SPECIFICATION

Product Name: **LED Emergency Driver**

Model No.: **KE002 Built-in series new edition**

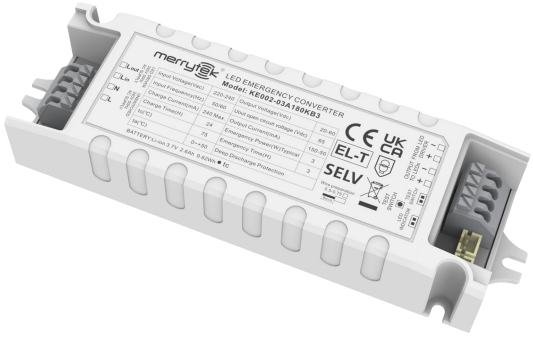
Issue Date: **February 12, 2025**

CUSTOMER APPROVED

Type	Model	Updating	Date
A0	KE002 Built-in series LED Emergency Driver new edition	The First Version	2024-05-18
A1	KE002 Built-in series LED Emergency Driver new edition	Correct the error	2025-02-12

Specification for LED Emergency Driver KE002 Built-in series

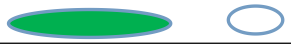
1. Features



- Constant power output LED emergency power supply with a wide output voltage range;
- Input relay switching.
- With multiple protection functions: battery overcharge, over discharge protection, output short circuit protection.protection.

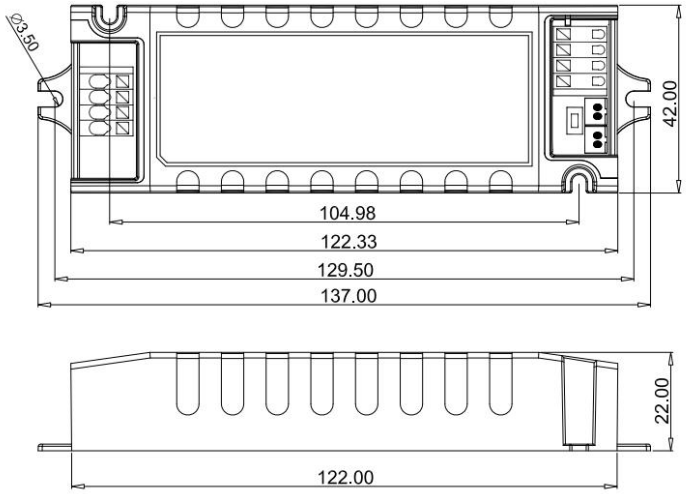
2. Parameters

Charge Part	KE002	01M / 01A180KB1	02M / 02A180KB	03M / 03A180KB3
	Rated input voltage	220-240Vac 50Hz/60Hz		
	Rated input current	0.06A Max. @230Vac		
	Input inrush current	30A(twidth=100uS 50% Ipeak)@230Vac（Cold start at full load)		
	Power factor	≥0.5@230Vac		
	Input power	<4W		
	Battery charging current (Max)	240mA		
	Battery charging time	24 hours Max.		
Emergency Part	Operating mode	Emergency mode		
	Load type	LED		
	Emergency power	1W	2W	3W
	Emergency time	3hours		
	Load output current	50-15mA	100-30mA	150-50mA
	Load output voltage	20-60VDC		
Battery	Li-ion (The battery capacity meets the emergency time at 25℃)	3.7V 2000mAh	3.7V 2600mAh	
	Battery warranty	Warranty 3 year, @25℃.		
Exception Driver Requirements	Surge current	8A		
	Input current	3A Max.		
	Output current	2A		
LED Indication	Charging	Green light		
	Fault	Green light off		
Emergency Function Test	Manual test	Yes		
	Auto test	KE002-01A180KB1 / KE002-02A180KB / KE002-03A180KB3		

