



# 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



<b>DRIVER TYPE:</b> Constant Power LED Emergency Back-Up Driver Kit
<b>MAX. OUTPUT POWER:</b> 5W, 500 lumens
<b>INPUT VOLTAGE:</b> 120–277Vac $\pm 10\%$
<b>NUMBER OF OUTPUTS:</b> One
<b>SAFETY STANDARD:</b> UL 924, Complies with CEC Title 20 Efficiency Standards
<b>LOCATION:</b> IP20 design for dry and damp location
<b>WARRANTY:</b> 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><b>Over voltage protection:</b> Hiccup mode. Protection will trigger when load voltage exceeds specified output voltage and will auto-recover after the fault mode is removed.</p> <p><b>Over current protection:</b> Hiccup mode. Protection will trigger when load current exceeds specified output current and will auto-recover after the fault mode is removed.</p> <p><b>Short circuit protection:</b> Hiccup mode. Protection will trigger when short circuit occurs and will auto-recover after the fault mode is removed.</p> <p><b>Over temperature protection:</b> 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

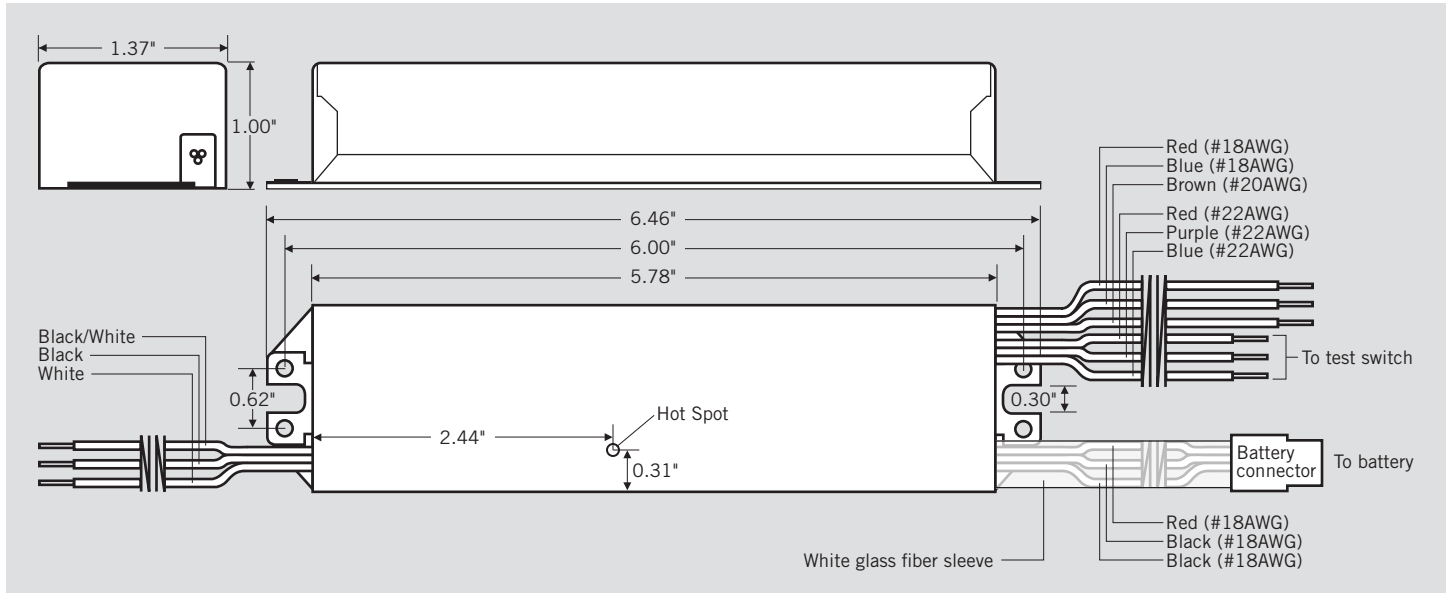


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### DIMENSIONS AND WIRING SPECIFICATIONS

