

# **SPECIFICATION**

LED Emergency Driver		
KE026 HB Series		
April 22, 2025		
JSTOMER APPROVED		



# Shenzhen Merrytek Technology Co.,Ltd.

Туре	Model	Updating	Date
A0	KE026 HB Series	The First Version	2024-05-06
A1	KE026 HB Series	Modify product features	2024-07-25
A2	KE026 HB Series	Modified wiring diagram	2024-09-07
A3	KE026 HB Series	Added test mode switching requirement	2025-01-06
A4	KE026 HB Series	Fix bug	2025-04-22



# Specification for LED Emergency Driver KE026 HB Series C.W.

### 1. Features



- Constant power output LED emergency power supply with a wide output voltage range.
- Input relay switching.
- High safety, high performance, long life LifePO4 battery.
- With battery management.
- Manual test&automatic test selection.

### 2. Parameters

	KE026	02AM180HB	02AM180HB1	03AM180HB	03AM180HB1
	Rated input voltage	220-240Vac 50Hz/60Hz			
	Rated input current	0.06A Max. @230Vac			
Charge Part	Input inrush current	10A(Twidth=100us 50% Ipeak )@230Vac (Cold start at full load)			
	Power factor	≥0.5@230Vac			
	Input power	<4W@230Vac			
	Battery charging current	200mA Max.			
	Battery charging time	24 hours Max.			
	Operating mode	Emergency mode			
	Load type	LED			
	Emergency power	2W 2.5W		5W	
Emergency Part	Emergency time	3 hours			
	Load output current	100-30mA	40-11mA	125-41mA	50-13mA
	Load output voltage	20-60Vdc	50-180Vdc	20-60Vdc	50-180Vdc
Battery	LifePO₄ (The battery capacity meets the emergency time at 25°C)	6.4V 1800mAh			
	Battery warranty	Warranty 5 year @5~60℃.			
Exception	Surge current	8A			
Driver	Input current	3A Max.			
Requirements	Output current	2A Max.			
LED Indication	Charging	Green light			
(Manual test)	Fault	Green light off			
Emergency	Manual test	Default			
Function Test	Auto test	Settable			



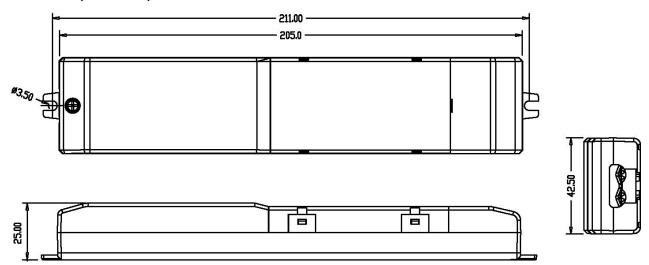
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	Fault / test / Status	Reason	Charge Indicator Status	
	Battery fully charged and operational	Standard daily use	solid green	
		Initial Charge/Battery Top		
	Battery Charging	Up	Flashing green 1 sec on 1 sec off	
	Auto Test 3 Hours (every 12	·		
	months)	Periodic self test	Flashing Green 3 sec on 1 sec off	
Auto Testing	Auto Test 5 Min (every 30 days)	Periodic self test		
			Flashing Green 3 sec on 3 sec off	
	Duration test fault	Automatic test failed		
			Flashing Red 0.5 sec on 0.5 sec off	
	LED fault	Not plugged in or		
		damaged/faulty	Flashing Red 2 sec on – 2 sec off	
	Battery Disconnected/Faulty	Not plugged in or damaged/faulty	solid red	
	over-charge/deep discharge protection	Yes		
Abnormal	Output over-voltage protection	Yes Yes		
protection	Output overload protection			
	Output short circuit protection	Yes		
Onevetina	Operating temperature/humidity	0℃+50℃humidity:20%-75%(without condensation)		
Operating Environment	Storage temperature/humidity	-5℃-35℃		
LIMIOIIIICIL	Case Max. Temp(Tc)	75℃		
	Withstand voltage	3000Vac 5mA 60s (Input "L N" – output "SEC+ SEC-)		
0.5.6.	Safety standard	EN61347-1, 60598-2-22, 61	347-2-7, 62034	
Safety & EMC	EMC standard	EN55015, EN61000-3-2, EN	N61000-3-3	
& EIVIC	Battery standard	UN38.3		
	Environmental protection requirements	Compliant to RoHS		
	Certification	CE		
	In/output(terminal/wiring)specification	Press terminal, wire diameter	er: 0.75-1.5mm <sup>2</sup>	
	IP rating	IP20		
	Type of protection	Class 2		
Others	Installation type	Built-in installation		
Ouicis	Installation dimension	211*42.5*25mm		
	Packaging requirement	White box+Instruction manual+clapboard+outer carton(K=A)		
	Weight	248±5g		
	Lifespan	5 Year @Ta		

