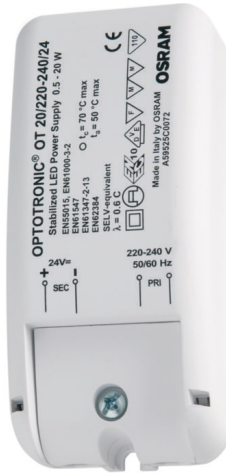


## OT 20/220-240/24

OPTOTRONIC Power supplier 24 V



### Product family features

- Type of protection: IP20
- Wide operating temperature range: -20...+50 °C
- Lifetime: up to 50,000 h (temperature at max.  $t_c$ )

### Product family benefits

- Installation in cold and hot environments
- Very stable output power
- High electrical reversible short-circuit, overload, overtemperature protection
- Independent installation possible

### Areas of application

- Facades, public squares, cruise ships
- Signage
- Suitable for indoor and outdoor installations

## Technical data

### Electrical data

|   |                           |
|---|---------------------------|
| <b>Nominal input voltage</b>                    | 220...240 V               |
| <b>Mains frequency</b>                          | 50...60 Hz                |
| <b>Input voltage AC</b>                         | 198...264 V <sup>1)</sup> |
| <b>Total harmonic distortion</b>                | 150 %                     |
| <b>Power factor <math>\lambda</math></b>        | 0.50 <sup>2)</sup>        |
| <b>Efficiency in full-load</b>                  | 83 % <sup>3)</sup>        |
| <b>Device power loss</b>                        | 4.0 W <sup>4)</sup>       |
| <b>Inrush current</b>                           | 17 A                      |
| <b>Max. ECG no. on circuit breaker 10 A (B)</b> | 23                        |
| <b>Max. ECG no. on circuit breaker 16 A (B)</b> | 42                        |
| <b>Surge capability (L-N)</b>                   | 1 kV                      |
| <b>Nominal output voltage</b>                   | 24 V / 24 V <sup>5)</sup> |
| <b>U-OUT (working voltage)</b>                  | 24 V                      |
| <b>Nominal output power</b>                     | 20 W <sup>6)</sup>        |
| <b>Maximum output power</b>                     | 20 W <sup>7)</sup>        |
| <b>Galvanic isolation</b>                       | SELV                      |

