

Triac Dimming LED Driver

LT-200-xxT



Features



- Independent ultra-slim design
- Dimmable constant voltage driver
- Flicker-free
- Dimming with leading edge or trailing edge dimmer
- Smooth dimming compatible with most dimmer
- Dimming range 1...100%
- Push wire connections
- Support loop-through wiring
- Differential mode 2kV and common mode 4kV surge immunity
- Protections: opencircuit, shortcircuit, overload, overtemperature
- DC input compatible (176-280VDC)
- SELV equivalent
- Suitable for protection class II luminaires
- Protection class II



Selection Guide

Model No.	Nominal Voltage (V)	Nominal Current (A)	Power Factor (λ)	THD Full load (%)	Max. Output (W)	Output Current (A)	Output Voltage (V)	No Load Voltage (V)	Efficiency Full Load (%)
LT-200-24T	220-240	1.3	0.95	15	200	2.78-8.33	24	25.2	91
LT-200-48T	220-240	1.3	0.95	15	200	1.39-4.17	48	50.4	92

Input Parameters

Parameter	Condition	Min.	Typ.	Max.																				
Input Voltage Range	AC Input	198VAC	--	264VAC																				
	DC Input	176VDC	--	280VDC																				
Rated Input Frequency	AC Input	--	50/60Hz	--																				
No-load Power Consumption		--	--	2.0W																				
Inrush Current	Cold Start@230V	65A/500us																						
Max.units Per Circuit Breaker	<table border="1"> <thead> <tr> <th>Circuit Breaker</th> <th colspan="4">Circuit Breaker Current</th> </tr> <tr> <th>Typ.</th> <th>10A</th> <th>13A</th> <th>16A</th> <th>20A</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>2</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>C</td> <td>4</td> <td>5</td> <td>6</td> <td>8</td> </tr> </tbody> </table>				Circuit Breaker	Circuit Breaker Current				Typ.	10A	13A	16A	20A	B	2	2	3	4	C	4	5	6	8
Circuit Breaker	Circuit Breaker Current																							
Typ.	10A	13A	16A	20A																				
B	2	2	3	4																				
C	4	5	6	8																				

Output Parameters

Parameter	Condition	Min.	Typ.	Max.
Output Accuracy	Full Load@230V	--	±5%	--
Ripple & Noise	Low Frequency < 120Hz, Full Load@230VAC	--	--	3%
Pst LM		--	--	1

Triac Dimming LED Driver

LT-200-xxT



SVM		--	--	0.4
Galvanic Isolation	SELV			
Short-Circuit Protection (SCP)	Auto-Recovery If Fault Is Removed			
Over-Voltage Protection (OVP)	N/A			
Over-Current Protection (OCP)	Auto-Recovery If Fault Is Removed			

General Parameters

Parameter	Condition	Value
Ambient Temperature Range t_a		-20...+45 °C
Maximum Case Temperature t_c	Measured on t_c point indicated of the product label	90 °C
Max.Case Temp.In Fault Condition		110 °C
Storage Temperature Range		-20...+70 °C
Relative Humidity	Non Condensing	5...85%
Withstand Voltage	I/P-O/P	3.75kVAC, I leakage < 5mA, 60s
Surge Transient Protection	L-N, L/N-PE	2kV, 4kV
Environmental Rating		Indoor
IP Rating		IP20
Mains Switching Cycles		> 100,000
Expected Lifetime	$t_{cmax}=90^{\circ}\text{C}$, 0.2%/1000h failure rate	50,000h

Dimming Parameters

Dimmable	Yes
Dimming control	Leading/Trailing edge
Dimming range	1-100%

Physical Parameters

Housing Material	PC
Type of connection	Push terminal
Dimensions (LxWxH)	450x32x23mm
Mounting hole spacing	443mm
Weight	500 ± 25g

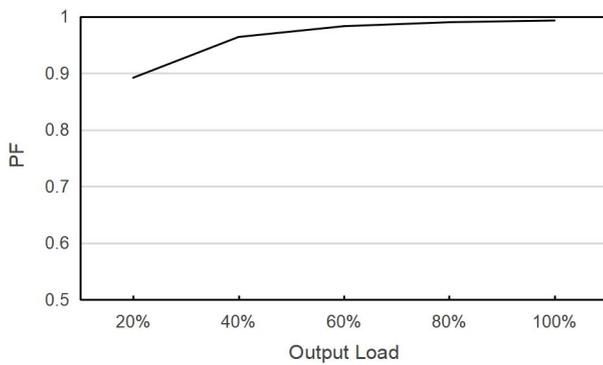
Standards

Safety Standards	EN 61347-1, EN 61347-2-13
Performance	EN 62384
EMC Standards	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547

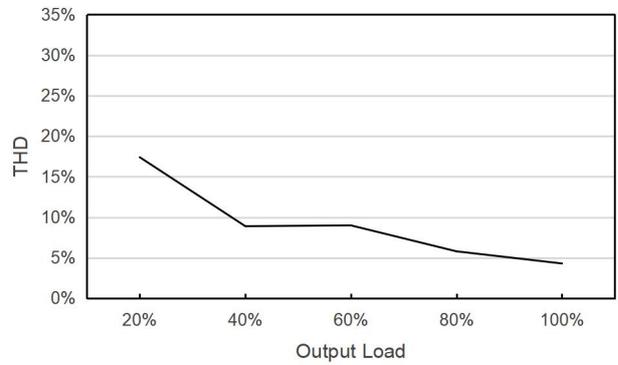
*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25 °C of ambient temperature.

