

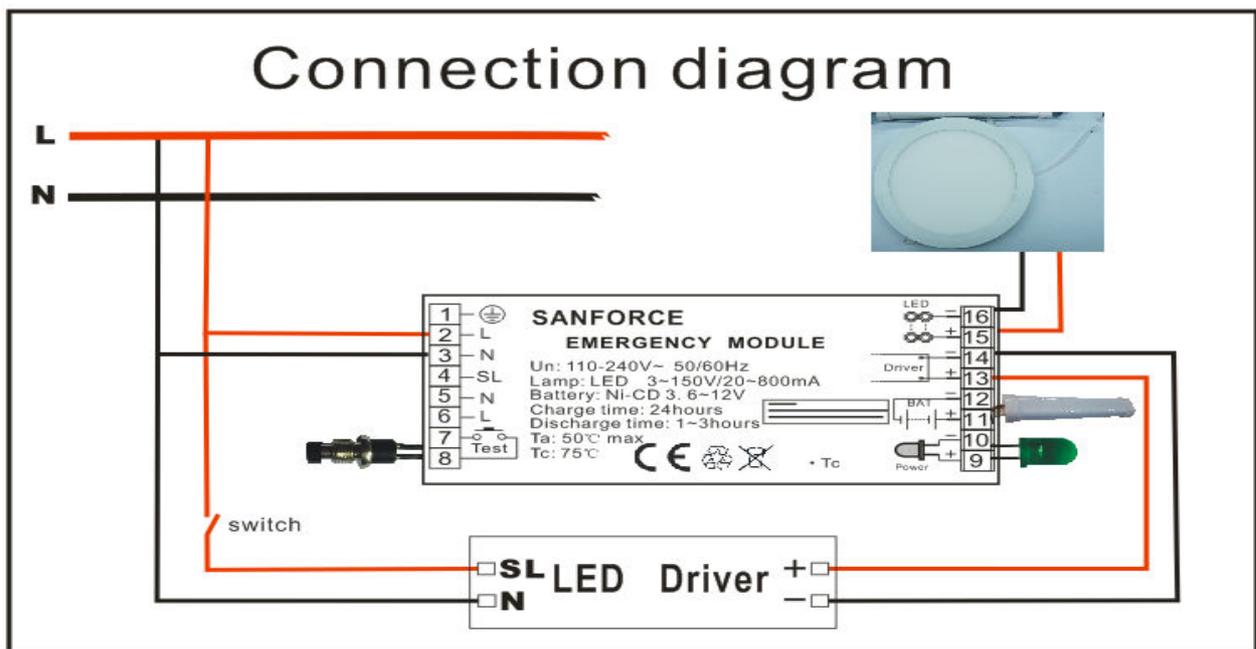
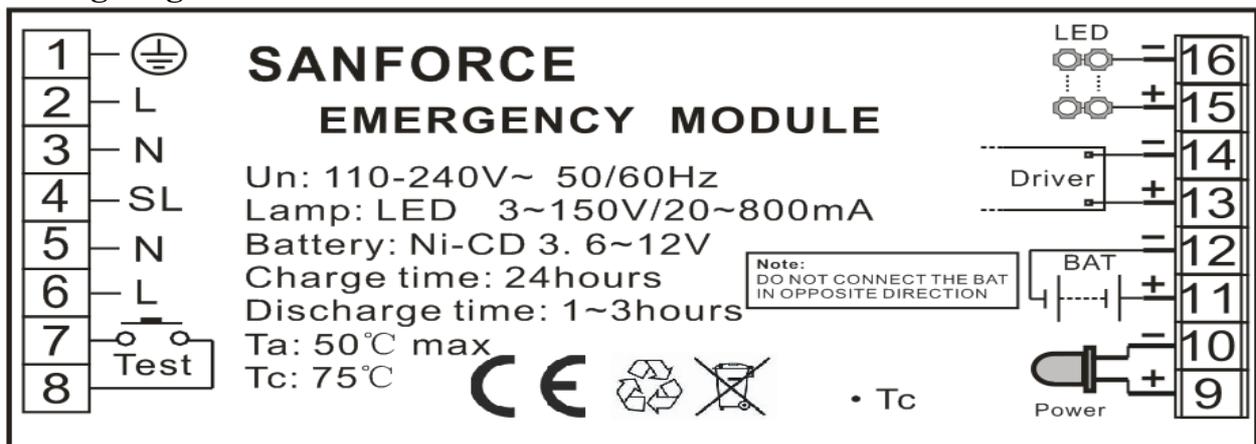
Instruction Manual of Sanforce LED Emergency Module

