STREAMER

LED EMERGENCY DRIVER

YH33T

Type	YH33T
Notes	Released version by JL
Catalog Number	Rev.02_2024-06

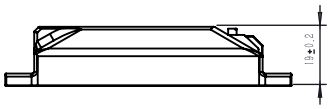
Product description

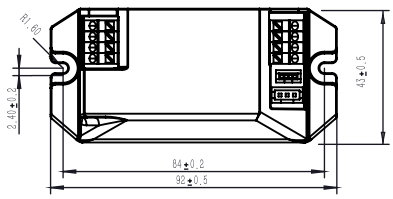
- Self-test function.
- LED Emergency converter that can transfer standard LED fitting into emergency LED fitting.
- Used with LiFePO4 battery
- Suits for LED fitting with external LED driver
- Accessary test switch and charge indicator

Applications

- Use in damp and dry environment.
- For use on a wide range of LED fittings to convert them from standard to emergency fitting.
- LED fitting would be maintained emergency LED fitting if standard (main powered) driver, emergency lighting kit and battery are all retained in the circuit.
  LED fitting would be non-maintained emergency LED fitting if only emergency lighting kit. and battery are retained in the circuit.
- Additional Relay that can control standard LED driver.
- Deep discharge protection.
- Connector between emergency kit and battery has the function of polarity reversal protection.
- Ambient range ta 0....50℃
- IP20 protection, relies on end-product enclosure for protection against accidental contact live parts.
- Not intended for use in luminaries for high-risk task area lighting.

Dimensions





Ordering data

Model No.	E.M Power	Duration	Battery Pack
YH33T-01WL	DC20-42V 1W constant power	3 Hours	LiFePO4 3.2V 1.6Ah 5.12Wh
YH33T-02WL	DC20-42V 2W constant power	3 Hours	LiFePO4 3.2V 3.2Ah 10.24Wh

Technical data

Item	YH33T-01WL	YH33T-02WL
Rated input voltage	220-240VAC,50/60Hz	220-240VAC,50/60Hz
Input current	20mA	30mA
Iutput power	3W	3W
Power factor	>0.5	>0.5
Terminal L-in / L-out (LED driver input constant)	AC 3A Max	AC 3A Max
Output voltage range	DC20...42V, 45V max	DC20...42V, 45V max
Max output current	50mA	100mA
Output power (constant)	1W	2W
Battery cells voltage/capacity	LiFePO4 3.2V1.600mAh,5.12Wh	LiFePO4 3.2V3200mAh,10. 24Wh
Recharge current	120mA max	200mA max
Recharge time	24hours	24hours
Discharge time	180 minutes	180 minutes
AC LED driver output(output +/-)	DC50V 1A Max	DC50V 1A Max
Lumen factor	140lm/W	140lm/W
Max. casing temperature tc	70℃	70℃

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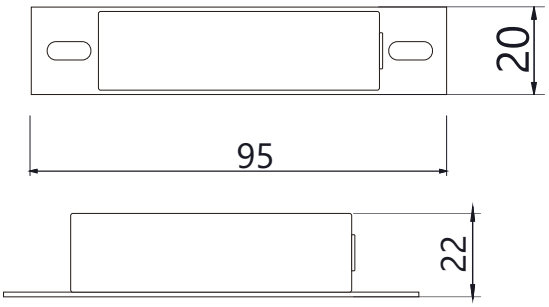
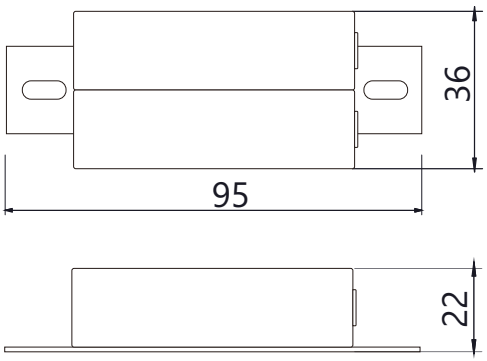
Battery pack size

