



DESCRIPTION

Constant Power Emergency LED Driver | 12W Output | 120 –277V Input











DRIVER TYPE: Constant Power Emergency LED Driver

MAX. OUTPUT POWER: 12W

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

PASS-THROUGH CURRENT: 3A max



FLECTRICAL SPECIFICATIONS

Input voltage range	ELECTRICAL SPECIFI	CATIONS
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 600mA @ 20Vdc, 206mA @ 58Vdc Output power 12W (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 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 current protection: Hiccup mode. Protection will trigger when short circuit 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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Input voltage range	120~277Vac ± 10%
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 600mA @ 20Vdc, 206mA @ 58Vdc Output power 12W (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. 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. Emergency Operation 90 minutes <th< th=""><td>Frequency</td><td>50/60Hz</td></th<>	Frequency	50/60Hz
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Output power Turn-on Delay Time 12W (constant) Turn-on Delay Time 12W (constant) Overshoot 10% Ripple & Noise (pk-pk) Input to output, 2800Vdc, 2mA Leakage current Maximum 0.5mA at 277Vac, 60Hz input 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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Output voltage	·
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Ripple & Noise (pk-pk) <10%	Output power	12W (constant)
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Withstand voltage Leakage current Maximum 0.5mA at 277Vac, 60Hz input 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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Overshoot	<10%
Leakage current Maximum 0.5mA at 277Vac, 60Hz input 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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Ripple & Noise (pk-pk)	<10%
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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Withstand voltage	Input to output, 2800Vdc, 2mA
Frotection 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. Emergency Operation 90 minutes Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Leakage current	Maximum 0.5mA at 277Vac, 60Hz input
Battery High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell Recharge Time 24 hours	Protection	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.
Recharge Time 24 hours	Emergency Operation	90 minutes
	Battery	High-temperature, maintenance-free, LiFePO ₄ battery, 9.6Vdc, 3 cell
Battery Charging Current 307mA	Recharge Time	24 hours
	Battery Charging Current	307mA



ENVIRONMENTAL SPECIFICATIONS

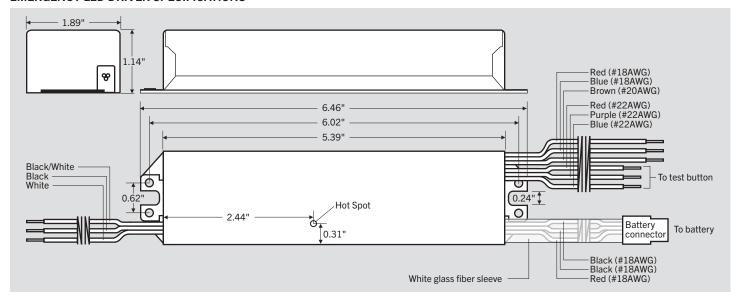
Operating temperature	0°C/32°F to 55°C/131°F	
Storage temperature	-20ºC/-4ºF to 55°C/131ºF	
Humidity	5% to 95%	
MTBF	TBD	
Life rating	TBD	
Maximum case temperature	75°C/167ºF for LED driver	
Maximum ambient temperature	55°C/131ºF for battery	

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

DIMENSIONS AND WIRING SPECIFICATIONS

EMERGENCY LED DRIVER SPECIFICATIONS





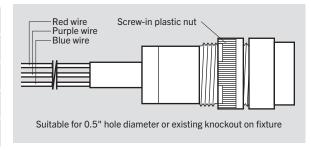
LED DRIVER DIMENSIONS

Length (L)	6.46" (164mm)	
Width (W)	1.89" (48mm)	
Height (H)	1.14" (29mm)	
Mounting (M)	6.02" (153mm)	

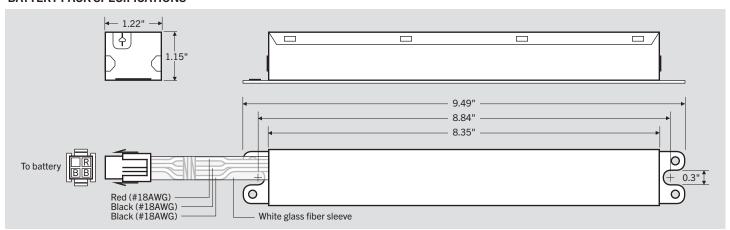
WIRE SPECIFICATIONS

Input		Black, White, Black/White	12", UL1316 #18AWG	
Output	To LED module	Red, Blue	24", UL1316 #18AWG	
	To LED driver	Brown 24", UL14 #20AWG		
	To battery connector	Red, Black	24", UL1015 #18AWG	
	To test button	Red, Blue, Purple	24", UL1430 #22AWG	

TEST SWITCH (3-WIRE) SPECIFICATIONS



BATTERY PACK SPECIFICATIONS

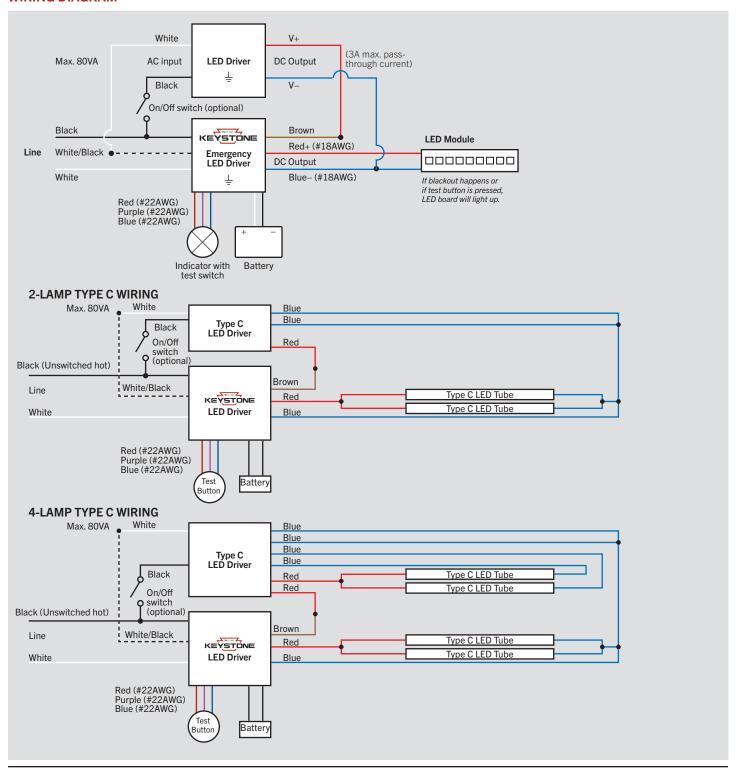


BATTERY PACK DIMENSIONS

Length (L)	9.49" (241.6mm)		
Width (W)	1.22" (31.1mm)		
Height (H)	1.15" (29.2mm)		
Mounting (M)	8.84" (224.5mm)		

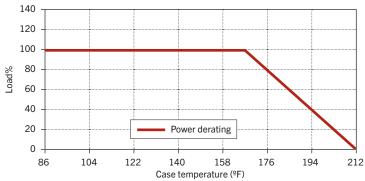


WIRING DIAGRAM





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	DESCRIPTION	PACKAGING STYLE	PACK QTY.	ITEM STATUS
KT-EMRG-LED-12C-1200-IP	Constant Power Emergency LED Driver	Individually Packaged	TBD	Active

CATALOG NUMBER BREAKDOWN

KT-EMRG-LED-12C-1200-IP 4 5 6 3

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