



Thomas Research Products

SSL Solutions Faster Than The Speed Of Light®

150W TRC-150 Series

Switch Mode LED Drivers
Constant Current
Aluminum Housing

Total Power: 150 Watts
Input Voltage: 100-277 Vac
Outputs: Single from 15-428 Vdc
Waterproof Applications, IP67
Ultra High Efficiency
High Power Factor
UL8750

Electrical Specifications

Input Voltage Range: 100 - 277 Nom. Vac (90 - 305 V Min/Max)
 Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)
 Power Factor: >0.90 @ full load, 100V through 277V
 Inrush Current: 65 Amps max @ 230 Vac, cold start 25°C
 Input Current: 1.8 A max 100Vac, 0.9 A max 220Vac
 Maximum Power: 150W
 Line Regulation: ± 1%
 Load Regulation: ± 3%
 Leakage Current: 1 mA 277 VAC 60Hz
 Typical Efficiency: 89-91% at 277VAC
 Turn-on Delay: 0.5S typical 110Vac, 0.3S typical 220Vac
 Ripple and Noise: 3% V_o
 Protection: Over-Voltage, Over-Temperature (110°C), Lightning, and Short Circuit Protection with Self Recovery

Environmental Specifications

Max Case Temperature: 350mA, 450mA, 700mA Tc= 88.2°C, all others Tc= 90°C
 Storage Temperature: -40°C to +85°C
 Operating Temperature: -35°C to +85°C
 Humidity: 5% to 100%
 Cooling: Convection
 MTBF: - 250,000 Hrs (350mA model) @110Vac input, 80% load, 25°C ambient conditions per MIL-HDBK-217F
 - 195,000 Hrs (5950mA model) @110Vac input, 80% load, 25°C ambient conditions per MIL-HDBK-217F
 Lifetime: - 90,000 Hrs (350mA model) @ 220Vac, 80% load, 60°C case temp.
 - 50,000 Hrs (5950mA model) @ 220Vac, 80% load, 60°C case temp.
 Weight: 3.31 lbs. (1.5 kg)



Constant Current - Product Specifications

| Model Name | Output Current (mA)* | Output Voltage Range (Vdc) | Max Output Power (W) | Typical Efficiency |
|---------------|----------------------|----------------------------|----------------------|--------------------|
| TRC-150S035ST | 350 | 256-428 | 150 | 92% |
| TRC-150S045ST | 450 | 200-333 | 150 | 92% |
| TRC-150S070ST | 700 | 128-214 | 150 | 92% |
| TRC-150S105ST | 1050 | 85-142 | 150 | 92% |
| TRC-150S140ST | 1400 | 64-107 | 150 | 92% |
| TRC-150S175ST | 1750 | 51-85 | 150 | 91% |
| TRC-150S210ST | 2100 | 42-71 | 150 | 91% |
| TRC-150S245ST | 2450 | 36-61 | 150 | 90% |
| TRC-150S280ST | 2800 | 31-53 | 150 | 90% |
| TRC-150S315ST | 3150 | 28-47 | 150 | 90% |
| TRC-150S350ST | 3500 | 25-42 | 150 | 90% |
| TRC-150S420ST | 4200 | 21-35 | 150 | 89% |
| TRC-150S490ST | 4900 | 18-30 | 150 | 89% |
| TRC-150S595ST | 5950 | 15-25 | 150 | 88% |

* The output current is adjustable at factory from 50% to 100%.



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.

5-21-13

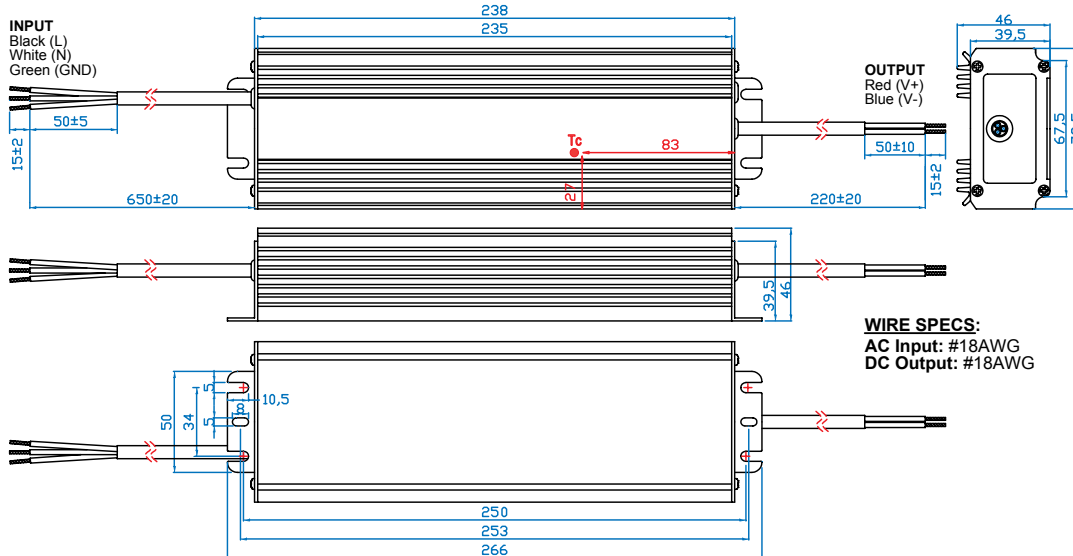


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Safety and EMC Compliance

| | |
|---------------|---|
| UL/CUL | UL8750, Compliance to UL1012, UL935, CAN/CSA-C22.2 No. 0, CSA-C22.2 No. 107.1-01, CSA-C22.2 No. 250.0 |
| C E | EN 61347-1, EN61347-2-13 |
| EN 55015 | Conducted emission Test & Radiated emission Test |
| EN 61000-3-2 | Harmonic current emissions |
| EN 61000-3-3 | Voltage fluctuations & flicker |
| EN 61000-4-2 | Electrostatic Discharge (ESD): 8 kV air discharge, 4 kV contact discharge |
| EN 61000-4-3 | Radio-Frequency Electromagnetic Field Susceptibility Test-RS |
| EN 61000-4-4 | Electrical Fast Transient / Burst-EFT |
| EN 61000-4-5 | Surge Immunity Test: AC Power Line: line to line 4 kV, line to earth 6 kV |
| EN 61000-4-6 | Conducted Radio Frequency Disturbances Test-CS |
| EN 61000-4-8 | Power Frequency Magnetic Field Test |
| EN 61000-4-11 | Voltage Dips |
| EN 61547 | Electromagnetic Immunity Requirements Applies to Lighting Equipment |



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