Description:

This emergency lighting module is designed to convert a wide range of LED types, ideal choice for converting most standard LED luminaires and arrays containing from 2 to 55V LEDs in series.

This unit is designed to assort with existing LED driver and panel layout. The control circuit of inverter monitors the mains supply, Inverter allows the charger to trickle charge the battery pack or stand by if light works well. In the case of the emergency, Inverter automatically activate battery backup system to illuminate the lighting in less than 0.1 second.

Wiring diagram



Specifications of Drawing, Schedule and Symbols:

L = “live”wire

N= “Neutral” wire sometimes called “nil” or “0”

switch = a mechanical device that connects or interrupts a “life”wire to the driver.

LED Driver is an electronic device that drives the LED lighting fixture with a constant current.

SL is switched Life wire connection on the LED driver

N is the Neutral connection on the LED driver

+ on the LED driver is the positive connection from driver to the LED fixture

- on the LED driver is the negative connection from driver to the LED fixture

Installation Instruction:

Connection 1 is used for safety ground (earth)

Connection 2 is used for connecting to the life wire of the buildings electricity network before the switch, sensing if the life wire is “alive”

Connection 3 is used for connecting the neutral of the buildings electricity network

Connection 4, 5 and 6 are not used. Or connect “L” of building electricity to connection 4(SL), and connect Driver “SL”,”L”with connection 5 and 6.

Connection 7 and 8 have a test switch (that is connected in series between the life connection (2) and the electronic circuit of the Sanforce module).

Connection 9 (positive +) and 10 (negative -) for connecting a control LED meaning Life electricity is connected and “alive”.

Connection 11 (positive +) and 12 (negative -) are used to connect the battery for emergency operation.

Connection 13 (positive +) and 14 (negative -) are used to connect the LED system driver.

Connection 15 (positive +) and 16 (negative -) are used to connect the LED fixture to the current driver of the Sanforce module.

Operation

The module is capable of testing the performance of the emergency luminaire in accordance with IEC EN61347-2-7 & EN61347-2-13.

Commissioning Test

Connection of the mains supply will initiate commissioning where the battery will remain on charge for an uninterrupted 24 hours. An interruption of the mains supply will impact the accuracy of emergency running duration.

Functional test

This test can be initiated manually by pressing the Testing Button.

Duration Test

A full rated duration test is carried out after charge the battery for 24 hours.

Note that start times of the tests are set based on the battery capacity.

Charge LED Indicator

A range of LEDs are available in red or green, diffused or clear high intensity, with or without a fitted rubber bezel or plastic clip and with various lead lengths.

Check the LED charge indicator is on with the mains present and battery is being charged while inverter is working well.

Note the production date of the battery.

Charge the battery completely when it is out of operation over 3 month.

Check the emergency module functionality for 3 month intervals.

Replace the battery every 3 years interval

Important

It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Sanforce accepts no responsibility for injury, damage or loss, which may arise as a result of incorrect installation, operation or maintenance. the conversion requires an unswitched supply for charging the battery and a switched supply for a maintained conversion.

Ensure that the finished converted luminaire operates within the module and battery temperature ratings.

Ensure that the original luminaire components are still operating within their temperature ratings.

ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE.

High voltage could be present at the output terminals if the battery is not isolated.

Charge the battery more than 24 hours before using.



- Avoid running the LED mains driver and Emergency pack without the load connected. Failure to do so may result in damage to the LED array.
- The polarity of the battery must be observed at all times. **Permanent damage to the module will occur if they are reversed.**