Product Characteristic Curve

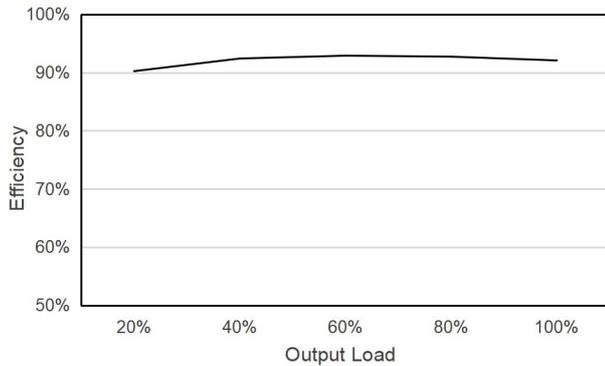
Power Factor vs Load



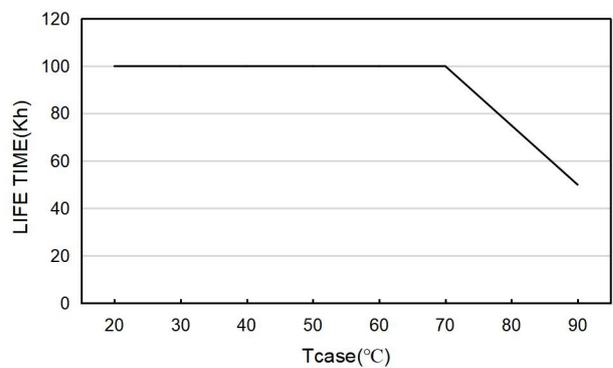
Total Harmonic Distortion vs Load



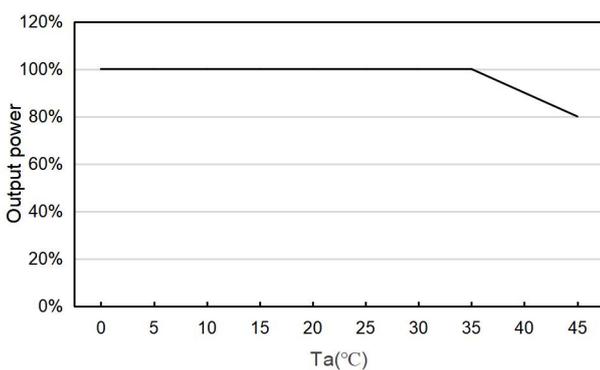
Efficiency vs Load



Life Time vs Case Temperature



Output power vs Ambient temperature



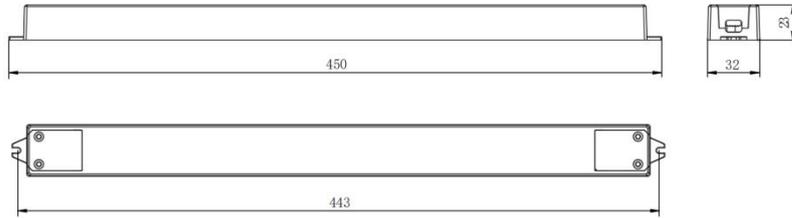
Triac Dimming LED Driver

LT-200-xxT

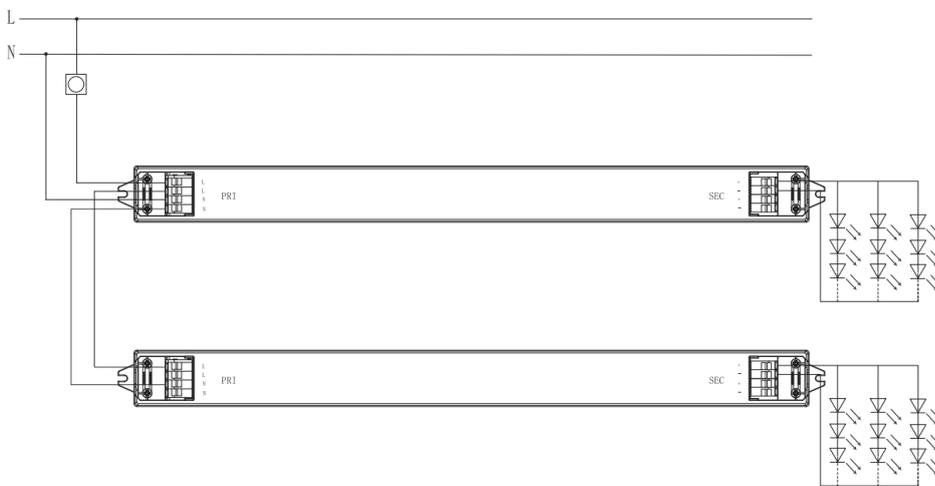


Appearance of Size

Dimension Drawing(mm)



Wiring Diagram



PRI

Cable cross-section: 0.75-1.5mm²

Stripping: 11mm

SEC

Cable cross-section: 0.5-1.5mm²

Stripping: 11mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.