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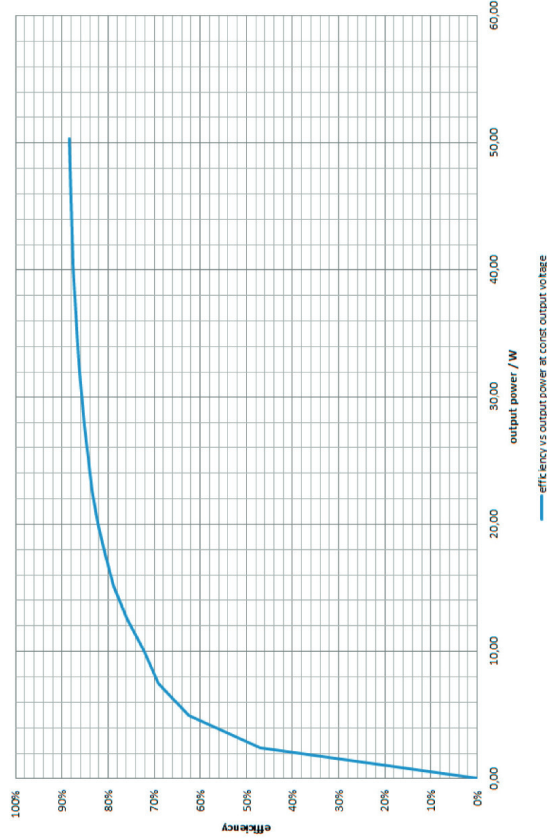
Platform portfolio

LED DRIVERS

All products are EN 61347-1 and EN 61347-2-13 approved.

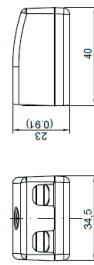


Efficiency

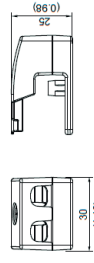


Accessories: Protective Covers

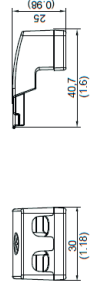
Model	Article no.	Model	Article no.
LT Cap	1839772	LT Cap Slim	1844770
LT Cap Slim Short	1896330		



All dimensions in millimeter (inch). Abweichung ± 0,5 (0,02) All Dimensions in millimeter (inch). Deviation ± 0,5 (0,02)



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LT50 DALI

50 W LED POWER SUPPLY



Characteristics

- DALI2 (Digital-Addressable Lighting Interface) and PUSH-DIM (control with push button) functionality
- Automatic detection of the kind of the control signal
- Dimming control range covers 1% to 100% intensity and 0% in the OFF position
- High efficiency: up to 88%
- Minimal housing cross section: 21 x 30 mm
- Wide operating temperature range: -20...+45°C
- Driver equipped with thermal protection
- This device is suitable for installing on or in furniture
- Driver is suitable for emergency lighting purposes regarding IEC61347-2-13 annex J.
- This device is suitable for high-risk area lighting
- Protective covers as additional accessories

LED DRIVERS FOR CREATIVE LIGHTING

The FRIWO LED driver series: Custom power supply solutions for your lighting concept. Featuring minimal housing cross sections and a variety of shapes, they offer maximum freedom of design. From flush-mounted drivers that are safe from vandalism to installation in the narrowest casings, FRIWO's standard drivers offer the ideal basis for the creative design of lighting solutions.

FRIWO's LED drivers offer maximum efficiency. LED power supply systems are subject to particular requirements with regard to safety (EN 61347-1/-2-13), EMC (EN 55015) and harmonic current emissions. In compliance with those guidelines, the drivers in the LT range control the power and voltage for a single device.

FRIWO offers a comprehensive LED portfolio, including LED drivers, the DIMMbox and LS12 light control, which offer excellent dimming solutions using DALI, Push-Dim or 1-10V. The LS12 even allows up to 100 LED drivers to be controlled in parallel, and features an additional power supply for external sensors. From safe power supply units to creative light control, FRIWO's modular system allows various components to be combined in a solution that precisely meets your individual needs.

