



Project: _____
 Type: _____
 Model No: _____ Qty: _____
 Date: _____
 Notes: _____

AC/EM Drivers

LED

BAC40EM10

Combination AC/Emergency driver for LED strips

Class 2 output

40 Watts output power (AC)

10 Watts output power (Emergency)

Product order number: BAC40EM10 (metal case, separate battery)

Specifications *

UL Recognized

Factory Installation Only
(Indoor and Damp)

Universal Input Voltage

120 thru 277 VAC, 50/60 Hz

Output Voltage

22.5 - 54V

Temperature Rating

Electronic Case: Tc Life - 75°C
UL - 85°C

Battery: Tc (max): 60°C
Operating Ambient Temp Range:
0°C - 50°C (32°F to 122°F)

Warranty

5 Years (NOT pro-rata)

Features & Benefits:

- Combined AC and Emergency LED driver in one compact, low-profile case
- AC/EM driver compatibility is confirmed
- Separate battery for mounting flexibility
- Fewer wires to simplify installation
- Class 2 output - UL 1310 Certified, CSA 22.2 No 223-M91 compliant
- Emergency mode lumen output of up to 1300 lumens
- Compatible with a variety of LED strip manufacturers
- SimpleSet Programming for AC operation
- 0 - 10V dimming to 1%
- RoHS compliant

Emergency Operation

Illumination Time

90 Minutes Emergency

AC Input Current

60 mA Maximum (Charging Only)

AC Input Power Rating

5.0 W Maximum (Charging Only)

Output Power

10.0 W Maximum (Emergency)

Test Switch Charging Indicator Light
Illuminated Test Switch

Battery

High-Temp, Maintenance-Free
Nickel-Cadmium Battery
7- to 10-Year Life Expectancy

Recharge Time

24 Hours

Dimensions

Case - 14.1" x 1.18" x 1.0" (mounting center -13.78")
 Battery - 1" Diameter x 14.8"L (mounting center - 14.5")
 (see back page for additional drawings)

AC Operation

Maximum Output Power

40W

Output Current (Programmable)

.1 - 1.1A

AC Input Current

0.45A @ 120V
0.18A @ 277V

Maximum Input Power

51W

THD @ Maximum Load

<10%

Power Factor @ Max Load

>0.95

Surge Protection (Combi-Wave, KV)

1.5KV

Dimming

0-10V Analog, Class 1 or
Class 2 wiring

Dimming Range

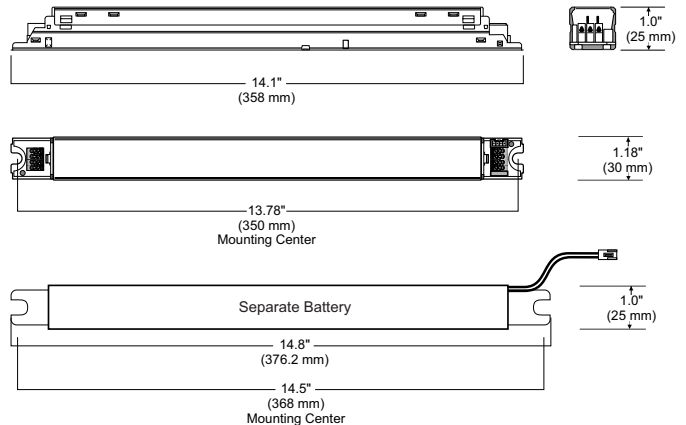
(with specified dimmers)
1% ~ 100% (for output current
range 0.25 - 1.1A)

Minimum Output Current

0.0025A

Dimming Source Current

150 µA



* See product data sheet for more details



BAC40EM10

Combination AC and Emergency LED Driver

Application

The BAC40EM10 is a combination 40W dimming LED driver and a 10W Emergency LED Driver in one low profile case. The BAC40EM10 is supplied with a separate high-temperature nickel-cadmium battery, with one simple connection point. The BAC40EM10 can deliver up to 10 watts to an LED load (measured at nominal battery voltage) for 90 minutes in the emergency mode. The BAC40EM10 is suitable for indoor and damp locations. The BAC40EM10 is universal input (120-277 V), and dims to 1%. The AC operation of the BAC40EM10 must be programmed with Philips SimpleSet technology.

Operation

During normal operation, the BAC40EM10 operates as a standard SimpleSet programmable 40W AC driver, with 0-10VDC dimming compatibility and a minimum dim level of 1%. When AC power fails, the BAC40EM10 immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode.