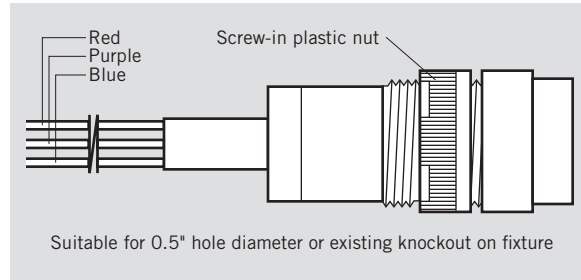
#### EMERGENCY LED DRIVER SPECIFICATIONS



#### 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

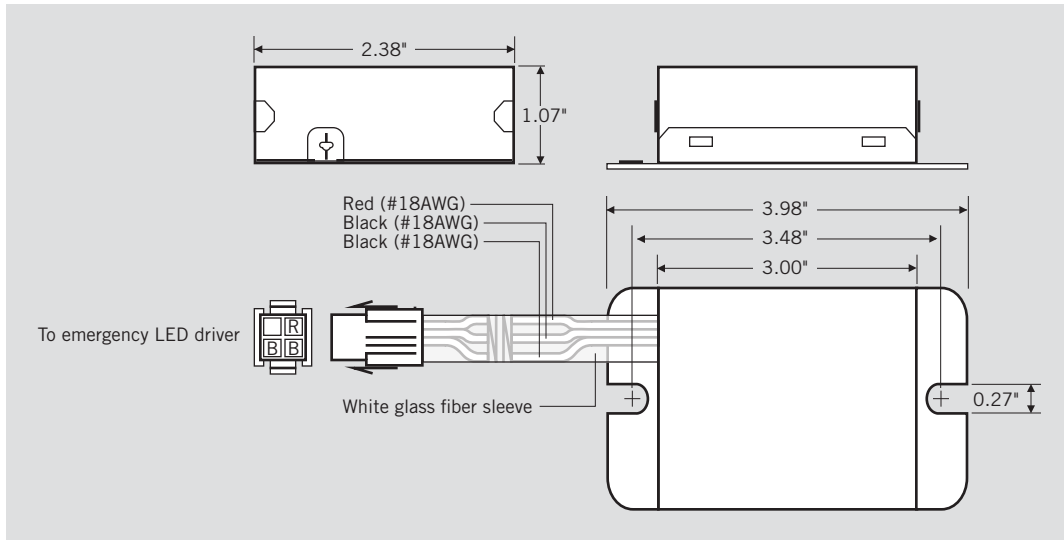
#### TEST SWITCH (3-WIRE) SPECIFICATIONS



#### 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

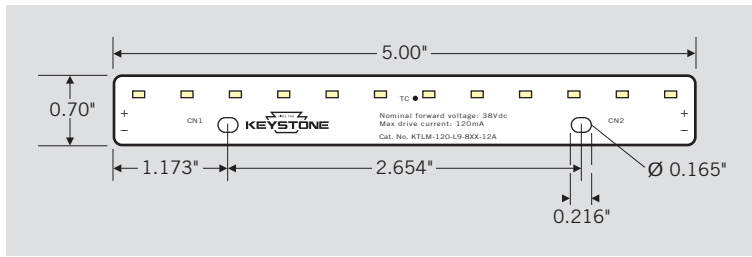
Length	3.98" (101.0mm)
Width	2.38" (60.4mm)
Height	1.07" (27.2mm)
Mounting	3.48" (88.4mm)



