

# DALI Dimming LED Driver

LT-200-xxD



## Features



- Independent ultrathin design
- Independent super slim design
- Flicker-free
- DALI-2 certified
- Switch-Dim function
- Dimming range 0.1...100%
- Push wire connections
- Protections: opencircuit, shortcircuit, overload, overtemperature
- SELV equivalent
- DC input compatible (176-280VDC)
- 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-200-24D	220-240	1.3	0.95	10	200	0-8.33	24	25	91
LT-200-48D	220-240	1.3	0.95	10	200	0-4.17	48	50	91

## 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		--	--	N/A																				
Standby Power Consumption		--	--	0.5W																				
Inrush Current	Cold Start@230V	75A/300us																						
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>3</td> <td>3</td> <td>4</td> </tr> <tr> <td>C</td> <td>5</td> <td>6</td> <td>7</td> <td>9</td> </tr> </tbody> </table>				Circuit Breaker	Circuit Breaker Current				Typ.	10A	13A	16A	20A	B	2	3	3	4	C	5	6	7	9
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## Output Parameters

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

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Pst LM	--	--	1
SVM	--	--	0.4
Galvanic Isolation	SELV		
Short-Circuit Protection (SCP)	Re-power on to Recover If Fault Is Removed		
Over-Voltage Protection (OVP)	Re-power on to Recover If Fault Is Removed		
Over-Current Protection (OCP)	Re-power on to Recover 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	1kV, 2kV
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	DALI-2/Switch-Dim
Dimming range	0.1-100%
Dimming method	PWM
PWM frequency	2-20kHz@0.1-2%; 20kHz@2-100%

## Physical Parameters

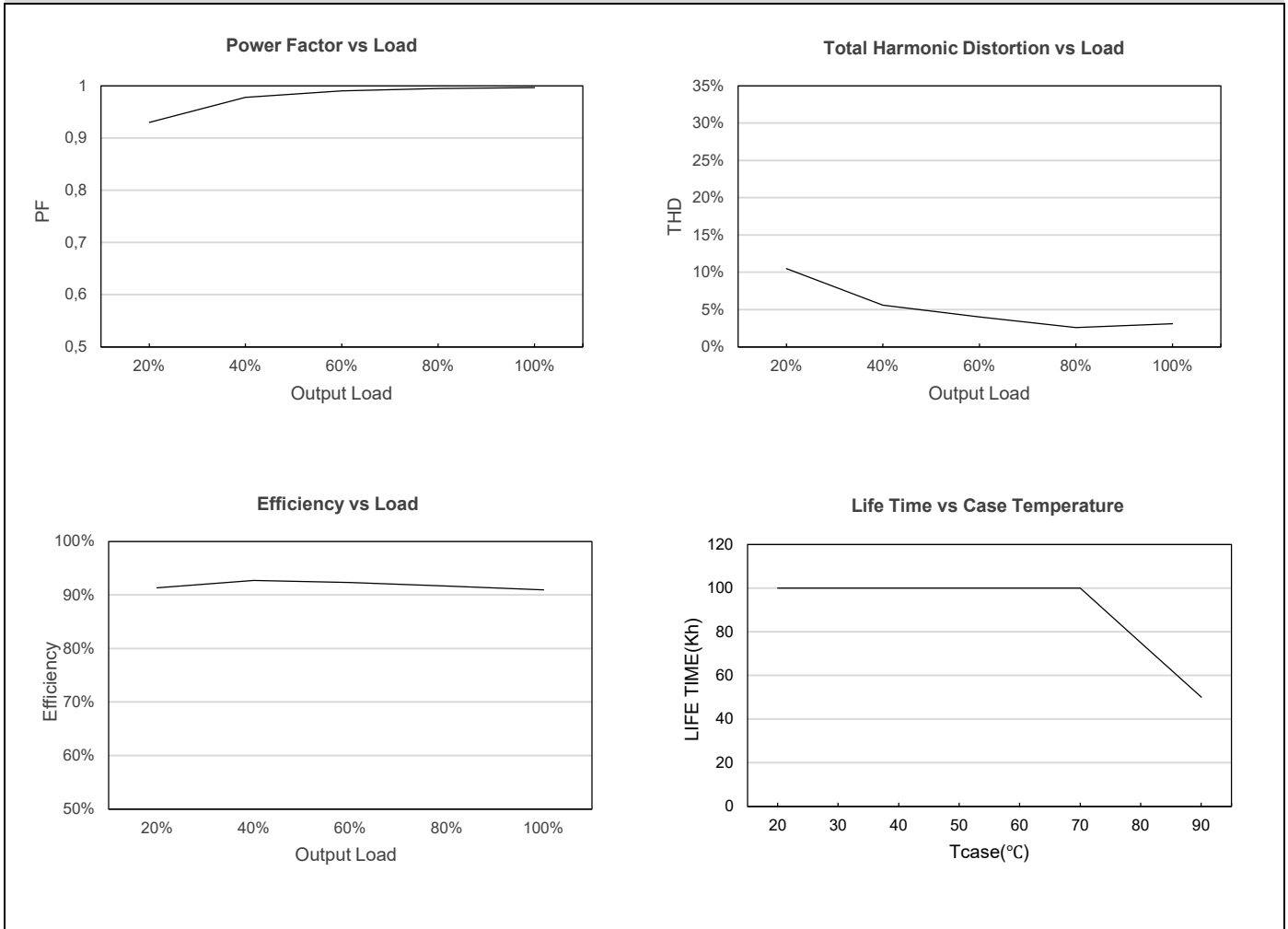
Housing Material	PC
Type of connection	Push terminal
Dimensions (LxWxH)	450x32x23mm
Mounting hole spacing	443mm
Weight	375 ± 20g

