

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

## LED EMERGENCY BACK-UP DRIVER

#### **DESCRIPTION**

LED Emergency Back-Up Driver | 5W Output | 120 -277V Input | CEC T20 Compliant | 2-Piece Design











**DRIVER TYPE:** LED Emergency Back-Up Driver **MAX. OUTPUT POWER: 5W** INPUT VOLTAGE: 120-277Vac ±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**

**PASS-THROUGH CURRENT: 3A max** 

| Input voltage range             | 120~277Vac ± 10%   |
|---------------------------------|--|
| Frequency                       | 50/60Hz  |
| Power factor                    | > 0.9 under 120~277Vac input   |
| Inrush current                  | TBD  |
| Max input current               | 50mA @120V, 35mA @240V, and 30mA @277V   |
| THD                             | <20% under 120~277Vac input  |
| Output voltage                  | 20–60Vdc Class 2 compliant Remarks: the output power is valid for output voltage ≤ 58V; above that power will drop   |
| Output current                  | 250mA @ 20Vdc, 86mA @ 58Vdc  |
| Output power                    | 5W (constant)  |
| 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                      | 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.  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.  Short circuit protection: Hiccup mode. Protection will trigger when short circuit and will auto recover after the fault mode is removed.  Over temperature protection: Protection will trigger when driver overheats and auto-recovery when cooled down. |
| <b>Emergency Operation</b>      | 90 minutes   |
| Battery                         | High-temperature, maintenance-free, LiFePO4 battery, 9.6Vdc, 3 cell  |
| Recharge Time                   | 24 hours   |
| <b>Battery Charging Current</b> | 307mA  |

#### **ENVIRONMENTAL SPECIFICATIONS**

| Operating temperature       | 0°C/32°F to 55°C/131°F      | Humidity    | 5% to 95% |
|-----------------------------|-----------------------------|-------------|-----------|
| Storage temperature         | -20°C/-4°F to 55°C/131°F    | MTBF        | TBD       |
| Maximum case temperature    | 167°F (75°C) for LED driver | Life rating | TBD       |
| Maximum ambient temperature | 131°F (55°C) for battery    |             |           |

#### SAFETY AND EMC COMPLIANCE

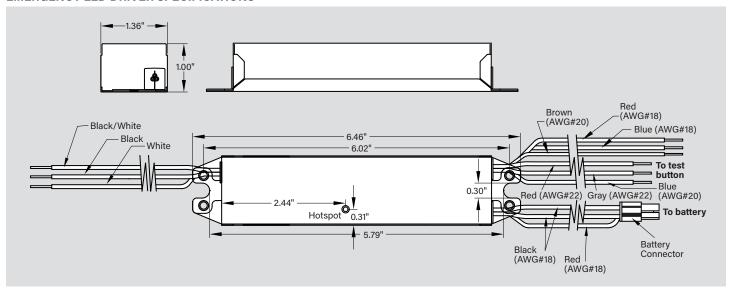
| UL/cUL             | Listed for field or factory installation: UL 924 and CSA No. 141 Emergency Lighting Compliant |
|--------------------|---|
| FCC, 47CFR Part 15 | ANSI C63.4:2009 Class B (consumer limit)  |
| EN61000-3-2        | Harmonic current emissions Class C  |



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#### **DIMENSIONS AND WIRING SPECIFICATIONS**

#### **EMERGENCY LED DRIVER SPECIFICATIONS**



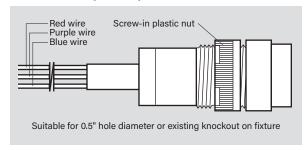
#### LED DRIVER DIMENSIONS

| Length (L)   | 6.46" (164mm)  |
|--------------|----------------|
| Width (W)    | 1.36" (34.7mm) |
| Height (H)   | 1.00" (25.4mm) |
| Mounting (M) | 6.02" (153mm)  |