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

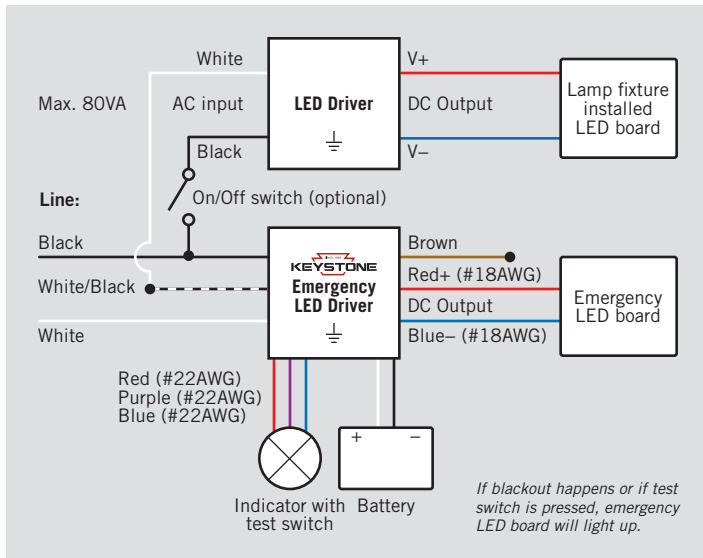
## CONSTANT POWER LED EMERGENCY BACK-UP DRIVER KIT

### LED MODULE SPECIFICATIONS

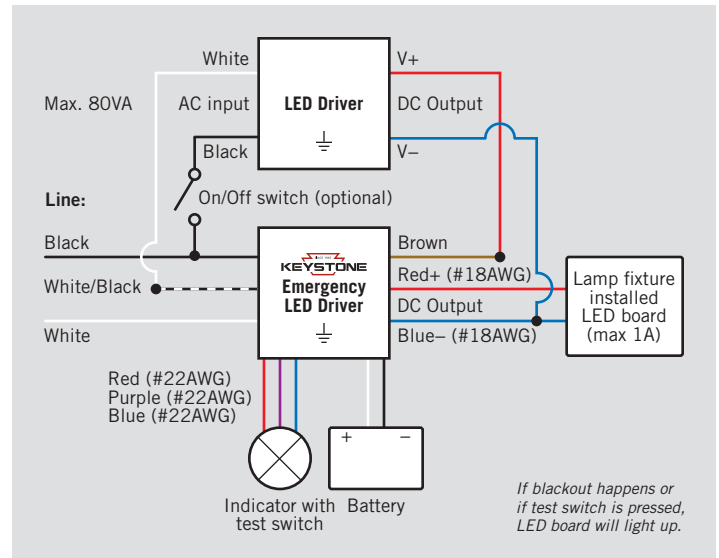


### WIRING DIAGRAMS

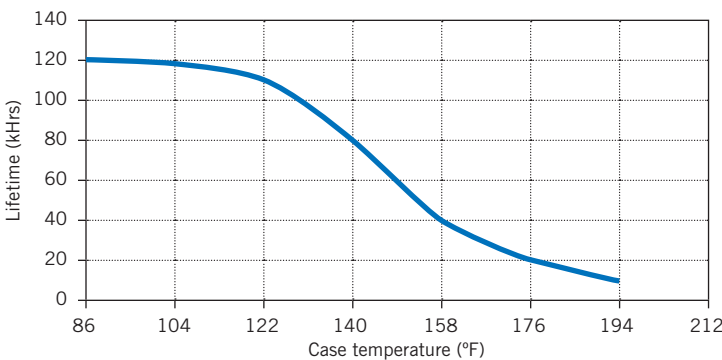
Connect emergency LED driver with emergency LED board



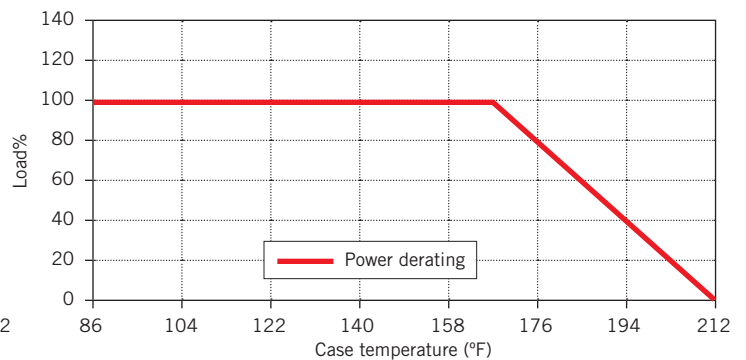
Connect emergency LED driver with lamp fixture installed LED board



### 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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## CONSTANT POWER LED EMERGENCY BACK-UP DRIVER KIT

**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