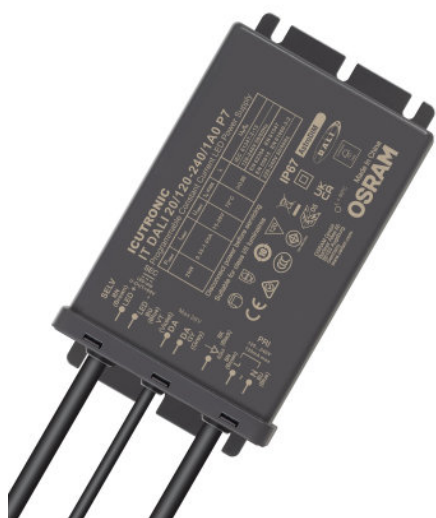


## IT DALI 20/120...240/1A0 P7

ICUTRONIC - DALI (AstroDIM) IP67 | Constant current LED drivers



### Características del producto

- Available with different wattage: 20 W, 40 W, 75 W, 110 W, 150 W, 200 W, 240 W
- AstroDim functionality
- DALI-2 certified (Part 251, 252, 253)
- DALI dimming (min.10%)
- Output current range 350...1050 mA
- Tensión de suministro: 120...240 V

### Beneficios del producto

- Versatile DALI driver due to flexible output characteristic
- Fully programmable via T4T software (DALI / AstroDIM / Constant Lumen)
- Elevada protección de sobretensión: hasta 10 kV
- IP rating: IP67 (Independent installation)
- High efficiency and reliability
- 5 years guarantee

### Áreas de aplicación

- Industry lighting
- Iluminación de calles y urbana
- Apto para el uso en luminarias en exteriores con clase de protección I y II



## Datos técnicos

### Datos eléctricos

|                                           |                             |
|-------------------------------------------|-----------------------------|
| Tensión nominal                           | 120...240 V                 |
| Tensión de entrada                        | 120...264 V                 |
| Corriente nominal                         | 0,11 A <sup>1)</sup>        |
| Frecuencia de red                         | 50/60 Hz                    |
| Factor de potencia $\lambda$              | 0,95 <sup>2)</sup>          |
| Distorsión armónica total                 | < 10 % <sup>3)</sup>        |
| Pérdida de potencia del equipo            | 4,0 W <sup>4)</sup>         |
| Networked standby power [AGGR]            | <0.50 W <sup>5)</sup>       |
| Corriente de encendido IP                 | 30 A <sup>6)</sup>          |
| Nº de ECE máximos con automático 10 A (B) | 14 <sup>7)</sup>            |
| Nº de ECE máximos con automático 16 A (B) | 22 <sup>7)</sup>            |
| Nº de ECE máximos con automático 25 A (B) | 34 <sup>7)</sup>            |
| Resis. a la sobretensión (L/N-tierra)     | 10 kV <sup>8)</sup>         |
| Tensión de aislamiento (L-N)              | 6 kV                        |
| Potencia de salida                        | 20 W                        |
| Potencia de salida máxima                 | 20 W                        |
| Efficiency in full-load                   | 86 % <sup>5)</sup>          |
| Corriente de salida                       | 350...1050 mA <sup>9)</sup> |
| Default output current                    | 700 mA                      |
| Corriente de salida tolerancia            | ±5 %                        |
| Corriente de salida rizada (100 Hz)       | +/- 5 % <sup>10)</sup>      |
| Output PSTLM                              | ≤1                          |
| Output SVM                                | ≤0.4                        |
| Corriente de salida mínima                | 70 mA <sup>11)</sup>        |
| Aislamiento galvánico                     | SELV                        |
| Tensión de salida                         | 15...29 V                   |
| U-OUT                                     | 60 V                        |
| Núm. máx. ECEs en 16 A MCB con EBN-OS     | 45                          |

