# **Light is OSRAM**



## OTi DALI 50/220-240/1A4 LT2 L G2

Constant current LED driver incl. OSRAM DALI features - SELV

Wide operating area up to 1400mA, 1...100% dimmable

Flexible, reliable solution for energy saving lighting: DALI dimmable & programmable, embedded corridor functionality and advanced TouchDIM with daylight harvesting, constant lumen output.

Automatic current set through the LEDSet interface.

### **Benefits**

Wide operating range: 600 – 1400mA Adjustable current via DALI programmable or LEDset2 Long lasting and high reliability Small, slim white metal housing 30 x 21 mm Suitable for emergency lighting units Smart analogue dimming 1...100% DALI-2 certified

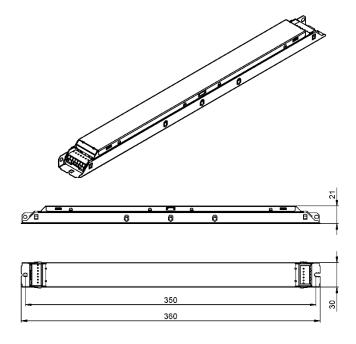
## **Applications**

Linear and area lighting
Office – industrial – shop

### **Applications**

CE, VDE-ENEC, VDE-EMC, RCM, W, EL

In preparation, if not already printed on the label



Housing material: metal, white painted

## **Product Features**

- Output current range 600 1400mA
- Fully digital programmable
- Analogue dimming down to 1%
- Very high efficiency up to 91%
- Low stand-by consumption <0.15 W</li>
- Output power up to 54 W
- Suitable for emergency lighting

- OSRAM SELV technology
- Overload & temperature protection
- Very low ripple ≤1%
- 100'000 h lifetime at t<sub>c</sub> = 65°C
- t<sub>c</sub> max = 75 °C
- Wide t<sub>a</sub> range -25 +50 °C
- 5 years guarantee

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# **Electrical Specifications**

	Item	Value	Unit	Remarks
	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	176 – 276	V	DC or RAC
	Maximum voltage	350	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.28	Α	
	Total Harmonic Distortion (THD)	< 15	%	Full load
⊨	Power factor	> 0.95		Full load, 220 – 240 V, 50 Hz / see graphs
NPUT	Efficiency	Up to 91	%	Full load, 220 – 240 V, 50 Hz / see graphs
Z	Starting time	≤ 0.9	s	
	Power losses	6	W	Maximum, full load
	Stand-by power	< 0.15	W	
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	20	A pk	th = 240 μs
	Max. units per circuit breaker	B16: 20 B10: 12		
	Protective conductor current	< 0.5	mA	Through PE
	Nominal voltage range	15 – 54	V	
	Maximum voltage	< 60	Vdc	w/ Open Circuit
	Nominal current range	600 – 1400	mA	LEDset open: 300mA; LEDset short: 1400mA
5	Current accuracy	+/- 3	%	with DALI; with LEDset2 +/-5%
OUTPUT	Current ripple	< 1	%	100 Hz., low freq. ripple is negligible
2	Nominal power range	12 – 54	W	
	Maximum power	54	W	
	Emergency output factor (EL)	15	%	Preset value, adjustable via software, at DC or RAC
	Galvanic isolation	YES		SELV
	Dimming control	yes		DALI-2 and TouchDIM
Dimming	Dimming range	1100	%	Complete analogue Dimming
Οin	Dimming Standard	DALI-2		
	Ambient temperature range t <sub>a</sub>	-25+50	°C	
	Maximum case temperature t <sub>c</sub>	75	°C	Measured on $t_{\mbox{\tiny c}}$ point indicated of the product label
L,	Max. case temp. in fault condition	110	°C	
鱼	Storage temperature range	-25+85	°C	
Σ	Relative humidity	5 85	%	Not condensing
õ	Surge transient protection	1   2	kV	L/N   LN/PE acc to. EN 61547 Clause 5.7
\₹	Environmental rating	Indoor		
ENVIRONMENT	IP rating	IP 20		
	Mains switching cycles	> 150'000 50'000		t₀ = 75°C, 0.2% / 1'000 h failure rate, 24h ON
	Expected lifetime	100'000	h	$t_c$ = 75°C, 0.2% / 1'000 h failure rate, 24h ON $t_c$ = 65°C, 0.1% / 1'000 h failure rate, 24h ON
		100 000		to - 00 G, 0.170 / 1 000 H fallufe fate, 24H ON

