



KT-EMRG-LED-5C-500-K1

CONSTANT POWER LED EMERGENCY BACK-UP DRIVER KIT

DESCRIPTION

LED Emergency Back-Up Driver Kit | 5W Output | 500 Lumens
120–277V Input | CEC T20 Compliant



DRIVER TYPE: Constant Power LED Emergency Back-Up Driver Kit
MAX. OUTPUT POWER: 5W, 500 lumens
INPUT VOLTAGE: 120–277Vac \pm 10%
NUMBER OF OUTPUTS: One
SAFETY STANDARD: UL 924, Complies with CEC Title 20 Efficiency Standards
LOCATION: IP20 design for dry and damp location
WARRANTY: 5 Years

ELECTRICAL SPECIFICATIONS

Input voltage range	120–277Vac \pm 10%
Frequency	50/60Hz
Power factor	>0.5 under 120–277Vac input
Inrush current	7A @ 230V
Max input current	50mA @ 120V, 35mA @ 240V, and 30mA @ 277V
THD	<200% under 120–277Vac input
Output voltage	20–60Vdc Class 2 compliant. <i>Remarks:</i> the output power is valid for output voltage \leq 58V; above that power will drop
Output current	250mA @ 20Vdc, 86mA @ 58Vdc
Output power	5W (constant), 500 lumens
Turn-on Delay Time	<1s
Overshoot	<10%
Ripple & Noise (pk–pk)	<10%
Withstand voltage	Input to output, 2800Vdc, 2mA
Leakage current	Maximum 0.5mA at 277Vac, 60Hz input
Protection	<p>Over voltage protection: Hiccup mode. Protection will trigger when load voltage exceeds specified output voltage and will auto-recover after the fault mode is removed.</p> <p>Over current protection: Hiccup mode. Protection will trigger when load current exceeds specified output current and will auto-recover after the fault mode is removed.</p> <p>Short circuit protection: Hiccup mode. Protection will trigger when short circuit occurs and will auto-recover after the fault mode is removed.</p> <p>Over temperature protection: Protection will trigger when driver overheats and auto-recover when cooled down.</p>
Emergency Operation	90 minutes
Battery	High-temperature, maintenance-free, LiFePO4 battery, 9.6Vdc, 3 cell
Recharge Time	24 hours
Battery Charging Current	307mA

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	0°C/32°F to 55°C/131°F
Storage temperature	–20°C/–4°F to 55°C/131°F
Humidity	5% to 95%
MTBF	284,000 hrs at 40°C/104°F ambient (–70°C/158°F case temp)
Life rating	80,000 hrs at 120Vac input, 100% load and 60°C/140°F case temp
Max case temperature	75°C/167°F for LED driver
Max ambient temperature	55°C/131°F for battery

SAFETY AND EMC COMPLIANCE

UL/cUL	UL 924
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic current emissions Class C

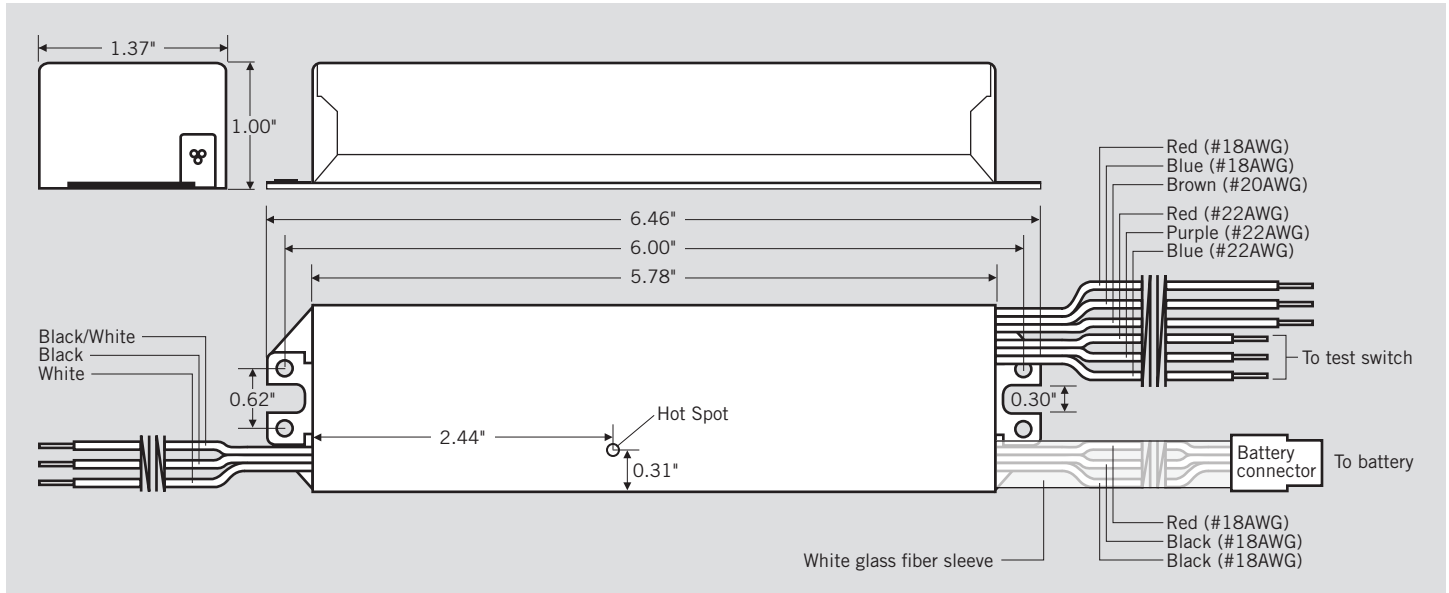


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DIMENSIONS AND WIRING SPECIFICATIONS