<sup>1)</sup> Vin 230v 50Hz

<sup>2)</sup> Carga total a 230 V/50 Hz

<sup>3)</sup> At full load, 230 V, 50 Hz / see graphs

<sup>4)</sup> At Full load, 230 V, 50 Hz

<sup>5)</sup> at 230 V, 50 Hz

<sup>6)</sup> Max, th = 205 µs @ 50 % Ipk

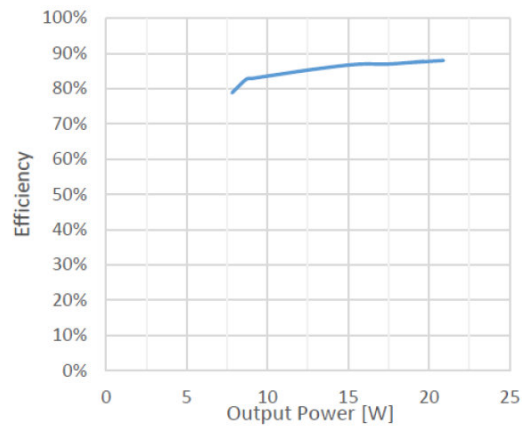
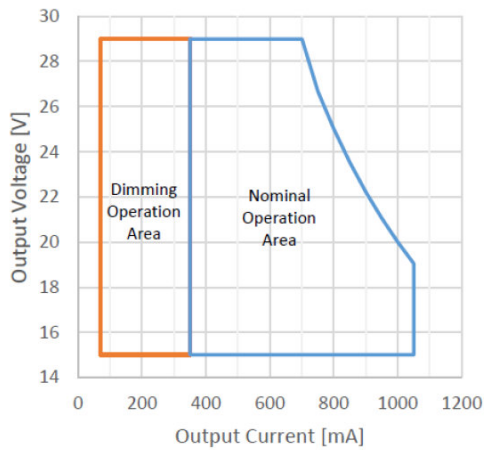
<sup>7)</sup> Type B

<sup>8)</sup> L - N acc to EN 61547 (>15 pulses) / L/N - PE acc to EN 61547 (>15 pulses)

<sup>9)</sup> Default 700 mA; 200...1050 mA adjustable

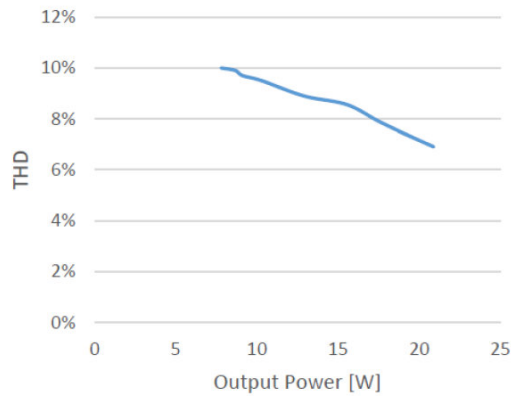
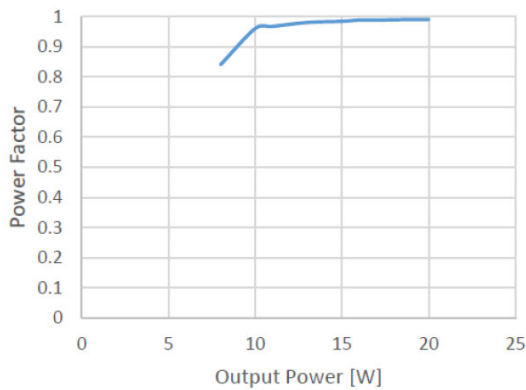
<sup>10)</sup> Ripple / average @ 100 Hz

11) Physical Minimum Dimming Current



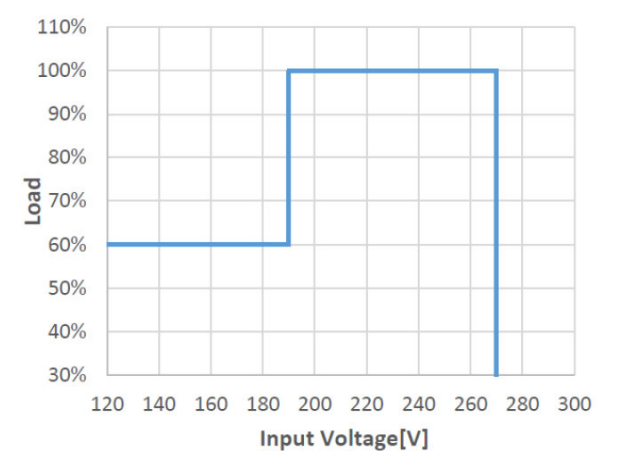
IT DALI 20 120-240 1A0 P7 Operating Window