## 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
DALI Standards	EN 62386-101, EN 62386-102, EN 62386-207

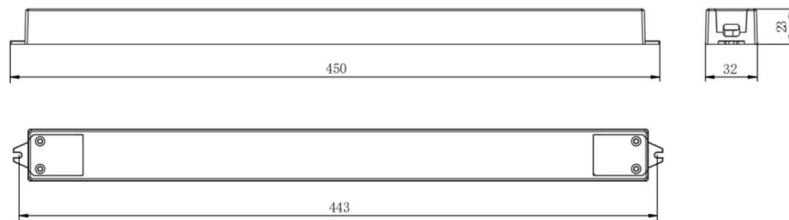
\*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.

## Product Characteristic Curve

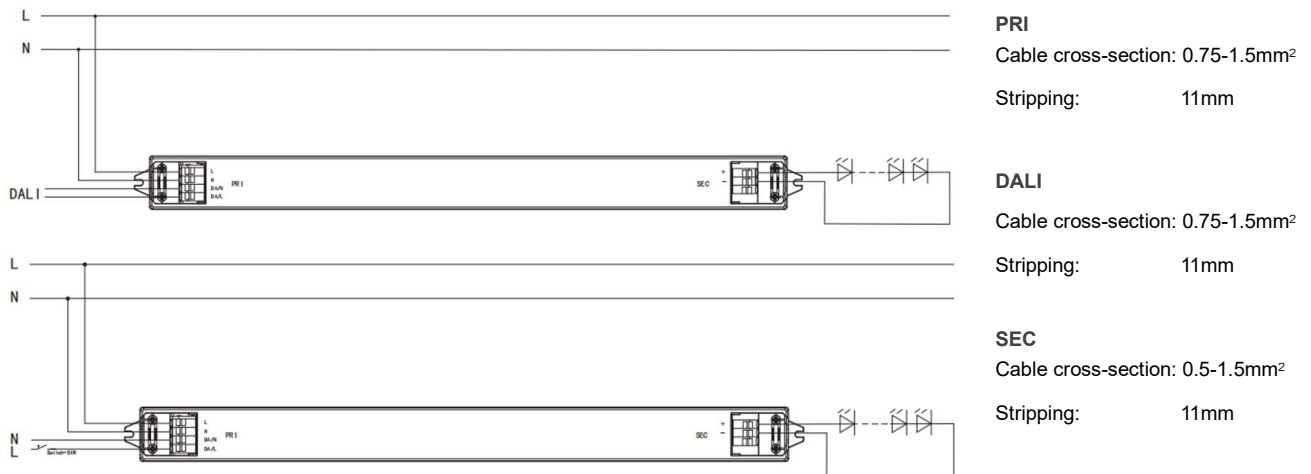


## Appearance of Size

### Dimension Drawing(mm)



### Wiring Diagram



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

## Functions

### DALI

In this operating mode the light level of the device is controlled via its DALI address.

### Switch-DIM

Alternatively the device can be controlled using switch-inputs for mains voltage, the dim level is saved at power-down and restored at power-up.

-Short press(<1S): switches LED driver ON and OFF

-Long press: LED modules are dimmed. After repush the LED modules are dimmed in the opposite direction.

### Synchronization

In installations with LED drivers with different dimming levels or opposite dimming directions, all LED drivers can be synchronized to 50% dimming level by a 15S push, switch off the light by short press one time, then long press. Up to 25 LED drivers can be controlled via direct switch-button use. The number of switch-button is limited by the sum of the overall cable length between switch(es) and the connected LED drivers, which may not exceed 20m.

### Notice

The compatibility with other devices must be tested in advance to the installation.

DALI application and switch-control application can not apply to the system at the same time.