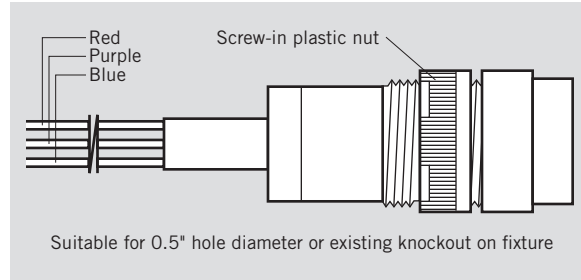
EMERGENCY LED DRIVER SPECIFICATIONS



WIRE SPECIFICATIONS

Input		Black, White, Black/White	12", UL1316 #18AWG
Output	To LED module	Red, Blue	24", UL1316 #18AWG
	To LED driver	Brown	24", UL1015 #20AWG
	To battery connector	Red, Black	24", UL1015 #18AWG
	To test switch	Red, Blue, Purple	24", UL1430 #22AWG

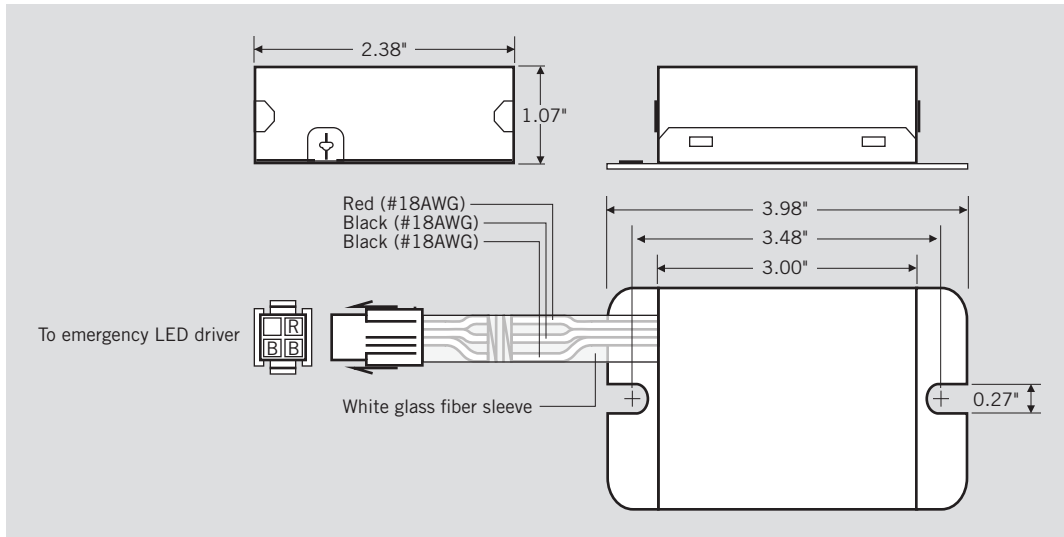
TEST SWITCH (3-WIRE) SPECIFICATIONS



LED DRIVER DIMENSIONS

Length	6.46" (164.0mm)
Width	1.37" (34.7mm)
Height	1.00" (25.4mm)
Mounting	6.00" (152.4mm)

BATTERY PACK SPECIFICATIONS



BATTERY PACK DIMENSIONS

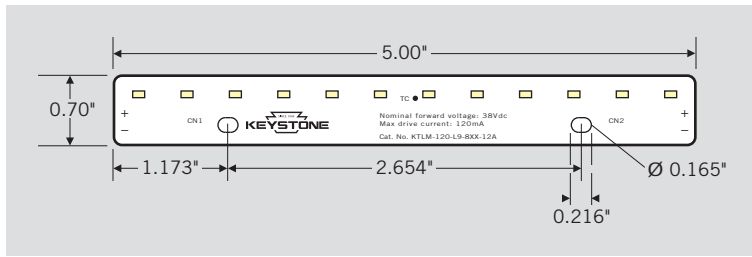
Length	3.98" (101.0mm)
Width	2.38" (60.4mm)
Height	1.07" (27.2mm)
Mounting	3.48" (88.4mm)