IT DALI 20 120-240 1A0 P7 Typical Efficiency vs. Load

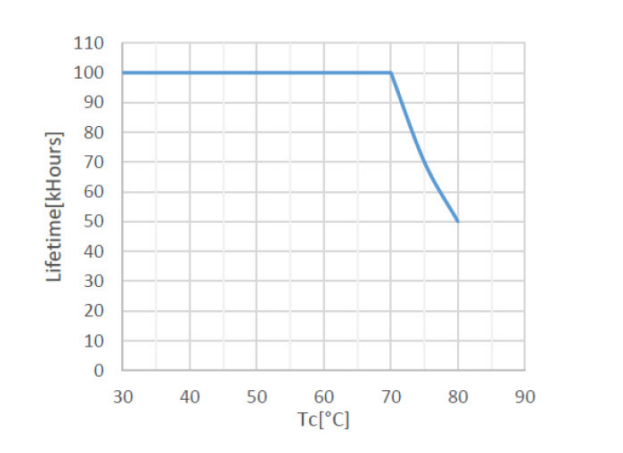


IT DALI 20 120-240 1A0 P7 Typical Power Factor vs. Load

IT DALI 20 120-240 1A0 P7 Typical THD vs Load

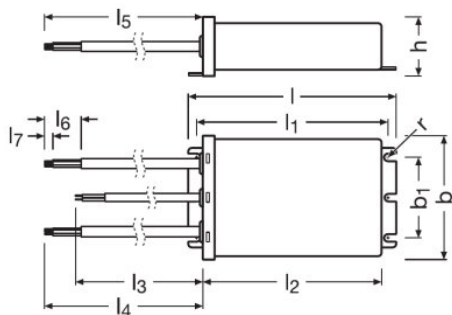


IT DALI 120-240 1A0 P7 Typical Input Voltage vs Load



IT DALI 20 120-240 1A0 P7 Lifetime vs Case Temp

Dimensiones y peso



|                                      |          |
|--------------------------------------|----------|
| Largo                                | 138,0 mm |
| Ancho                                | 82,5 mm  |
| Alto                                 | 38,0 mm  |
| Distancia entre taladros longitud    | 126,0 mm |
| Distancia entre taladros anchura     | 52,0 mm  |
| Peso del producto                    | 540,00 g |
| Sección de cable, entrada            | 1,0 mm²  |
| Sección de cable, salida             | 1,0 mm²  |
| Long aislamiento parte de la entrada | 10 mm    |

Temp. y condiciones de funcionamiento

|                                          |                        |
|------------------------------------------|------------------------|
| Margen de temperatura ambiente           | -40...+70 °C           |
| Temperatura de almacenamiento            | -40...+85 °C           |
| Temp. máx. en el punto de prueba tc      | 80 °C <sup>1)</sup>    |
| Temp. máx de la carcasa en caso de fallo | 120 °C                 |
| Humedad en el aire                       | 5...95 % <sup>2)</sup> |

<sup>1)</sup> Measured on tc point indicated on the product label.

<sup>2)</sup> Non condensing, absolute humidity: 36g/m³

Duración de vida

|               |                                |
|---------------|--------------------------------|
| ECE vida útil | 50000 / 100000 h <sup>1)</sup> |
|---------------|--------------------------------|

<sup>1)</sup> At maximum T<sub>c</sub> = 80°C / 10% failure rate / At maximum T<sub>c</sub> = 70°C / 10% failure rate

