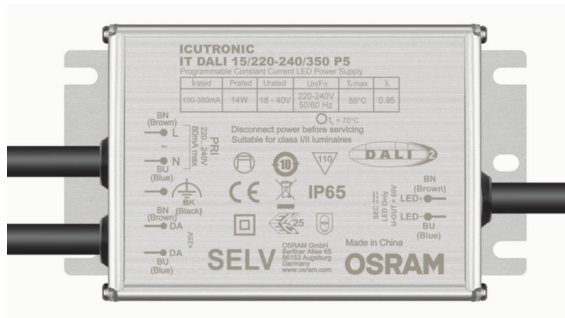


## IT DALI 15/220-240/350 P5 CE (PHASE OUT)

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

### Areas of application

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

## Technical data

### Electrical data

|                                          |                            |
|------------------------------------------|----------------------------|
| Nominal input voltage                    | 220...240 V                |
| Mains frequency                          | 50/60 Hz                   |
| Input voltage AC                         | 198...264 V                |
| Nominal input current at 230 V           | 0.08 A                     |
| Total harmonic distortion                | < 8 %                      |
| Power factor $\lambda$                   | > 0.95 <sup>1)</sup>       |
| Efficiency in full-load                  | 83 % <sup>2)</sup>         |
| Device power loss                        | 2.9 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                   | 18...40 V                  |
| U-OUT (working voltage)                  | 60 V                       |
| Nominal output current                   | 150...350 mA <sup>7)</sup> |
| Minimum output current                   | 150 mA                     |
| Default output current                   | 150 mA                     |
| Output current tolerance                 | ±7.5 %                     |
| Output ripple current (100 Hz)           | +/- 5 % <sup>8)</sup>      |
| Nominal output power                     | 2.7...14 W                 |
| Maximum output power                     | 14 W                       |

1) Full load

2) at 230 V, 50 Hz

3) Vin 230v 50Hz

4) Max, th = 250  $\mu$ s

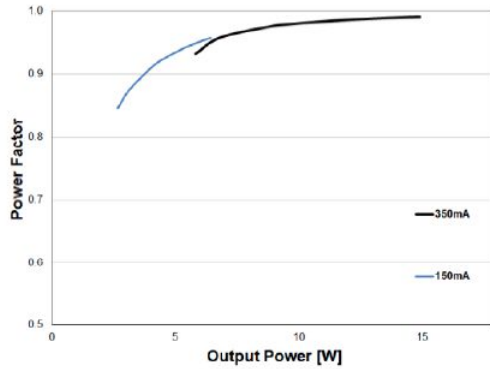
5) Type B

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

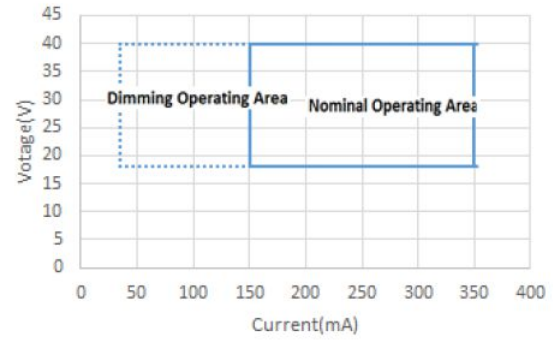
7) Default current 150 mA

8) Low frequency  $\leq$ 100Hz, full load @ 230V

## Typical Power Factor v Load



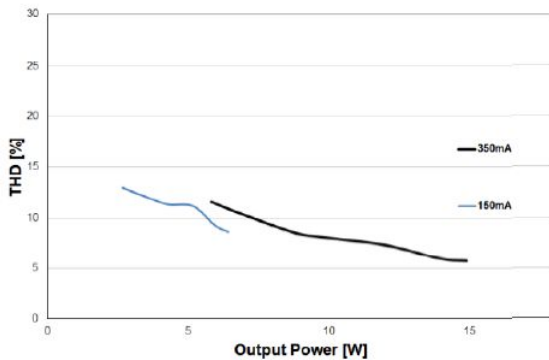
## Operating Window



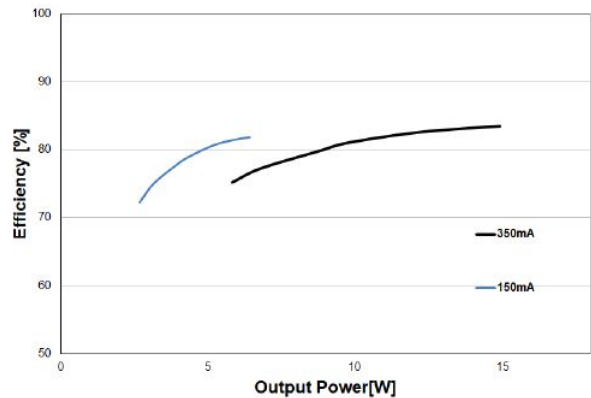
IT DALI 15 220-240 350 P5 CE Typical Power Factor vs. Load