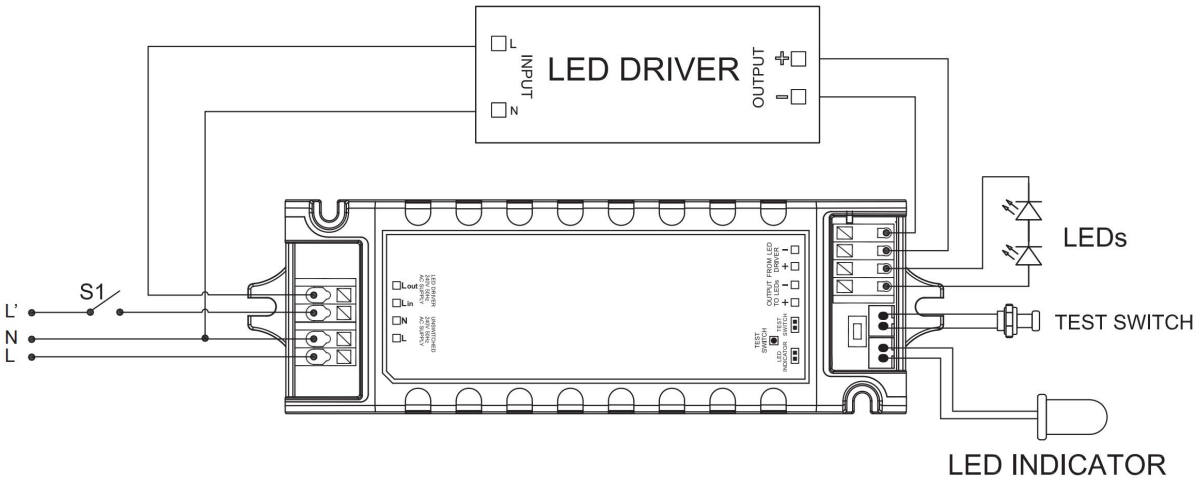
Auto Testing	Fault / test / Status	Reason	Charge Indicator Status
	Battery fully charged and operational	Standard daily use	 solid green
	Battery Charging	Initial Charge/Battery Top Up	 Flashing green 1 sec on 1 sec off
	Auto Test 3 Hours (every 12 months)	Periodic self test	 Flashing Green 3 sec on 1 sec off
	Auto Test 5 min (every 30 days)	Periodic self test	 Flashing Green 3 sec on 3 sec off
	Duration test fault	Failed the 3 hour annual test	 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
Emergency protection	Battery over-charge/deep discharge protection	Yes	
	Output over-voltage protection	Yes	
	Output overload protection	Yes	
	Output short circuit protection	Yes	
Operating Environment	Operating temperature/humidity	0℃…+50℃humidity:20%-75%(without condensation)	
	Storage temperature/humidity	-5℃-35℃	
	Case Max. Temp(Tc)	75℃	
Safety & EMC	Withstand voltage	3000Vac 5mA 60s (Input “L N” – output “SEC+ SEC-)	
	Safety standard	EN61347-1, EN61347-2-7	
	EMC standard	EN55015, EN61000-3-2, EN61000-3-3	
	Battery standard	UN38.3	
	Environmental protection requirements	Compliant to RoHS	
	Certification	CE	
Others	Input/output(terminal/wiring) specification	Press terminal, wire diameter：0.5-0.75mm^2	
	IP rating	IP20	
	Type of protection	Class 2	
	Installation type	Built-in installation	
	Installation dimension	137*42*22mm	
	Packaging requirement	White box+Instruction manual+clapboard+outer carton(K=A)	
	Weight :Emergency Power Supply	110g	

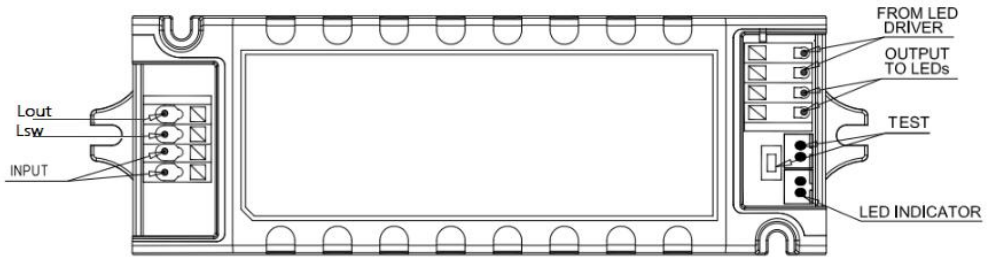
Others	Lifespan	5 Year @Ta (Battery not included)
Notes： All parameters are tested on the input voltage 230Vac,environment temperature 25℃,unless otherwise specified.		

3. Dimension (Unit：mm)

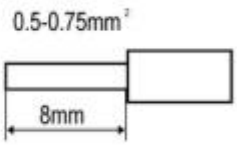


4. Wiring Diagram





5. Wire Preparation



1) Solid or Stranded wire type：0.5-0.75mm^2

2) To access or remove the wires from the terminals, use a screwdriver to push the buttons down

6. Manual Test & Operation Instructions

1).Connect the wire according to wiring diagram.

2).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.

3).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).Connect the wire according to wiring diagram.

2).AC power is off, and the clock lasts for 15 days, Power on and re-time.

3).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.