Model Selection: Output Specifications

Article no.	Model	Constant Current Mode (CC)*		Constant Voltage Mode (CV)*		Efficiency (typ)	No-Load Power
		Voltage	Current	Voltage	Current		
1899313	LT50-24/2100 DALI	-	-	24 V	0 - 2100 mA	88.0%	<500 mW

* Standard units will be delivered with highest output voltage / output current.

Input Specifications

Input voltage 220-240V ±10%
 Frequency 50-60 Hz
 Input current 250 mA
 Inrush current (@240V) <24 A

General Specifications

Operating temperature -20...+45°C
 Operating humidity 10...95%
 Operating altitude 2000 m
 Storage temperature -40°C...+70°C
 Storage humidity 5...90%
 Atmospheric pressure 783 - 1070 hPa
 DALI / PUSH-DIM 264 VAC / 50 VDC
 Output voltage tolerance ±2 %
 Output current tolerance ±5 %
 Line regulation ±2 %
 Load regulation ±2 %
 Turn-on delay ≤0.5 s
 Hold-up time >10 ms (115 V)
 >50 ms (230 V)

MTBF calculation* 200,000 h acc. MIL217F (based on calculations at 120Vac/60Hz & 230Vac/50Hz, ambient 25°C)
 Housing material PC / Bayer Makrolon 6485

PCB material FR4

Dimensions 240x30x21 mm

Weight 130 g

Connectors / Push-in contact 0.20...1.5 mm² (solid wire, litz wire), 0.25...1.0 mm² (with wire end sleeves)

Dimming Function

Switching frequency LED current

Duty cycle f=484 Hz
 1 - 100% and OFF 0%
 DALI input 0xFE=100% to 0x56=1% (0x00=0%)
 PUSH-DIM input t (1% -> 100% or 100% -> 1%) = 4s
 t (on/off) = 20-600 ms

Safety

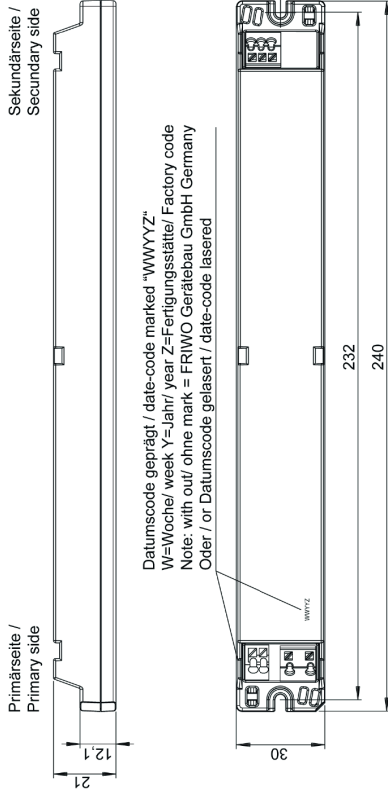
Safety standards EN 61347-1:2015, EN 61347-2-13:2014
 Approbations ENEC, DALI 2
 Protection class II
 Leakage Current ≤ 250 µA
 IP code IP20
 Overload protection Yes
 Overvoltage protection Yes
 Short circuit protection Yes
 No-load proof Yes (U_{max} = 24V)
 Overtemperature protection Yes (EN 61347-1 C.5.e)
 Self-resetting power derating via NTC
 Input over current protection Yes (Fuse F11 F13: T2, 0A/250V)
 non-exchangeable

EMC Compliance

Conducted and radiated emissions EN 55015:2013/A1:2015
 Immunity EN 61547:2009
 Harmonics EN 61000-3-2:2014
 Performance requirements EN 62384:2006/A1:2009

* MTBF are theoretically determined values, which does not guarantee the lifetime of the product.

Mechanical Drawings



Output Characteristics