Capacidades

|                                         |                     |
|-----------------------------------------|---------------------|
| Regulable                               | Sí                  |
| Interfaz DIM                            | DALI-2 / AstroDIM   |
| Margen de regulación                    | 10...100 %          |
| Apto para luminarias con clase de prot. | I / II              |
| Función de lumen constante              | Programmable        |
| Ent. de coeficiente de temp. negativo   | No                  |
| Protección contra cortocircuito         | Sí                  |
| Prueba de no carga                      | Sí                  |
| Intended for no-load operation          | No                  |
| Longitud cableado máx. ECE/lámpara      | 2,0 m <sup>1)</sup> |
| Protección contra sobrecarga            | Sí                  |
| LEDset                                  | No                  |
| Number of channels                      | 1                   |
| DALI-2 Energy Data                      | Sí <sup>2)</sup>    |
| DALI-2 Diagnostic Data                  | Sí <sup>3)</sup>    |

<sup>1)</sup> Output wires must be routed as close as possible to each other

<sup>2)</sup> Acc. DALI part 252

<sup>3)</sup> Acc. DALI part 253

Programming

|                        |      |
|------------------------|------|
| Box programming        | No   |
| Tuner4TRONIC           | Sí   |
| Tuner4TRONIC Field App | No   |
| Programming device     | DALI |

Programmable features

|                       |                  |
|-----------------------|------------------|
| Constant Lumen        | Sí               |
| Driver Guard          | No               |
| AstroDIM              | Sí               |
| StepDIM               | No               |
| MainsDIM              | No               |
| Emergency Mode        | No               |
| Configuration Lock    | Sí               |
| DALI-2 Luminaire Data | Sí <sup>1)</sup> |

<sup>1)</sup> Acc. DALI part 251

Certificados & Normas

|                          |                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Tipo de protección       | IP67                                                                                                                                              |
| Normas                   | Según EN 61347-1/Según EN 61347-2-13/Según EN 55015/Según EN 61547/Según EN 61000-3-2/Según EN 61000-3-3/Acc. to EN 60598-1 (ED.8)/Según EN 62384 |
| Símbolos de homologación | CCC / CE / TISI / RCM / ENEC / UKCA / DALI-2 / IP67                                                                                               |

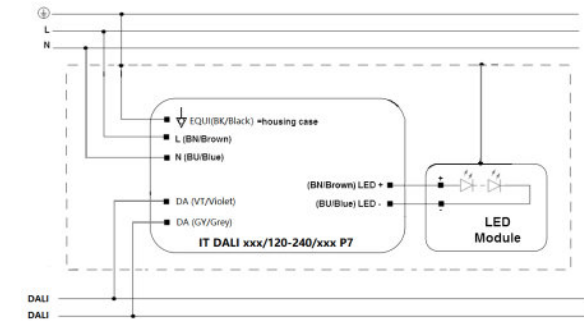
Datos logísticos

|                                |             |
|--------------------------------|-------------|
| Número estadístico de material | 85044083900 |
|--------------------------------|-------------|

Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |                                                                                                    |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Date of Declaration                                                   | 19-05-2023                                                                                         |
| Primary Article Identifier                                            | 4052899620308                                                                                      |
| Candidate List Substance 1                                            | Lead                                                                                               |
| CAS No. of substance 1                                                | 7439-92-1                                                                                          |
| Safe Use Instruction                                                  | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| Declaration No. in SCIP database                                      | 0214fb63-b7a2-4a36-8240-5f2a5e32fafb                                                               |

Esquema de conexión



| Item         | Value                   | Unit                      | Remarks                                                  |
|--------------|-------------------------|---------------------------|----------------------------------------------------------|
| INPUT        | Cable cross section     | 1.0                       | mm <sup>2</sup> L (Brown/BN), N (Blue/BU), PE (Black/BK) |
|              | Wire preparation length | 10                        | mm                                                       |
|              | Type of wire            | Flexible three core cable |                                                          |
|              | Lead length             | 300 ± 20                  | mm                                                       |
| OUTPUT       | Cable cross section     | 1.0                       | mm <sup>2</sup> LED+ (Brown/BN), LED- (Blue/BU)          |
|              | Wire preparation length | 10                        | mm                                                       |
|              | Type of wire            | Flexible two core cable   |                                                          |
|              | Lead length             | 300 ± 20                  | mm                                                       |
| DIMMING      | Cable cross section     | 0.3                       | mm <sup>2</sup> DALI+ (Violet/VT), DALI- (Grey/GY)       |
|              | Wire preparation length | 10                        | mm                                                       |
|              | Type of wire            | Flexible two core cable   |                                                          |
|              | Lead length             | 220 ± 20                  | mm                                                       |
| CABLE LENGTH | LED+LED-                | < 2                       | m                                                        |

