full capacity without the need for periodic exercising or equalization, and restores the battery to full charge following a full or partial discharge within the requirements of ANSI/UL 924.

**Circuit isolation and surge protection** is provided by use of a UL Class 2 isolation transformer, which is dual tapped for 120 or 277 volt AC operation.

**Constant light output** of the LED lamps during emergency battery operation is obtained by the use of a unique solid state boost converter which regulates the LED operating current independent of the battery voltage or capacity.

**Brownout protection** during periods of low line voltage is obtained by allowing the boost converter to operate for partial cycles which permits full brightness of the LED lamps without complete discharge of the battery. If the AC line voltage drops below 75% of normal, the circuit transfers to full emergency operation for the full rated battery duration.

**Low battery voltage** is monitored during battery discharge. When this falls to approximately 87% of nominal, the circuit cuts off with zero current bleed. This protects the battery from deep discharge or cell reversal.

**Input power requirements, single or double face:**

Color	Voltage	Watts	Power Factor
Red	120 or 277	4.5	.85
Green	120 or 277	3.5	.70

**An AC line latch** circuit prevents the battery from discharging before the initial energizing of the building power, thus protecting the battery during installation or construction.

**Nickel Cadmium Battery:** A high temperature maintenance free nickel cadmium battery with polypropylene separators is provided. Extended float life of 10 years is estimated in normal operating conditions. The battery is warranted by Western Lighting Inc. for a period of 5 years.

Temperature variations affect the performance and capacity of all batteries. Optimum performance is obtained when cell wall temperature is maintained within a range of 45 degrees F. to 95 degrees F. Occasional variations ranging from 0 to 150 degrees F. may occur, however battery discharge capacity is reduced. When operated within optimum temperatures, new installed batteries will exceed the U.L. minimum 90 minute operating requirement.

**LED operating circuits** are designed to furnish optimum light output and operating conditions for the LED lamps, providing a predicted life of 25 years.



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