YHBL-2-1.6



YHBL-2-3.2



Battery

Product type	Battery type	Battery model	Battery pack (L×W×H)
YH33T-01WL	LiFePO4 3.2V 1.6Ah	YHBL-1-1.6	95x20x22mm 3.7x0.8x0.9"
YH33T-02WL	LiFePO4 3.2V 3. 2Ah	YHBL-1-3. 2	95x36x22mm 3.7x1.4x0.9"

Battery Declaration

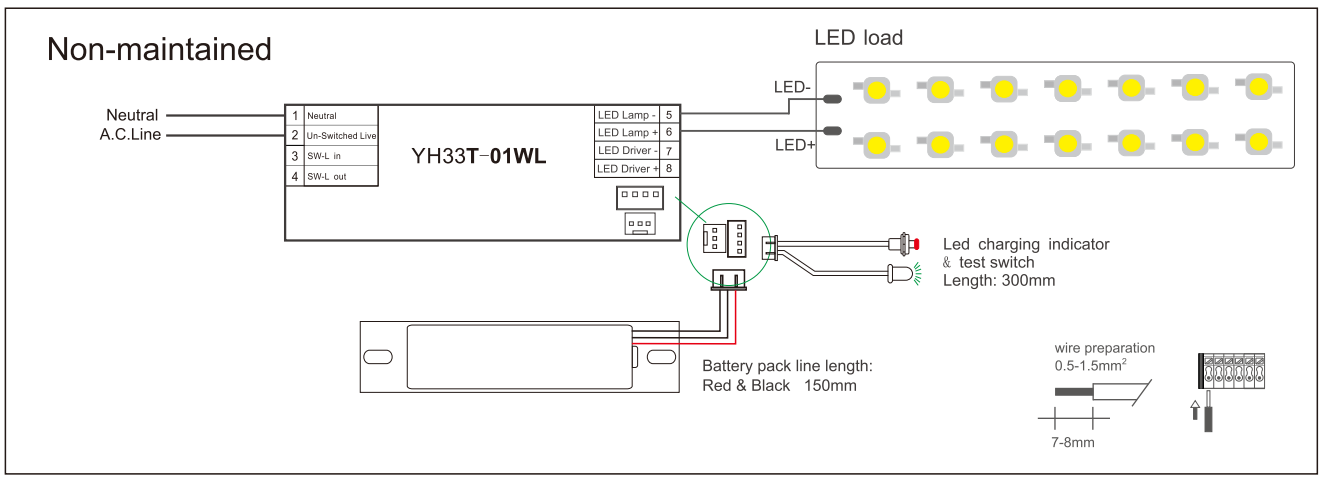
- Batteries' lifetime is 4 years.If you are using or stocking the batteries for 4 years, please replace the batteries.
- The batteries can not be charged for 5000 hours consistently. It should be discharged for once at least, during the 5000 hours charging time.

Technical data(battery cells)

Battery cell model	IFR18650-1600
Battery voltage per cell	3.2V
Battery capacity per cell	1600mAh
Battery case temperature	0....50°
Max short term temperature	70°

Install

- Installed on the back of the panel requires safety and fixation.
- Only professional people (e.g. electrical Engineer) can wire it.
- Please confirm that the electrical parameters of this product match with the luminaire.
- Please check the wiring method carefully before installation.
- Please power o ffmains supply before installation, and confirm the wiring is correct, then connect the battery, the last step is to turn on mains supply.