IT DALI 120 240 P7 Wiring Diagram

IT DALI 120 240 P7 Wiring Diagram

Texto de la hoja técnica

- Input voltage range: Nominal operation at 198 – 264Vac. Workable at 120 – 277Vac without safety issue (refer to [8] Typical Input Voltage vs. Load), but normal performance such as THD, EMI, lifetime etc are not guaranteed;
- Input voltage range: Nominal operation at 198 – 264Vac. Workable also at 120 – 198Vac without safety issue (refer to graph Typical Input Voltage vs. Load), but normal performance such as THD, EMI, lifetime etc are not guaranteed;
- Output overload/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. The driver needs a power cycle to restart or DALI command with the correct load connected.
- Output short circuit protection: shut down of driver occur in case of output short circuit without damage to the unit.
- 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 of the driver ( $V_o=P_o/I_o$ ) if no load is connected. The driver needs a power cycle to restart 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;
- Disconnect the power before servicing. Terminal block is not included, installation must be performed by qualified person;
- The EQUI (housing) shall be connected to the heat sink of the LED module to improve the surge withstand capability of the system and EMI in critical luminaires.
- Not suitable to be mounted in ceiling corner
- The LED control gear cannot be abutted against or covered by normally flammable materials or used in installations where building insulation or debris is, or may be, present in normal use.
- The external flexible cable or cord of this driver cannot be replaced; if the cord is damaged, the driver shall be destroyed.
- The dimmer should fulfill at least basic insulation between control voltage and dimming circuit (for Australia and New Zealand).
- The minimum clearance distance from the top and sides of the controlgear to normally flammable building elements is  $A=B=C=Min.10mm$ , this clause does not apply when the LED driver is built-in the luminaires (for Australia and New Zealand).
- The startup time to reach the set output current is less than 2s.
- For further details please consult the application note;

Descarga datos

| Fichero                                                                             |                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|
|  | User instruction<br>User Instruction                       |
|  | Certificados<br>CB Certificate of OT DALI P7               |
|  | Certificados<br>EAC Certificate of OT products             |
|  | Certificados<br>ENEC Certificate of IT DALI P7             |
|  | Certificados<br>CCC certificate                            |
|  | Declaración de conformidad<br>IT DALI P7 CE 4287284 120822 |

## Hoja de datos de producto

|                                                                                   |                                                                |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | Declaración de conformidad<br>IT DALI P7 UK DoC 4287289 120822 |
|  | Datos CAD<br>IT DALI 20 40 1A0 P7 STEP 300323                  |

### 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.

### Logistical Data

| Código del producto | Descripción del producto    | Unidad de embalaje (Piezas/unidad) | Dimensiones (largo x ancho x alto) | Volúmen               | Peso bruto |
|---------------------|-----------------------------|------------------------------------|------------------------------------|-----------------------|------------|
| 4052899620308       | IT DALI 20/120...240/1A0 P7 | Embalaje de envío 20               | 589 mm x 218 mm x 207 mm           | 26.58 dm <sup>3</sup> | 11654.00 g |

El código del producto mencionado describe la unidad más pequeña de la cantidad que se puede pedir. Una unidad de envío puede contener uno o más productos individuales. Al cursar un pedido, introduzca la cantidad de la unidad de envío o su múltiple.

### Privacidad de datos

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on [www.myosram.com](http://www.myosram.com) and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here. However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

### Referencias / links

## Hoja de datos de producto

\* For more information on the multi-level guarantee and the terms and conditions of the guarantee visit <https://www.inventronics-light.com/multilevel-guarantees>

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### Aviso

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