IT DALI 15 220-240 350 P5 CE Operating Window

## Typical THD v Load



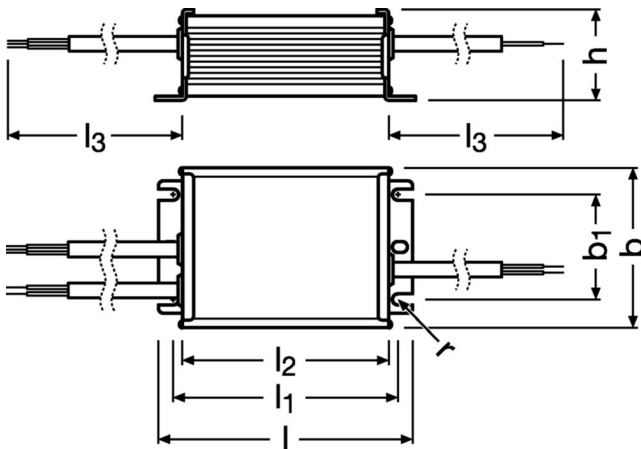
## Typical Efficiency v Load 230 V 50 Hz



IT DALI 15 220-240 350 P5 CE Typical THD vs Load

IT DALI 15 220-240 350 P5 CE Typical Efficiency vs. Load

## Dimensions & weight



|                                      |                     |
|--------------------------------------|---------------------|
| Product weight                       | 375.00 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 mm <sup>2</sup> |
| Cable cross-section, output side     | 1.0 mm <sup>2</sup> |
| 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     | 70 °C                  |
| Max.housing temperature in case of fault | 110 °C                 |
| Temperature range at storage             | -25...85 °C            |
| Permitted rel. humidity during operation | 5...95 % <sup>1)</sup> |

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

## Lifespan

|                     |                       |
|---------------------|-----------------------|
| <b>ECG lifetime</b> | 50000 h <sup>1)</sup> |
|---------------------|-----------------------|

1) At maximum  $T_c = 70^\circ\text{C}$  / 10% failure rate

## Capabilities

|                                               |                     |
|-----------------------------------------------|---------------------|
| <b>Control interface</b>                      | DALI-2              |
| <b>Dimmable</b>                               | Yes                 |
| <b>Dimming interface</b>                      | DALI / AstroDIM     |
| <b>Dimming range</b>                          | 10...100 %          |
| <b>Constant lumen function</b>                | Yes                 |
| <b>Max. cable length to lamp/LED module</b>   | 2.0 m <sup>1)</sup> |
| <b>Suitable for fixtures with prot. class</b> | I / II              |
| <b>Type of connection, input side</b>         | Cables              |
| <b>Type of connection, output side</b>        | Cables              |
| <b>Number of channels</b>                     | 1                   |
| <b>Overload protection</b>                    | Yes                 |
| <b>Short-circuit protection</b>               | Yes                 |
| <b>Intended for no-load operation</b>         | No                  |
| <b>No-load proof</b>                          | Yes                 |

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

## Programming

|                    |      |
|--------------------|------|
| Programming device | DALI |
| Tuner4TRONIC       | Yes  |

## Programmable 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                                             |

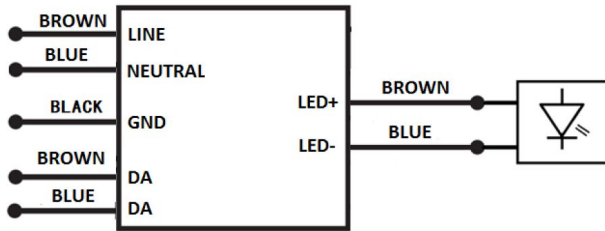
## Logistical data

|                |             |
|----------------|-------------|
| Commodity code | 85044083900 |
|----------------|-------------|

## Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |               |
|-----------------------------------------------------------------------|---------------|
| Date of Declaration                                                   | 28-02-2025    |
| Primary Article Identifier                                            | 4062172174213 |
| Declaration No. in SCIP database                                      | In work       |
| SCIP_STATUS                                                           | In work       |
| SCIP_ID                                                               |               |

## 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.



### 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 output 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 ( $V_o = P_o / I_o$ ), 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 luminaires.
- 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    |

## Logistical Data

| Product code  | Product description          | Packaging unit (Pieces/Unit)     | Dimensions (length x width x height) | Volume                | Gross weight |
|---------------|------------------------------|----------------------------------|--------------------------------------|-----------------------|--------------|
| 4062172174213 | IT DALI 15/220-240/350 P5 CE | Shipping carton box<br>30 Pieces | 363 x 323 x 248 mm                   | 29.08 dm <sup>3</sup> | 412.50 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 15/220-240/350 P5 CE | DALI magic     | ▶ 6977078996907 |
| IT DALI 15/220-240/350 P5 CE | DALI magic     | ▶ 4008321582768 |
| IT DALI 15/220-240/350 P5 CE | DALI magic     | ▶ 6977078997416 |

## Disclaimer

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