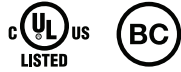




IHB-EB20 | Emergency Driver for IHB



Project Information	
Job Name	
Catalog Number	IHB-EB20
Approved by	

Specifications

UL Listed

Listed to UL924 and tested to CSA 22.2, No. 141
For Field or Factory Installation (Indoor and Damp)

Illumination Time

90 Minutes

Full Warranty

5 Years (NOT pro-rata)

Universal Input Voltage

120-277 VAC, 50/60 Hz

Output Voltage

54-200 VDC

Output Power

20W

Test Switch/Charging Indicator Light

IP65 rated for ingress protection to dust and water jets.
Test Switch Assembly is UL2043 Plenum-Rated.

Battery

High-Temperature, Maintenance-Free
LFP Battery Technology

Recharge Time

24 Hours

Temperature Rating

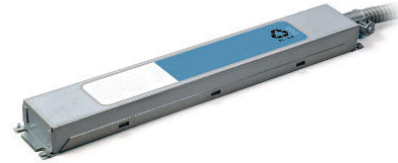
Ambient: 0°C to +55°C (32°F to 131°F)
Case: Tc (Max): 65°C

Dimensions

15.34" x 2.25" x 1.16" (369 mm x 58mm x 30 mm)
Mounting Center: 15.0" (356 mm)

Weight

2.67 lbs



Benefits:

- UL Listed for field or factory installation.
- When paired with a compatible LED luminaire, provides NFPA 101 compliant emergency lighting.
- Intelligent output initially provides rated power regardless of the LED array voltage.
- Meets CEC Title 20 (California Energy Commission) efficiency standards.
- Smart Charger Technology with low energy consumption helps meet Title 24 building requirements.
- Self-Test automatically performs the code required testing per the latest standard (UL 924, 10th edition, May 5th, 2022)
- Universal Input reduces ordering and stocking complexity and reduces field wiring errors.
- Test switch is IP65 rated for protection to dust and water ingress.

Lithium Battery Shipping Regulations

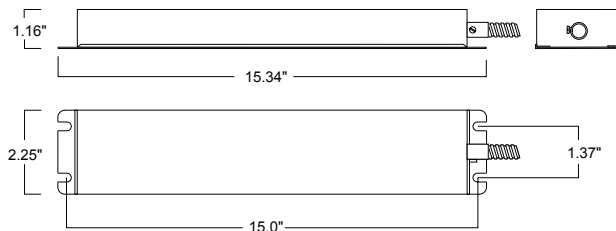
To comply with IATA provisions for air transporting lithium batteries, and for a step by step guidance through the shipping process, please visit <http://www.iata.org/publications/store/Pages/lithium-battery-shipping-guidelines.aspx>

To view a Classification Flowchart for package marking requirements, please visit <http://www.iata.org/whatwedo/cargo/dgr/Pages/lithium-batteries.aspx>. Scroll to the "Guidance Material" section and click on the provided "Guidance Document" PDF link. The Classification Flowchart will be found on page 5.

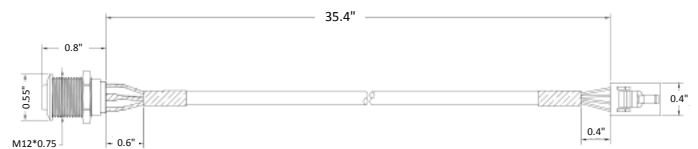
The IHB-EB20 battery cell capacity is less than 20Wh, and the battery pack capacity is less than 100 Wh.

Dimensions

15.34" x 2.25" x 1.16"
Mounting center - 15.0"



Plenum-Rated Test Switch Assembly



Note: Required hole is 0.5 inches (12.5mm).



Application

The IHB-EB20 emergency LED drivers are UL Listed for field or factory installations in the US and Canada and allows the same LED luminaire to be used for normal and emergency operation. These emergency LED drivers works in conjunction with an AC LED driver that has an output current not to exceed five (5) amps. These products consist of a battery and electronic circuitry in one compact galvanized steel case. These products can be used with an LED lighting load up to 200 Vdc, delivering an initial minimum power of 20 watts for 90 minutes. If used in an emergency-only fixture, no AC driver is necessary. These products are suitable for damp locations and for sealed and gasketed fixtures. These products are not suitable for air handling heated air outlets or wet or hazardous locations. For more information about specific LED and AC driver compatibility, please call the factory.

