

DALI Dimming LED Driver

LT-75-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-75-24D	220-240	0.5	0.95	10	75	0-3.125	24	25	91
LT-75-48D	220-240	0.5	0.95	10	75	0-1.57	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	40A/200us																						
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>6</td> <td>8</td> <td>10</td> <td>13</td> </tr> <tr> <td>C</td> <td>13</td> <td>17</td> <td>22</td> <td>27</td> </tr> </tbody> </table>				Circuit Breaker	Circuit Breaker Current				Typ.	10A	13A	16A	20A	B	6	8	10	13	C	13	17	22	27
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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...+50°C
Maximum Case Temperature t_c	Measured on t_c point indicated of the product label	80°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	$t_{cmax}=80^\circ\text{C}$, 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

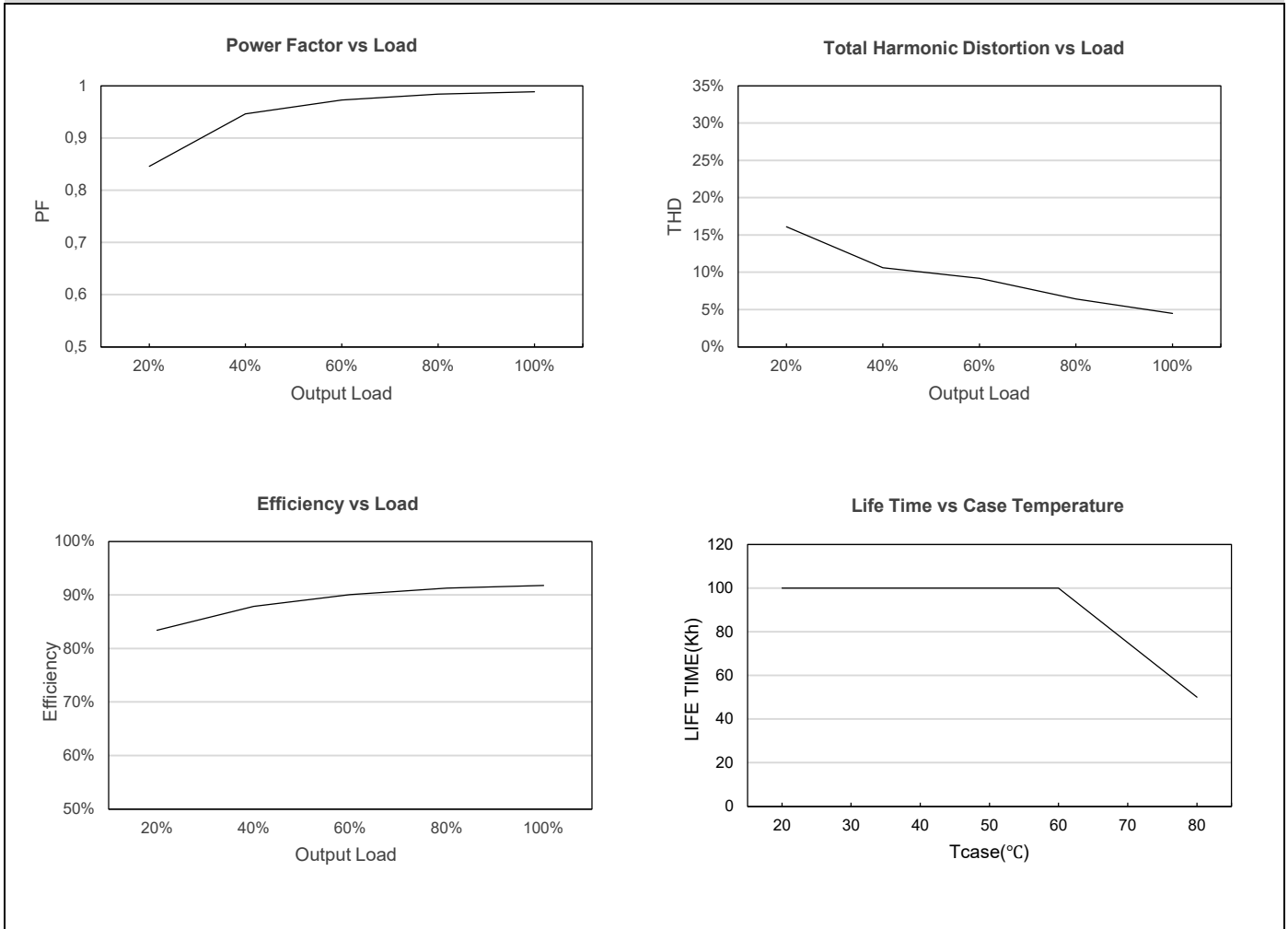
Housing Material	PC
Type of connection	Push terminal
Dimensions (LxWxH)	400x32x21.6mm
Mounting hole spacing	393mm
Weight	200 ± 10g

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

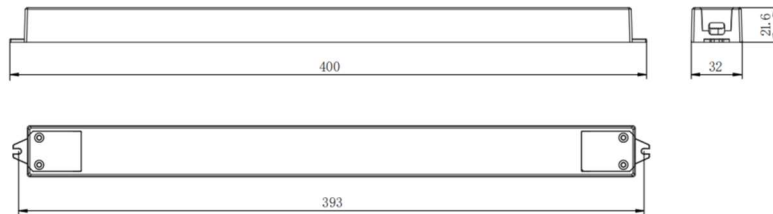
*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.

Product Characteristic Curve

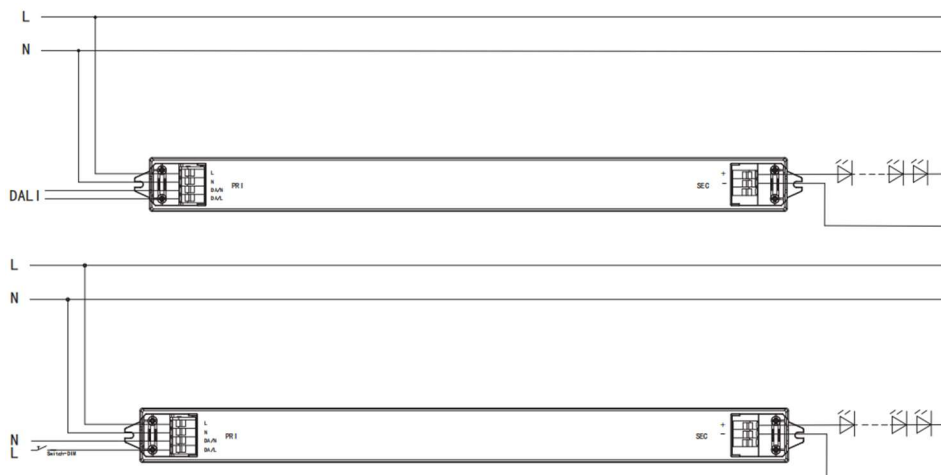


Appearance of Size

Dimension Drawing(mm)



Wiring Diagram



PRI

Cable cross-section: 0.75-1.5mm²

Stripping: 11mm

DALI

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.

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.