### IT DALI 25/220-240/700 P5 CE (PHASE OUT)

ICUTRONIC - DALI (AstroDIM) IP65 (SELV) | Constant current LED drivers

### Product family features

- Supply voltage: 220...240 V
- AstroDim functionality
- Constant Lumen Output (CLO)
- Available with different wattage: 15 W, 25 W, 40 W
- DALI dimming (min.10%)



#### Product family benefits

- High surge protection: up to 4 kV (L-N)
- Fully programmable via T4T software (DALI / AstroDIM / Constant Lumen)
- Over temperature protection
- Double isolation between primary/secondary sides (SELV)
- IP rating: IP65
- Long lifetime

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OSRAM product - technical datasheet

#### Areas of application

- Industry lighting
- Suitable for luminaires of protection class I and II
- Street and urban lighting
- Residential lighting

Specifications are subject to changes without notice.

#### **Technical data**

#### Electrical data

Nominal input voltage	220240 V
Mains frequency	50/60 Hz
Input voltage AC	198264 V
Nominal input current at 230 V	0.16 A
Total harmonic distortion	< 8 %
Power factor λ	> 0.95 <sup>1)</sup>
Efficiency in full-load	86 % <sup>2)</sup>
Device power loss	4.5 W <sup>3)</sup>
Inrush current	10 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	42 <sup>5)</sup>
Max. ECG no. on circuit breaker 16 A (B)	68 <sup>5)</sup>
Surge capability (L-N)	2 kV
Surge capability (L/N-Ground)	4 kV <sup>6)</sup>
Nominal output voltage	1840 V
U-OUT (working voltage)	60 V
Nominal output current	350700 mA <sup>7)</sup>
Minimum output current	350 mA
Default output current	350 mA
Output current tolerance	±7.5 %
Output ripple current (100 Hz)	+/- 5 % <sup>8)</sup>
Nominal output power	6.328 W
Maximum output power	28 W

1) Full load

2) at 230 V, 50 Hz

3) Vin 230v 50Hz

4) Max, th = 250 µs

5) Type B

6) L/N – PE acc to EN 61547 Cluase 5.7

7) Default current 350 mA

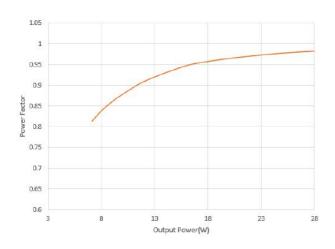
8) Low frequency ≤100Hz, full load @ 230V

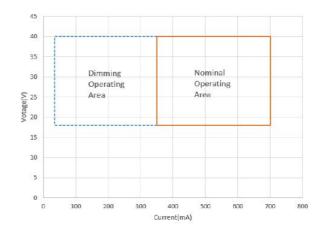
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#### Typical Power Factor v Load

#### **Operating Window**

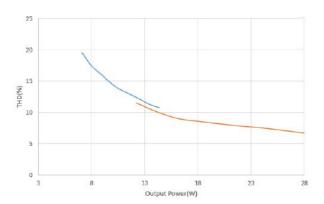




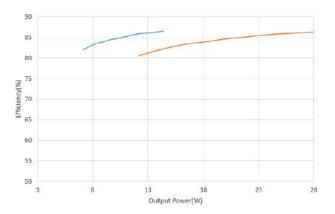
IT DALI 25 220-240 700 P5 CE Typical Power Factor vs. Load

IT DALI 25 220-240 700 P5 CE Operating Window

Typical THD v Load



Typical Efficiency v Load 230 V 50 Hz



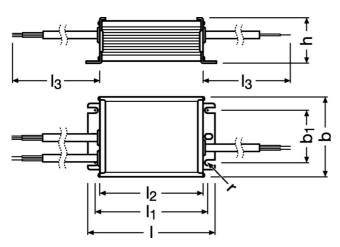
IT DALI 25 220-240 700 P5 CE Typical THD vs Load

#### IT DALI 25 220-240 700 P5 CE Typical Efficiency vs. Load

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#### **Dimensions & weight**



Product weight	400.00 g
Length	114.6 mm
Width	68.5 mm
Height	39.6 mm
Mounting hole spacing, width	42.9 mm
Cable cross-section, input side	1.0 mm²
Cable cross-section, output side	1.0 mm²
Wire preparation length, input side	10 mm
Wire preparation length, output side	10 mm

