

## OT 20/220...240/24

CV Power supplies 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

|                                          |                           |
|------------------------------------------|---------------------------|
| Nominal input voltage                    | 220...240 V               |
| Mains frequency                          | 50...60 Hz                |
| Input voltage AC                         | 198...264 V <sup>1)</sup> |
| Input voltage DC                         | -                         |
| Total harmonic distortion                | 150 %                     |
| Power factor $\lambda$                   | 0.50 <sup>2)</sup>        |
| Efficiency in full-load                  | 83 % <sup>3)</sup>        |
| Device power loss                        | 4.0 W <sup>4)</sup>       |
| Inrush current                           | 17 A                      |
| Max. ECG no. on circuit breaker 10 A (B) | 23                        |
| Max. ECG no. on circuit breaker 10 A (C) | -                         |
| Max. ECG no. on circuit breaker 16 A (B) | 42                        |
| Max. ECG no. on circuit breaker 16 A (C) | -                         |
| Max. ECG no. on circuit breaker 25 A (B) | -                         |
| Surge capability (L-N)                   | 1 kV                      |
| Nominal output voltage                   | 24 V <sup>5)</sup>        |
| U-OUT (working voltage)                  | 24 V                      |
| Nominal output power                     | 20 W <sup>6)</sup>        |
| Maximum output power                     | 20 W <sup>7)</sup>        |
| Galvanic isolation                       | SELV                      |
| Galvanic isolation primary/secondary     | 3 kV                      |
| Surge capability (L/N-Ground)            | -                         |
| Output ripple Voltage (100 Hz)           | -                         |

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> Minimum

<sup>3)</sup> at 230 V, 50 Hz

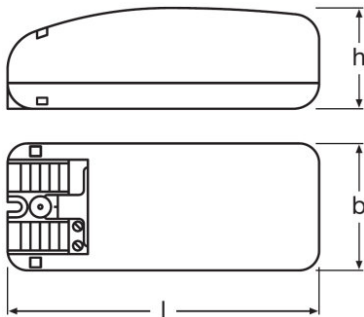
<sup>4)</sup> Maximum

<sup>5)</sup>  $\pm 1.0$  V

<sup>6)</sup> Partial load 0.5...20 W

<sup>7)</sup> at steady state

Dimensions & weight



|                                      |                            |
|--------------------------------------|----------------------------|
| Mounting hole spacing, length        | -                          |
| Product weight                       | 108.00 g                   |
| 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                      |
| Cable/wire length, input side        | -                          |
| Cable/wire length, output side       | -                          |
| Length                               | 109.0 mm                   |
| Width                                | 50.0 mm                    |
| Height                               | 35.0 mm                    |

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> |

<sup>1)</sup> Maximum 56 days/year at 85 %

Lifespan

|              |         |
|--------------|---------|
| ECG lifetime | 30000 h |
|--------------|---------|

Capabilities

## Product datasheet

|                                               |                      |
|-----------------------------------------------|----------------------|
| <b>Dimmable</b>                               | No <sup>1)</sup>     |
| <b>Dimming interface</b>                      | -                    |
| <b>Dimming range</b>                          | -                    |
| <b>Overheating protection</b>                 | Automatic reversible |
| <b>Overload protection</b>                    | Automatic reversible |
| <b>Short-circuit protection</b>               | Automatic reversible |
| <b>No-load proof</b>                          | Yes                  |
| <b>Intended for no-load operation</b>         | No                   |
| <b>Suitable for fixtures with prot. class</b> | II                   |
| <b>Type of connection, output side</b>        | Screw terminal       |
| <b>Number of channels</b>                     | 1                    |

<sup>1)</sup> With OPTOTRONIC dimmers

### 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>Protection class</b>          | II                                                                                                                      |
| <b>Type of protection</b>        | IP20                                                                                                                    |

### Logistical data

|                       |              |
|-----------------------|--------------|
| <b>Commodity code</b> | 850440829000 |
|-----------------------|--------------|

### Environmental information

|                                         |                                                                                                    |
|-----------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Date of Declaration</b>              | 23-12-2021                                                                                         |
| <b>Primary Article Identifier</b>       | 4050300618111                                                                                      |
| <b>Candidate List Substance 1</b>       | Lead                                                                                               |
| <b>CAS No. of substance 1</b>           | 7439-92-1                                                                                          |
| <b>Safe Use Instruction</b>             | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| <b>Declaration No. in SCIP database</b> | bbe50d75-fd0a-4476-b0c2-34d70d2132b2                                                               |

### 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.

## Product datasheet

### Download Data

| File                                                                              |                                                                                                  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|  | User instruction<br>OPTOTRONIC LED Power Supply                                                  |
|  | Addon Technical Information<br>313233_ADDON TECHNICAL INFORMATION OT 20230-24024 VS20 OSRAM (GB) |
|  | Brochures<br>OPTOTRONIC constant-voltage LED power supplies and controls (EN)                    |
|  | Certificates<br>OT ENEC 40038447 161221                                                          |
|  | Declarations of conformity<br>334871_Declaration of conformity &#150; OT 20220-24024             |
|  | Declarations of conformity<br>EU Declaration of Conformity 3578669                               |
|  | CAD data 3-dim<br>OT 20 220-240 24V Indoor-3D stp file                                           |

### 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    | 270 mm x 105 mm x 229 mm             | 6.49 dm <sup>3</sup> | 2396.00 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.