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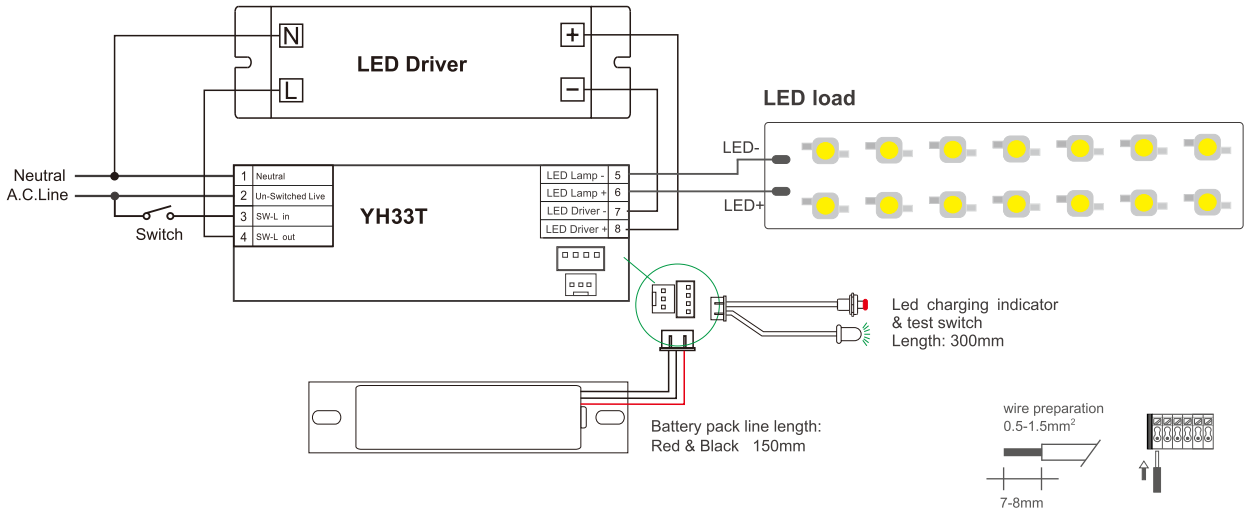
Maintained



Self-test function

Initial Test

Connect led load, emergency module, battery and led driver, then connect mains supply, this emergency conversion module will automatically start to do a initial test, to check led load, battery, led driver and emergency module itself working well or not. If not, led indicator would be red flash. If everything goes well, it then goes into charge mode.

Functional Test

Functional tests are carried out for 10 seconds automatically every 30 calendar days.

Duration test

Emergency conversion module will automatically make a full duration test every 180 calendar days to check capacity of battery.

Note

If mains supply is off during self-test period, emergency conversion module would terminate self-test immediately and go into emergency mode.

Timer reset functionality

The timer for function and duration test can be set to a particular time of the day by cycling the un-switched line supply 3 times within 1 minute.

Rest mode

Rest mode can be initiated during emergency mode by pressing test switch longer than 3 seconds.

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Explanation of LED indicator

	Color	LED indication	Status	Comment
	Green	Slow flashing green (3 sec on, 1 sec off)	Charging Mode	AC mode
	Green	Permanent green	Fully Charged	AC mode
	Green	Fast flashing green (0.1 sec on, 0.1 sec off)	Function test underway	
	Green	Slow flashing green (1 sec on, 1 sec off)	Duration test underway	
	Red	Permanent red	Load failure	Open circuit / Short circuit / LED failure
	Red	Slow flashing red (1 sec on, 1 sec off)	Battery failure	Battery failed the duration test or function test / No battery
		Green and red off	DC mode	Battery operation (emergency mode)

Test switch
The test button is a open switch , if you press it, it connects, and then you release it, it cuts off automatically.
When you are doing the daily maintenance , if you press the test button, the emergency driver goes into emergency mode, if you release the button, the emergency driver will go back to normal mode.

LED indicator
It can reflect charging or not charging. LED charging monitor will be light if battery is connected while it will be off without battery connecting.

Attention

- To guarantee the rated discharge time, please charge the battery for more than 12 hours.
  Please ensure that the voltage is 80% higher than the rated voltage, less than 110% of the highest rated voltage.
- Charge and discharge cycle needs to be done at least once every three months, and the continuous charging time can not exceed 3 months.

Warranty

- Warranty 3 years
- Except for the following circumstances:
  1) Improper installation or operation.
  2) Misuse.
  3) Abuse.
  4) Unauthorized or improper repair alteration.
  5) Accident or negligence in use, storage, transportation.
  6) Any natural acts.