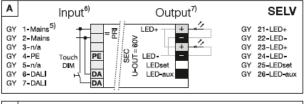
# **Wiring Diagram**

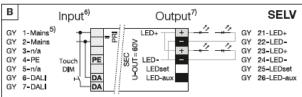
Terminal: Push in terminals Max. cable length - system: 2 m Geometry (l x b x h):  $360 \times 30 \times 21 \text{ mm}$ 

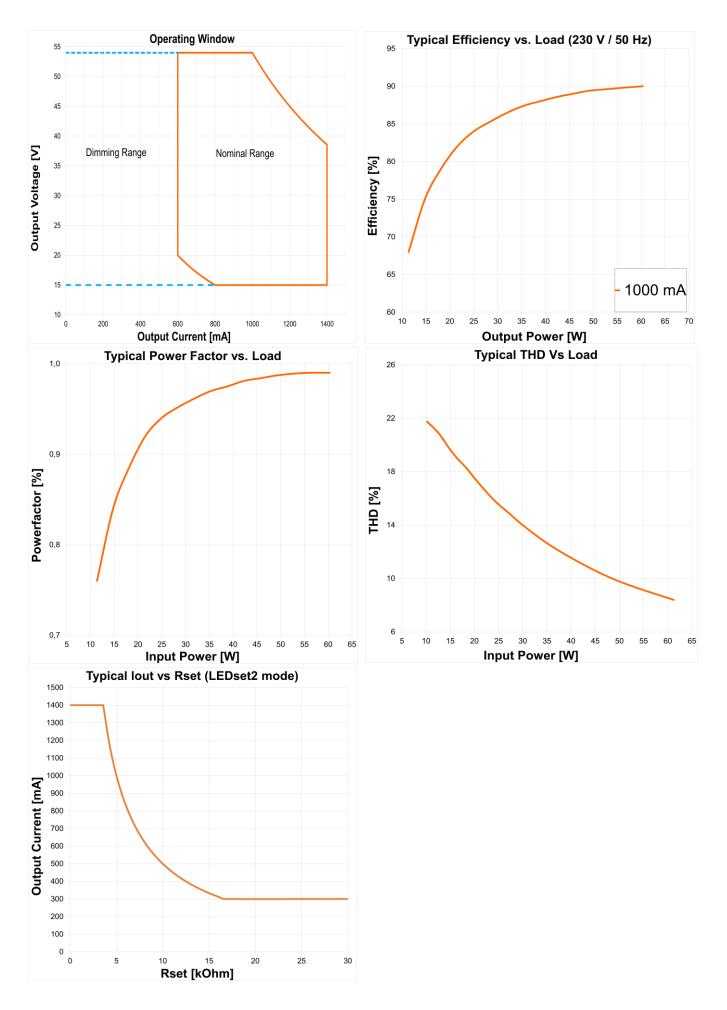
Wire preparation:
Push in s:0.5-1.5



8-9 mm







#### **Remarks**

- Input overvoltage protection: mains up to 350 Vac, for two hours maximum, will not destroy both the unit and the load; shut down of the load might occur in this condition.
- Input surge protection: the unit is protected against surge up to 1kV between L-N (symmetric surge) and 2kV between L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- Output short circuit / undervoltage protection: shut down of the load happens if Vout is out of the operating range.
- Output overload protection: the unit automatically reduces the output current to keep the output power below 54W.
- Output over voltage protection: shut down of the load might happen if Vout exceeds 54V.
  - Step 1: output current reduction to decrease Vout;
  - o Step 2: shut down of the load at longer or extreme overvoltage.
- No load operation: the unit automatically switches off, the maximum output voltage is <60V.</li>
- Overtemperature protection: the unit is protected against temporary overheating by automatic reduction of the output current when tc > 75°C.
- Enhanced programmable options:
  - Driver Guard: when active, the unit limits the maximum temperature of the driver according the prestart derating range.
  - o Soft Switch Off: when active, at DALI switch-off the LED current goes smoothly to zero.
  - Dim to dark: when active, the minimum dimming current is the minimum physical one provided by the unit. Compliance with local regulations must be checked.
- Switchover time: lower than 0.5 s, from AC to DC mains and viceversa.
- Output power hold time: > 4 ms, in case of mains dips.
- Emergency lighting: this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22;
   according to IEC 61347-2-13 Annex J.

### **Standards**

### **Ordering information**

IEC 61347-1 IEC 61347-2-13

IEC 62384

IEC 62386

IEC 61000-3-2

IEC 61000-3-3

IEC 61547

Product name		Туре	EAN10	EAN40	NAED	Pieces / box
	OTI DALI 50/220-240/1A4 LT2 L G2	AM0631400OL	4052899551787	4052899551794	n.a.	20

## **OSRAM GmbH**

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