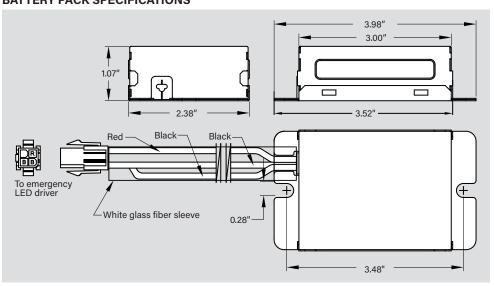
#### WIRE SPECIFICATIONS

| Input  |                      | Black, White,<br>Black/White | 12", UL1316<br>#18AWG |
|--------|----------------------|------------------------------|-----------------------|
|        | To LED module        | module Red, Blue             | 24", UL1316<br>#18AWG |
| Outmut | To LED driver        | Brown                        | 24", UL1430<br>#20AWG |
| Output | To battery connector | Red, Black                   | 24", UL1015<br>#18AWG |
|        | To test button       | Red, Blue,<br>Purple         | 24", UL1430<br>#22AWG |

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



#### **BATTERY PACK SPECIFICATIONS**



#### **BATTERY PACK DIMENSIONS**

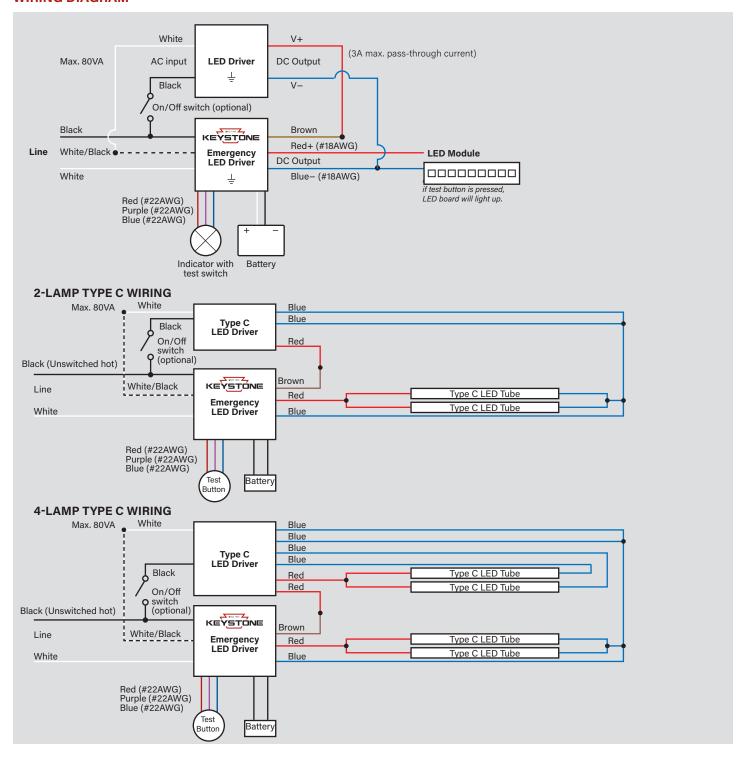
| Length (L)   | 3.98" (94.8mm) |
|--------------|----------------|
| Width (W)    | 2.38" (60.4mm) |
| Height (H)   | 1.07" (27.2mm) |
| Mounting (M) | 3.48" (88.4mm) |



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#### WIRING DIAGRAM

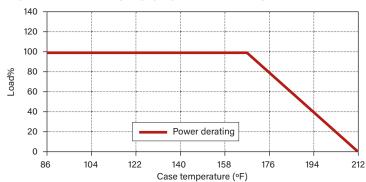




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#### **POWER DERATING VS CASE TEMPERATURE**



#### Notes

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

#### **ORDERING INFORMATION**

| ORDER CODE            | PACK QTY. | UPC          | EASY CODE |
|-----------------------|-----------|--------------|-----------|
| KT-EMRG-LED-5C-500-IP | TBD       | 843654103099 | JTR-48    |

#### **CATALOG NUMBER BREAKDOWN**

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

- 1 Keystone Technologies
- 2 Emergency Back-Up
- 3 LED Driver
- 4 Nominal Wattage
- **5** CEC Compliant
- **6** Nominal Lumen Output
- 7 Packaging Style