

# Thomas Research Products

Innovative & Energy Saving Lighting Controls

## LED-12W Series

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

Total Power: 12 Watts  
Input Voltage: 100-277VAC  
Outputs: Single from 6 VDC to 48 VDC  
Indoor or Outdoor Applications  
Active Power Factor Correction  
UL1310, Class 2 and UL 48 Compliant  
IP66 Compliant

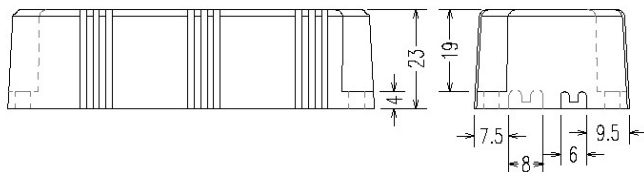
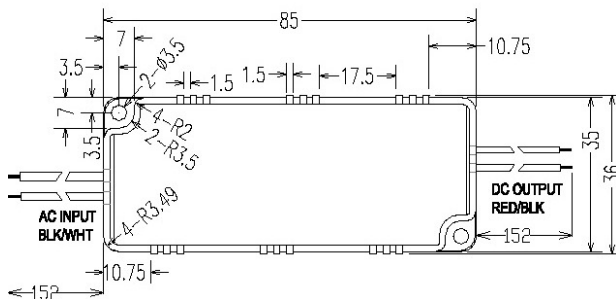
### Electrical Specifications

Input Voltage Range:	100 ~ 277 VAC
Frequency:	47 to 63 Hz
Power Factor:	>0.94 at full load
Inrush Current:	<15.0 Amps maximum @ 230 VAC, cold start 25°C
Input Current:	0.15 Amps maximum at 115 VAC
Efficiency:	85% typical at maximum load
Maximum Power:	12W
Current Accuracy:	+/- 1% (when applicable)
Load Regulation:	+/- 3%
Leakage Current:	300 uA 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
MTBF:	>550,000 at full load and 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

### Dimensions



### Constant Current Versions - Product Specifications

No.	Model Number	Output voltage range	Output constant current	Current accuracy	Output power	Max. efficiency
1	LED12-48-C0250	24-48VDC	250mA	+/-5%	12W	85%
2	LED12-36-C0350	18-36VDC	350mA	+/-5%	12.6W	84%
3	LED12-24-C0500	12-24VDC	500mA	+/-5%	12W	84%
4	LED12-16-C0800	8-16VDC	800mA	+/-5%	12.8W	83%
5	LED12-12-C1000	6-12VDC	1000mA	+/-5%	12W	83%

### Constant Current Versions - Product Specifications

No.	Model Number	Output constant voltage	Output current (max.)	Voltage accuracy	Output power	Max. efficiency
1	LED12-48	48VDC	250mA	+/-5%	12W	85%
2	LED12-36	36VDC	350mA	+/-5%	12.6W	84%
3	LED12-24	24VDC	500mA	+/-5%	12W	84%
4	LED12-16	16VDC	800mA	+/-5%	12.8W	83%
5	LED12-12	12VDC	1000mA	+/-5%	12W	83%



IP66



### Safety and Regulatory Certifications

UL 8750, UL1310, UL47, CSA 22.2, CE, FCC, IP66

01-06-10