1) Permitted voltage range

2) Minimum

3) at 230 V, 50 Hz

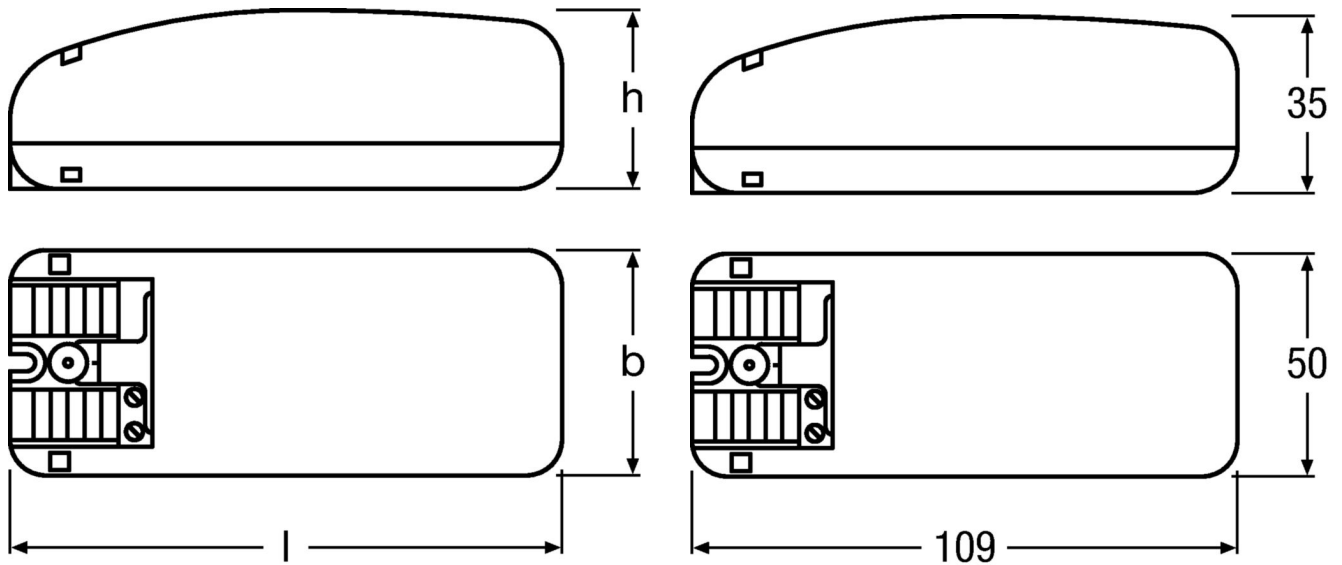
4) Maximum

5)  $\pm 1.0$  V

6) Partial load 0.5...20 W

7) at steady state

## Dimensions & weight



|                                      |                            |
|--------------------------------------|----------------------------|
| Length                               | 109.0 mm                   |
| Width                                | 50.0 mm                    |
| Height                               | 35.0 mm                    |
| Mounting hole spacing, width         | not relevant mm            |
| Cable cross-section, input side      | 0.75...1.5 mm <sup>2</sup> |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup>  |
| Wire preparation length, input side  | 10 mm                      |
| Wire preparation length, output side | 10 mm                      |
| Product weight                       | 108.00 g                   |

## Colors & materials

|                 |         |
|-----------------|---------|
| Casing material | Plastic |
|-----------------|---------|

## Temperatures & operating conditions

|  |                        |
|--|------------------------|
| Ambient temperature range                | -20...+50 °C           |
| Maximum temperature at tc test point     | 70 °C                  |
| Max.housing temperature in case of fault | 90 °C                  |
| Temperature range at storage             | -40...+85 °C           |
| Permitted rel. humidity during operation | 5...85 % <sup>1)</sup> |

1) Maximum 56 days/year at 85 %

## Lifespan

|                     |         |
|---------------------|---------|
| <b>ECG lifetime</b> | 30000 h |
|---------------------|---------|

## Capabilities

|   |                      |
|---|----------------------|
| <b>Dimmable</b>                               | No                   |
| <b>Max. cable length to lamp/LED module</b>   | 10 m <sup>1)</sup>   |
| <b>Suitable for fixtures with prot. class</b> | II                   |
| <b>Type of connection, output side</b>        | Screw terminal       |
| <b>Number of channels</b>                     | 1                    |
| <b>Overheating protection</b>                 | Automatic reversible |
| <b>Overload protection</b>                    | Automatic reversible |
| <b>Short-circuit protection</b>               | Automatic reversible |
| <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

## Certificates & standards

|                                  |   |
|----------------------------------|---|
| <b>Approval marks – approval</b> | CE / ENEC 10 / VDE / VDE-EMC / RCM  |
| <b>Standards</b>                 | Acc. to IEC 61347-2-13 / Acc. to IEC 62384 / Acc. to EN 55015 / Acc. to IEC 61000-3-2 / Acc. to IEC 61000-3-3 / Acc. to IEC 61547 |
| <b>Type of protection</b>        | IP20  |
| <b>Protection class</b>          | II  |

## Logistical data

|                       |             |
|-----------------------|-------------|
| <b>Commodity code</b> | 85044083900 |
|-----------------------|-------------|

## Environmental information

| <b>Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)</b> |               |
|--|---------------|
| <b>Date of Declaration</b>   | 30-05-2024    |
| <b>Primary Article Identifier</b>  | 4050300618111 |
| <b>Declaration No. in SCIP database</b>                                      | In work       |

### Additional product information

- EMI pass verified with wire length of 2 m, from the ECG to the LED module at full load.
- Wiring longer than 2 m from ECG to LED module is possible, but site installation conditions may interfere with EMI with these longer cables. EMI is therefore not verified in this condition.
- For wires longer than 2 m, the appropriate cable cross section must be carefully selected to reduce voltage drop.

## Download Data

| File                       |            |  |
|----------------------------|------------|--|
| Certificates               | PDF        | ▶ LED drivers EMC 40011668 300922                                    |
| Certificates               | PDF        | ▶ OT ENEC 40038447 270224  |
| CAD data 3-dim             | Compressed | ▶ OT 20 220-240 24V Indoor-3D stp file                               |
| Brochures                  | PDF        | ▶ OPTOTRONIC constant-voltage LED power supplies and controls (EN)   |
| Product Datasheet          | PDF        | ▶ 313200_ADDON TECHNICAL INFORMATION OT 20/230-240/24 VS20 OSRAM (G) |
| Mandatory Publications     | PDF        | ▶ OT 20 24 UK DoC 4314651 151122                                     |
| Declarations of conformity | PDF        | ▶ 334871_Declaration of conformity OT 20/220-240/24                  |
| Declarations of conformity | PDF        | ▶ EU Declaration of Conformity 3578669                               |
| User instruction           | PDF        | ▶ OPTOTRONIC® LED Power Supply                                       |

## 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

| Product code  | Product description | Packaging unit (Pieces/Unit)     | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|---------------------|----------------------------------|--------------------------------------|----------------------|--------------|
| 4050300618111 | OT 20/220-240/24    | Shipping carton box<br>20 Pieces | 270 x 229 x 94 mm                    | 5.81 dm <sup>3</sup> | 176.00 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

## Disclaimer

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