Installation

The BAC40EM10 does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the AC/EM driver. Installation is not recommended with fixtures where the ambient temperature may fall below 0° C. The product is suitable for installation in sealed and gasketed fixtures.

Emergency Illumination

In the Emergency mode, the BAC40EM10 operates an LED load of up to 10 W at nominal battery voltage for a minimum of 90 minutes.

Specification

Normal and Emergency lighting shall be provided by using an LED fixture equipped with a Philips Bodine BAC40EM10 combination AC and Emergency LED Driver, with universal input (120-277 V), SimpleSet, and 0-10VDC dimming to 1%. The BAC40EM10 shall include all AC/EM Driver functions in one case, and a

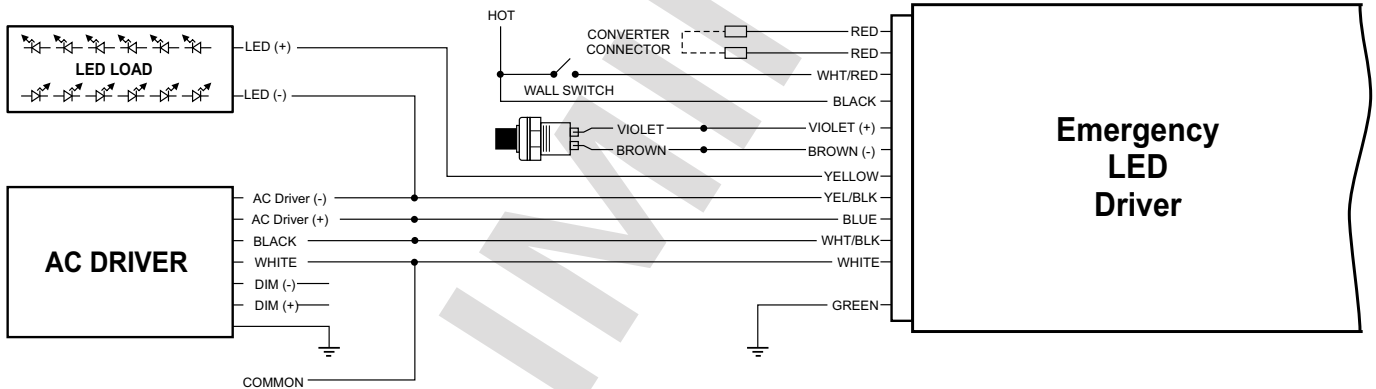
separate high-temperature, maintenance-free nickel-cadmium battery with an easy connect wiring harness. An illuminated test switch (ITS) to monitor charger and battery and installation hardware shall be provided. The combination AC and Emergency driver shall be capable of delivering up to 40W AC under normal operation and 10 watts to an LED load for a minimum of 90 minutes in the event of AC power loss. The BAC40EM10 is suitable for indoor and damp locations. The BAC40EM10 shall have a maximum of 5.0 watts of battery input power and a 25.2 Watt-hour battery capacity and shall comply with emergency standards set forth by the current NEC. This BAC40EM10 complies with Part 15 of the FCC Rules. The BAC40EM10 shall be UL Recognized for factory installation only.

Warranty

The BAC40EM10 is warranted for five (5) full years from date of manufacture. See web site for details.

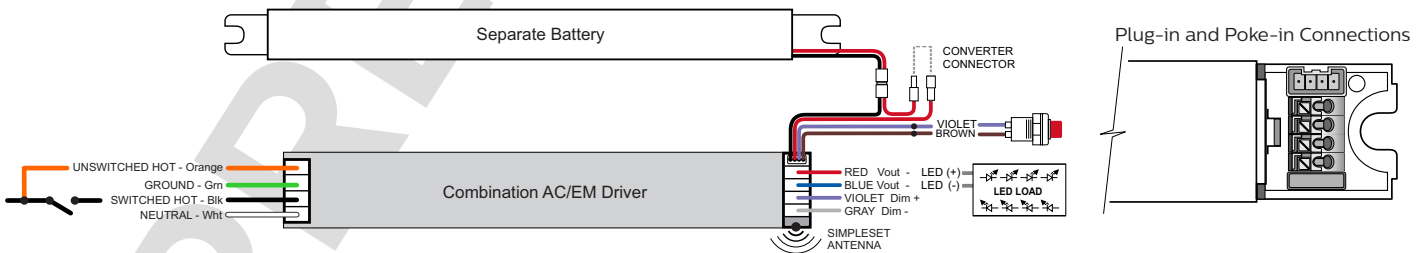
Traditional solution

with wire splicing and wire nuts



New and better solution

with fewer wires for simpler installation using poke-in connections



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