



Thomas Research Products

SSL Solutions Faster Than The Speed Of Light®

200W TRC-200 Series

Switch Mode LED Drivers
Constant Current
Aluminum Housing

Total Power: 200 Watts
Input Voltage: 100-277 Vac
Outputs: Single from 14-445 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 maximum @ 230 Vac, cold start 25°C
Input Current:	2.4 A max 100Vac, 1.2 A max 220Vac
Maximum Power:	200W
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

Operating Temperature:	-35°C to +70°C
Storage Temperature:	-40°C to +85°C
Humidity:	5% to 100%
Cooling:	Convection
MTBF:	330,000 Hours (450 mA model) @ 110Vac input, 80% load and 25°C ambient conditions per MIL-HDBK-217F
Lifetime:	60,000 Hours @ 220Vac, 80% load and 45°C ambient
Weight:	3.31 lbs. (1.5 kg)



Standard Versions - Product Specifications

Model Number	Output Current (mA)*	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
TRC-200S045ST	450	267-445	200	93%
TRC-200S070ST	700	171-285	200	93%
TRC-200S105ST	1050	114-190	200	92%
TRC-200S140ST	1400	85-142	200	92%
TRC-200S175ST	1750	68-114	200	92%
TRC-200S210ST	2100	57-95	200	91%
TRC-200S245ST	2450	48-81	200	91%
TRC-200S280ST	2800	42-71	200	91%
TRC-200S315ST	3150	38-63	200	91%
TRC-200S350ST	3500	34-57	200	90%
TRC-200S420ST	4200	28-47	200	90%
TRC-200S490ST	4900	24-40	200	90%
TRC-200S560ST	5600	21-35	200	89%
TRC-200S630ST	6300	19-32	200	89%
TRC-200S833ST	8330	14-24 Vc	200	88%

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

Safety and EMC Compliance

UL/CUL	UL8750, Compliance to UL1012, 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



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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