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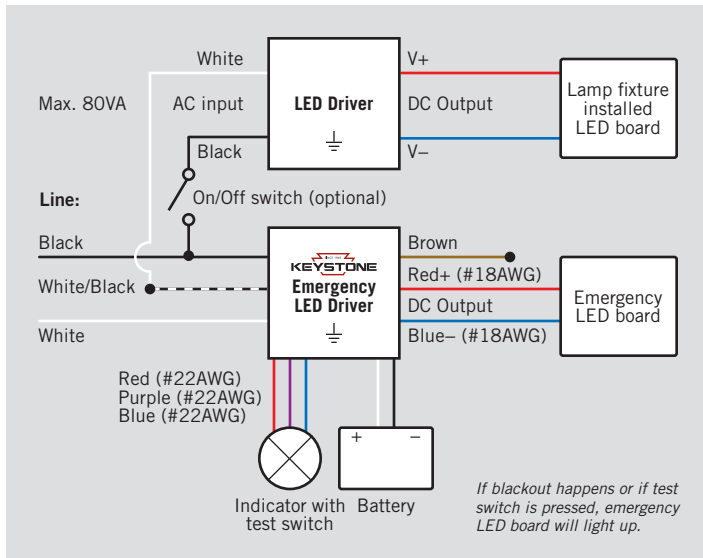
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LED MODULE SPECIFICATIONS

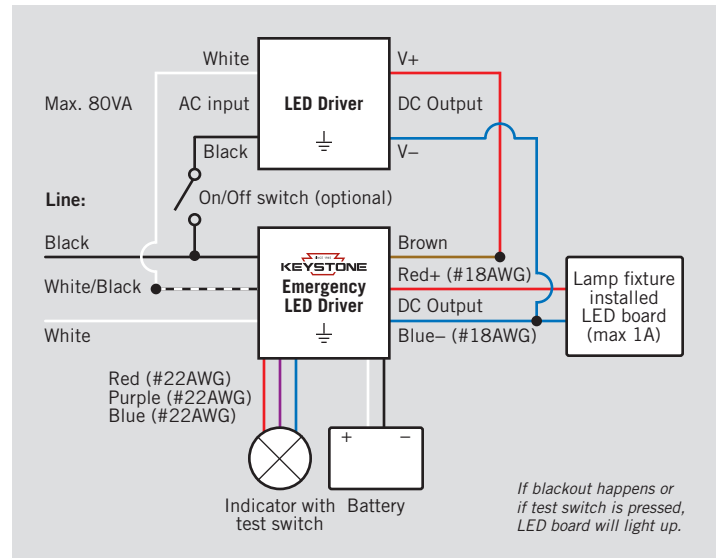


WIRING DIAGRAMS

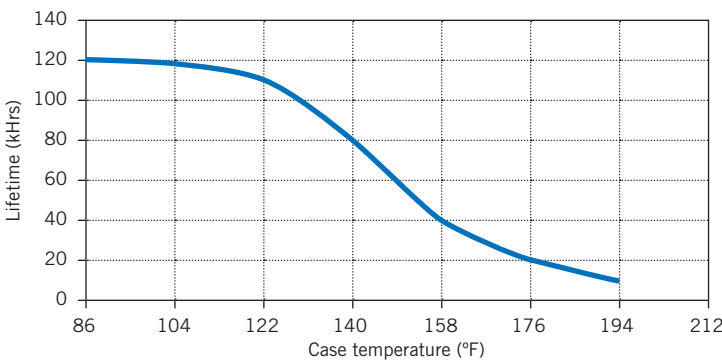
Connect emergency LED driver with emergency LED board



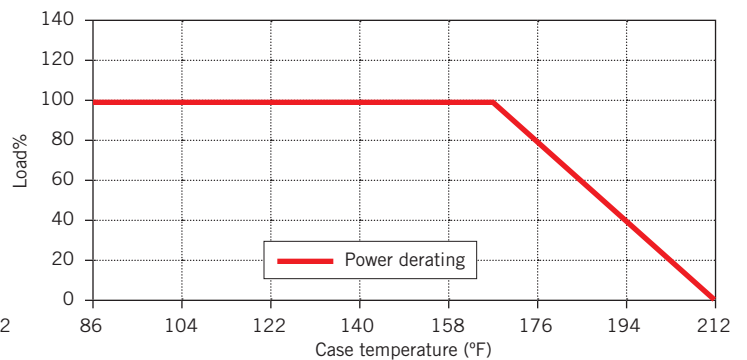
Connect emergency LED driver with lamp fixture installed LED board



LIFETIME VS CASE TEMPERATURE



POWER DERATING VS CASE TEMPERATURE



- Notes:
- To maintain good battery lifespan during storage, recharging emergency LED driver annually is recommended.
 - For operation, wiring, and installation please refer to installation instruction.



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ORDERING INFORMATION

ORDER CODE	DESCRIPTION	PACK QTY.	ITEM STATUS
KT-EMRG-LED-5C-500-K1-IP	Constant Power LED Emergency Back-Up Driver Kit, CEC Compliant	12	Active

CATALOG NUMBER BREAKDOWN

KT-EMRG-LED-5C-500-K1-IP

1
2
3
4
5
6
7
8

- 1 Keystone Technologies
- 2 Emergency Back-Up
- 3 LED Driver
- 4 Nominal Wattage
- 5 CEC Compliant
- 6 Nominal Lumen Output
- 7 Kit Version with Module
- 8 Packaging Style