#### **Colors & materials**

Casing material	Aluminium

#### **Temperatures & operating conditions**

Ambient temperature range	-20+55 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-2585 °C
Permitted rel. humidity during operation	595 % <sup>1)</sup>

1) Non condensing, absolute humidity: 36g/m<sup>3</sup>

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#### Lifespan

#### ECG lifetime

50000 h<sup>1)</sup>

1) At maximum  $T_c = 75^{\circ}C / 10\%$  failure rate

#### Capabilities

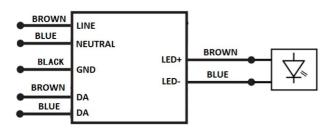
Control interface	DALI-2
Dimmable	Yes
Dimming interface	DALI / AstroDIM
Dimming range	10100 %
Constant lumen function	Yes
Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>
Suitable for fixtures with prot. class	1/11
Type of connection, input side	Cables
Type of connection, output side	Cables
Overload protection	Yes
Short-circuit protection	Yes
Intended for no-load operation	No
No-load proof	Yes

1) Output wires must be routed as close as possible to each other

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	DALI
Programming device	
Tuner4TRONIC	Yes
rogrammable features	
AstroDIM	Yes
StepDIM	not relevant
Certificates & standards Approval marks – approval	CE / ENEC
Standards	IEC/EN 61347-1 / ENEC: 61347-2-13 / IEC/EN 61547
Type of protection	IP65
	85044083900
ogistical data Commodity code Environmental information	
ogistical data Commodity code Environmental information	85044083900
ogistical data Commodity code Environmental information Information according Art. 33 of EU	85044083900 J Regulation (EC) 1907/2006 (REACh)
ogistical data Commodity code Environmental information Information according Art. 33 of EU Date of Declaration	85044083900 J Regulation (EC) 1907/2006 (REACh) 28-02-2025
ogistical data Commodity code Environmental information Information according Art. 33 of EU Date of Declaration Primary Article Identifier	85044083900 <b>J Regulation (EC) 1907/2006 (REACh)</b> 28-02-2025 4062172174237

#### Wiring Diagram



Wiring Diagram of IT DALI 220-240 P5

#### Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

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OSRAM

#### Additional product information

- Input overvoltage protection: the driver withstands an input voltage up to 305 Vac for a maximum of two hours, shut down of the output load might occur in case the supply voltage exceeds the declared input voltage range.
- Output short circuit protection: short circuit current is limited to the actual output current setting without damage to the unit. See typical operating window graph for details;
- Output under voltage operation: The output current setting is still effective if the load voltage is below the minimum output voltage without any safety issue, but normal performance such as ouput power, THD, EMI and lifetime etc is not guaranteed. See typical operating window graph for details.
- Output over load/voltage protection: In case the input voltage of the load exceeds the output voltage range which is auto defined by output current setting of the driver (Vo=Po/Io), it automatically reduces the output current. Auto-reversible without mains power on/off;
- No load protection: the driver automatically adjusts the output voltage to the maximum output voltage which is auto defined by output current setting if no load is connected. Auto-reversible with the correct load connected;
- Over temperature protection: the driver is protected against temporary overheating by shutting down until the overheating eliminated; Auto-reversible when temperature back to normal;
- The functional earth wire should be connected to the heat sink of the LED module to improve the surge withstand capability of the system and EMI in critical luminaries.
- The startup time to reach the set output current is less than 2s.
- For further details please consult the application note;
- The external flexible cable or cord of this driver cannot be replaced; if the cord is damaged, the driver shall be destroyed.
- Terminal block not included. Installation must be performed by a qualified person.
- The device has reinforced isolation between its primary, dimming and output circuits.
- These LED drivers do not suitable use for portable luminaires.

#### **Download Data**

File		
Certificates	PDF	►IT DALI P5 ENEC 260623
Mandatory Publications	PDF	►IT DALI P5 CE 4253474 07 060125
User instruction	PDF	►UI IT DALI 15 25 40 P5 CEDIM

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#### product - technical datasheet

#### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172174237	IT DALI 25/220-240/700 P5 CE	Shipping carton box 30 Pieces	363 x 323 x 248 mm	29.08 dm³	437.50 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit

#### Accessories Optional

Product description	Accessory name	Accessory code
IT DALI 25/220-240/700 P5 CE	DALI magic	►6977078996907
IT DALI 25/220-240/700 P5 CE	DALI magic	►4008321582768
IT DALI 25/220-240/700 P5 CE	DALI magic	▶6977078997416

#### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.