



# Thomas Research Products

SSL Solutions Faster Than The Speed Of Light

## LED-12W Series

Switch Mode LED Drivers  
Constant Current & Constant Voltage with Isolation  
Black Magic Thermal Advantage™ Plastic Housing

Total Power: 12 Watts  
Input Voltage: 100-277 Vac  
Outputs: Single from 6-48 Vdc  
Indoor or Outdoor Applications, IP66  
High Power Factor  
UL1310, Class 2 and UL48 Compliant

### Electrical Specifications

Input Voltage Range:	100-277 Vac Nom. (90-305 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ 120V, >0.75 @ 277V
Inrush Current:	<15.0 Amps max @ 230 Vac, cold start 25°C
Input Current:	0.15 Amps max at 120 Vac
Maximum Power:	12W
Current Accuracy:	± 1% (when applicable)
Load Regulation:	± 3%
THD:	≤ 20% @ 120 Vac, ≤ 35% @ 277 Vac
Leakage Current:	300 µA Typical
Hold Up Time:	Half Cycle
Protection:	Output Over-Voltage, Output Over-Current, and Output Short Circuit Protection with Auto Recovery

### Environmental Specifications

Operating Temperature:	-30°C to +60°C
Storage Temperature:	-40°C to +85°C
Maximum Case Temp.	90°C
Humidity:	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes
Sound Rating:	Class A
MTBF:	>550,000 Hours at full load & 40°C ambient conditions per MIL-217F Notice 2
EMC:	Compliant to CISPR 22 Class B, CISPR 14-1 Class B, GB4343 1-2003, GB17625.1-2003
Weight:	4.5 oz. (128 g)



Constant Current - Product Specifications					
Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency	
LED12W-48-C0250	250	24-48	12	82%	
LED12W-36-C0350	350	18-36	12.6	81%	
LED12W-24-C0350	350	12-24	8.2	80%	
LED12W-24-C0500	500	12-24	12	80%	
LED12W-16-C0700	700	8-16	11.2	79%	
LED12W-16-C0800	800	8-16	12.8	79%	
LED12W-12-C1000	1000	6-12	12	78%	

Constant Voltage - Product Specifications				
Model Number	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED12W-48	48	63-250	12	82%
LED12W-36	36	88-350	12.6	81%
LED12W-24	24	125-500	12	80%
LED12W-16	16	200-800	12.8	79%
LED12W-12	12	250-1000	12	78%

Class 2: US/Canada US Only



Specifications subject to change without notice.

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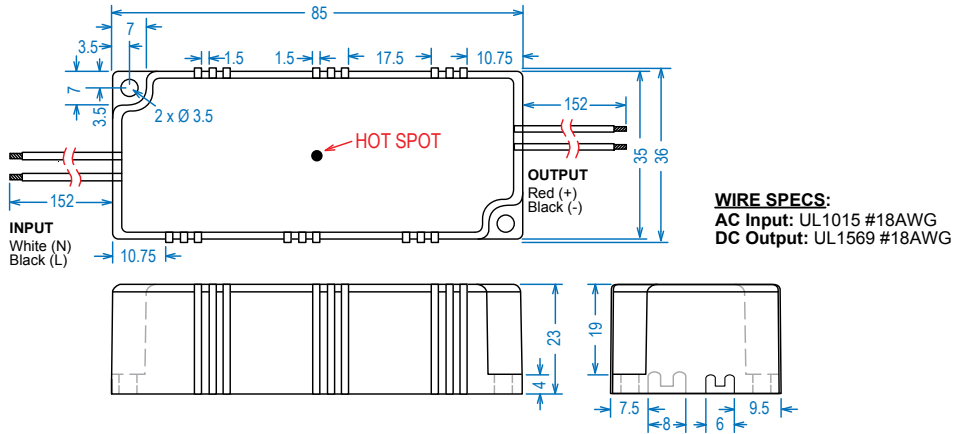
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LED12W

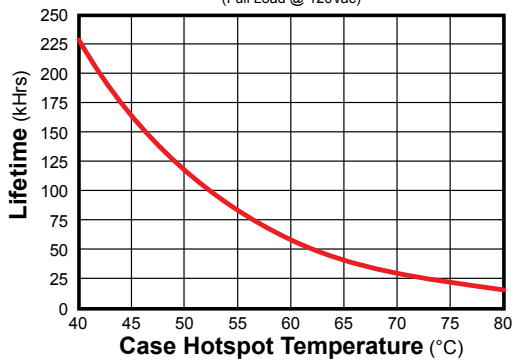
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## Dimensions - mm



## Lifetime / Case Temperature

(Full Load @ 120Vac)



## Safety and Regulatory Certifications

UL8750, UL1310, UL47, CSA 22.2, CE, FCC, IP66