Operation

When AC power fails, the IHB-EB immediately switches to the emergency mode, operating the LED load for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode. While charging, the product will perform the required 30-second test once a month and a 90-minute test once per year. During this test, the product will monitor its operation, and alert building occupants to a possible issue through flashing of the charge indicator LED. The product shall be provided with self-test and ABCConnect functionality.

Self-Test

These emergency drivers include self-test

functionality. The self testing feature automatically performs the required 30-second test once every month and the required 90-minute, full discharge, once per year. The product monitors the performance of the battery, the charging system, the LED load, and the temperature of the installation. Test results are reported to maintenance personnel via flashing of the charge indicator light. A solidly lit charging indicator light (no flashing) means that the unit detected no issues during the self-test routine. If the unit has encountered a problem after installation and during the selftest, then it will flash an error code using the indicator light. The number of flashes indicates an issue with specific functionality of the unit. Full details on the error codes are found in the unit installation instructions. The user can also manually initiate a 30-second self-test at any time by simply pressing and holding the test switch for 5 seconds. At the conclusion of the self-test, the unit will return to the normal mode and indicate any errors, if detected.

Installation

The IHB-EB20 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 emergency driver. The emergency driver must be fed from the same branch circuit as the AC driver. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C. These products are suitable for installation in sealed and gasketed fixtures.

Emergency Illumination

The IHB-EB20 operates an LED load, delivering an initial minimum 20 watts of power for a minimum of 90 minutes..

Specification

Emergency lighting shall be provided by using a LED fixture equipped with a Atlas IHB-EB20 emergency driver. This emergency driver shall consist of a high temperature, maintenance free LFP battery separate from, or included with, the electronic circuitry, which is contained in a metal chassis. Installation hardware, an IP65 test switch, and a plenum rated test switch cable assembly shall also be provided. The emergency driver shall be capable of operating an LED load for a minimum of 90 minutes and of delivering an initial minimum output power of 20 watts, following a battery charging period of at least 24 hours. It is suitable for damp locations and sealed and gasketed fixtures. The unit contains a smart charger system that initially charges the battery within the rated time then reduces power consumption to a lower standby power mode. The unit shall automatically perform the code required monthly and annual testing (self-testing) and employ technology to automatically enable charging, sensing, and emergency operation of the inverter by means of detecting when AC power is first applied (ABCConnect). The unit shall comply with emergency standards set forth by the current NEC, Part 15 of the FCC Rules, and also meets CEC Title 20 (California Energy Commission) efficiency standards. The emergency driver shall be UL Listed for field or factory installation and shall be suitable for temperature environments ranging from 0°C to +55°C.

Warranty

Model IHB-EB20 is warranted for five (5) full years from date of manufacture. Please see detailed warranty information on our web site.

Lumen Output Guide

These products are suitable for installation with a wide variety of LED light engines. To estimate the egress lighting illumination levels achieved by a system incorporating these products, follow the steps below.

1. Find the efficacy of the LED load which will be given as lumens/watt (lm/w). This data can be found by direct measurement, accessing of 3rd party test data, or from the luminaire supplier directly. Typically, the efficacy data found will be on the whole system, which includes losses due to driver efficiency and LED array temperatures. Actual lumens achieved may be higher. However, using these numbers in the following calculations will provide worst-case lumen estimations.
2. Determine the initial lumens delivered in the emergency mode by multiplying the LED load efficacy by the amount of power delivered by the emergency driver when running in the emergency mode.

LUMENS IN THE EMERGENCY MODE = LUMENS PER WATT OF FIXTURE x OUTPUT POWER OF EMERGENCY LED DRIVER

3. Using this result and industry standard lighting design tools, the estimated path of egress illumination levels can be calculated.

Example Efficacy (lumens per watt)	Lumen Output
130	2,600
150	3,000