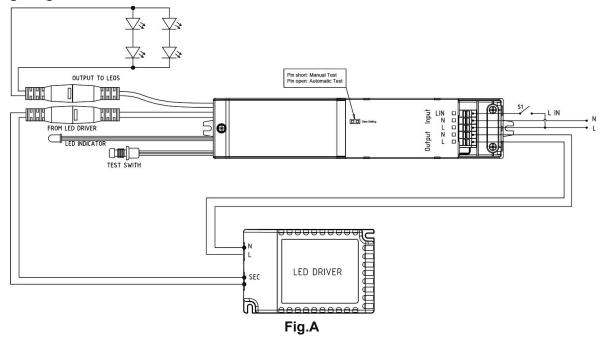
All parameters are tested on the input voltage 230Vac,environment temperature 25°C,unless otherwise specified.



# 3. Dimension (Unit: mm)



# 4. Wiring Diagram



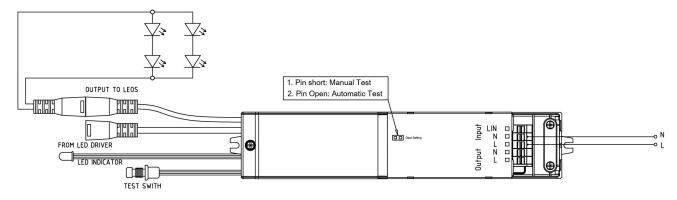


Fig.B



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#### 5. Manual and Automatic Test Set

-: Short : Open

Test Mode Set	J1
Automatic Test	
Manual Test	-

# 6. Manual Test & Operation Instructions

- 1).Before installation, set Pin short: Manual Test.
- 2). Connect the wire according to wiring diagram.
- 3).L,N power on, Switch on S1. then the load lamp turns on, The emergency driver indicator light will turns green, emergency power supply normal charging. Turn off Switch S1, the load lamp turns off.
- 4). Emergency Simulation: Switch on, the load lamp turns on, press the switch(TEST SWITCH), then switch to emergency mode, the indicator light of emergency driver will be extinguished. Release the switch(TEST SWITCH), then lamp is powered by led driver, the indicator light will turn on.

#### 7. Automatic Test & Operation Instructions

- 1). Before installation, set Pin open: Automatic Test.
- 2). Connect the wire according to wiring diagram. Remove the test switch on the LED Emergency Driver.
- 3).L,N power on, start the clock and periodic self test. To replace the battery, turn off the power supply, Re-time.

#### 8. Battery Application Notice

- 1). The battery should be recharged and discharged semiannually in normal use conditions.
- 2).Do not connect to the circuit when the battery is not use to prevent over-discharge of the battery due to self-consumption of the circuit board.
- 3).Please keep the battery from the heat source when installing and using, and only be allowed to use in certain working temperature range.
- 4). The battery should be stored in a cool and dry environment.
- 5). After long time storage, the battery is cycled every 12 months as required.
- 6).AC power is off, and the clock lasts for 7 days, Power on and re-time. To replace the battery, turn off the power supply, Re-time.