



# Thomas Research Products

SSL Solutions Faster Than The Speed Of Light®

## 50W TRC-050S110SC Switch Mode LED Drivers - Constant Current

Total Power: 50 Watts  
 Input Voltage: 100-277 Vac, 50/60 Hz  
 Outputs: Single from 4-142 Vdc  
 High Efficiency  
 Indoor or Outdoor Applications, IP67  
 High Power Factor  
 Input/Output Protection & Lightning Protection  
 UL8750 and EN61347 Certified

### Electrical Specifications

Input Voltage Range: 100 - 277 Nom. Vac (90 - 305 V Min/Max) or 108-250 Vdc  
 Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)  
 Power Factor: >0.90 @ full load, 100V through 277V  
 Inrush Current: 60 A @ 230Vac  
 Input Current: 0.54 A @ 100 Vac, 0.35 A @ 220 Vac  
 Maximum Power: 50W  
 Line Regulation: ± 3%  
 Load Regulation: ± 5%  
 Protection: Over-Voltage, Over-Current, Over-Temperature, Short Circuit Protection with Auto Recovery

### Environmental Specifications

Operating Temperature: -35°C to +90°C  
 Maximum Case Temp. 90°C  
 Storage Temperature: -40°C to +85°C  
 Humidity: 10% to 100%  
 Cooling: Convection  
 MTBF: 487,000 Hours @ 25°C, 80% load, 110Vac input  
 Lifetime: 66,000 Hours @ 45°C, 80% load, 110Vac input



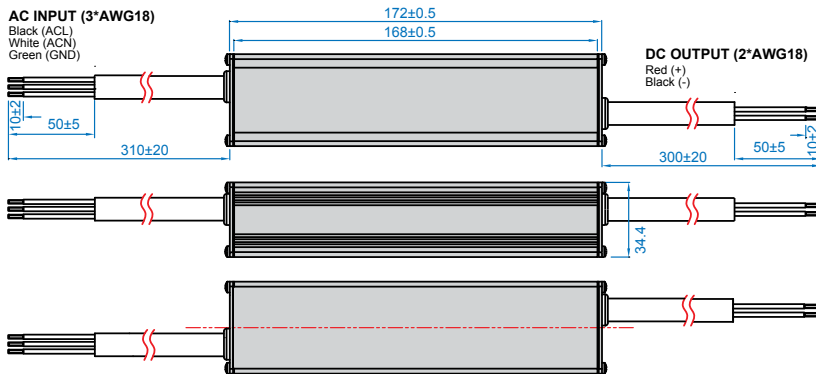
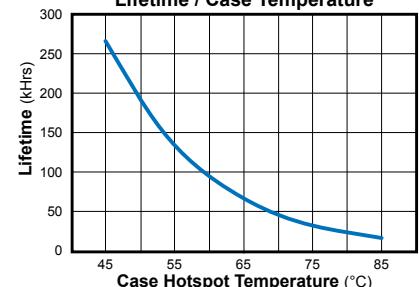
Part Number	Output Current (mA)	Output Voltage Range (Vdc)	Output Power Max (W)	Typical Efficiency
TRC-050S110SC	1100	14-40	50W	90%

Class 2: US/Canada

### Safety and EMC Compliance

CUL	UL 8750, Compliance to UL1310, Class 2
CE	EN 61347-1, EN61347-2-13
EN 55015	Conducted emission
EN 61000-3-2	Harmonic current emissions
EN 61000-3-3	Voltage fluctuations and flicker
EN 61000-4-2	Electrostatic discharge
EN 61000-4-3	RFE Field Susceptibility test
EN 61000-4-4	Electrical Fast Transient
EN 61000-4-5	Surge Immunity test: AC Power Line; Line to line 2kV, Line to ground 4kV
EN 61000-4-6	Conducted Radio Frequency
EN 61000-4-8	Power Frequency Magnetic Field Test
EN 61000-4-11	Voltage Dips
EN 61547	Electromagnetic Immunity

### Lifetime / Case Temperature



**Note:**  
 LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED driver, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

Specifications subject to change without notice.

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