

## CV Power supplies 24 V



### Product family features

- DC mode functionality
- Type of protection: IP66 and IP67
- Surge protection: up to 4 kV (L-N) / 6 kV (L/N-PE)
- Wide operating temperature range: -30...+55 °C
- Lifetime: up to 50,000 h (temperature at max.  $t_c$ )

### Product family benefits

- Large range of products from 20 W to 250 W
- Installation in very cold and hot environments
- Very stable output power
- High electronical reversible short-circuit, overload, overtemperature protection
- Smart Power Supply: boosting power to turn on cold LEDs
- Independent installation possible

### Areas of application

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

## Product family datasheet

### Technical data

| Product description    | Electrical data      |                 |                 |                      |                        |                    |                    |
|------------------------|----------------------|-----------------|-----------------|----------------------|------------------------|--------------------|--------------------|
|                        | Nominal output power | Mains frequency | Nominal voltage | Device power loss    | Power factor $\lambda$ | ECG efficiency     | Inrush current     |
| OT 20/220...240/24 P   | 20 W                 | 0...60 Hz       | 220...240 V     | 4.1 W                | 0.95                   | 83 %               | 20 A               |
| OT 40/220...240/24 P   | 40 W                 | 0...60 Hz       | 220...240 V     | 4.0 W                | 0.95                   | 85 %               | 20 A               |
| OT 60/220...240/24 P   | 60 W                 | 0...60 Hz       | 220...240 V     | 8.9 W                | 0.95                   | 87 %               | 30 A               |
| OT 100/220...240/24 P  | 100 W                | 0...60 Hz       | 220...240 V     | 11.8 W               | 0.95                   | 90 %               | 60 A               |
| OT 130/220...240/24 P  | 130 W                | 0...60 Hz       | 220...240 V     | 14.7 W               | 0.95                   | 90.5 %             | 60 A               |
| OTe 120/220...240/24 E | 120 W <sup>2)</sup>  | 50...60 Hz      | 220...240 V     | 15.0 W <sup>4)</sup> | 0.95 <sup>5)</sup>     | 90 % <sup>6)</sup> | 70 A <sup>7)</sup> |
| OT 250/220...240/24 P  | 250 W                | 0...60 Hz       | 220...240 V     | 21.7 W               | 0.95                   | 92 %               | 75 A               |

| Product description    | Galvanic isolation primary/secondary | Nominal output voltage | Input voltage DC | Input voltage AC           | Nominal current      |
|------------------------|--------------------------------------|------------------------|------------------|----------------------------|----------------------|
| OT 20/220...240/24 P   | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |
| OT 40/220...240/24 P   | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |
| OT 60/220...240/24 P   | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |
| OT 100/220...240/24 P  | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |
| OT 130/220...240/24 P  | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |
| OTe 120/220...240/24 E | 3.75 kV <sup>8)</sup>                | 24 V <sup>9)</sup>     |                  | 198...264 V <sup>10)</sup> | 0.60 A <sup>3)</sup> |
| OT 250/220...240/24 P  | 3 kV                                 | 24.2 V                 | 176...250 V      | 198...264 V                |                      |

| Product description    | Dimensions & weight |         |         |                               |                | Temperatures & operating conditions |
|------------------------|---------------------|---------|---------|-------------------------------|----------------|-------------------------------------|
|                        | Length              | Width   | Height  | Mounting hole spacing, length | Product weight | Ambient temperature range           |
| OT 20/220...240/24 P   | 178.0 mm            | 43.0 mm | 25.0 mm | 169.0 mm                      | 315.00 g       | -30...+55 °C                        |
| OT 40/220...240/24 P   | 208.0 mm            | 43.0 mm | 26.0 mm | 199.0 mm                      | 416.00 g       | -30...+55 °C                        |
| OT 60/220...240/24 P   | 208.0 mm            | 43.0 mm | 26.0 mm | 199.0 mm                      | 420.00 g       | -30...+50 °C                        |
| OT 100/220...240/24 P  | 240.0 mm            | 50.0 mm | 34.0 mm | 227.0 mm                      | 765.00 g       | -30...+55 °C                        |
| OT 130/220...240/24 P  | 220.0 mm            | 63.0 mm | 37.0 mm | 207.0 mm                      | 943.00 g       | -30...+55 °C                        |
| OTe 120/220...240/24 E | 258.0 mm            | 51.0 mm | 45.0 mm | 241.0 mm                      | 1100.00 g      | -10...+50 °C                        |
| OT 250/220...240/24 P  | 265.0 mm            | 68.0 mm | 40.0 mm | 250.0 mm                      | 1340.00 g      | -30...+55 °C                        |

| Product description  | Permitted rel. humidity during operation | Capabilities                           |                        |                     |                          |
|----------------------|------------------------------------------|----------------------------------------|------------------------|---------------------|--------------------------|
|                      |                                          | Suitable for fixtures with prot. class | Overheating protection | Overload protection | Short-circuit protection |
| OT 20/220...240/24 P | 5...85 % <sup>1)</sup>                   | II                                     | Yes                    | Yes                 | Yes                      |
| OT 40/220...240/24 P | 5...85 % <sup>1)</sup>                   | II                                     | Yes                    | Yes                 | Yes                      |

## Product family datasheet

| Product description    | Permitted rel. humidity during operation | Capabilities                           |                        |                      |                          |
|------------------------|------------------------------------------|----------------------------------------|------------------------|----------------------|--------------------------|
|                        |                                          | Suitable for fixtures with prot. class | Overheating protection | Overload protection  | Short-circuit protection |
| OT 60/220...240/24 P   | 5...85 % <sup>1)</sup>                   | II                                     | Yes                    | Yes                  | Yes                      |
| OT 100/220...240/24 P  | 5...85 % <sup>1)</sup>                   | I                                      | Yes                    | Yes                  | Yes                      |
| OT 130/220...240/24 P  | 5...85 % <sup>1)</sup>                   | I                                      | Yes                    | Yes                  | Yes                      |
| OTe 120/220...240/24 E | 5...85 % <sup>1)</sup>                   | I                                      | Automatic reversible   | Automatic reversible | Automatic reversible     |
| OT 250/220...240/24 P  | 5...85 % <sup>1)</sup>                   | I                                      | Yes                    | Yes                  | Yes                      |

| Product description    | No-load proof | Dimmable | Number of channels | Certificates & standards |
|------------------------|---------------|----------|--------------------|--------------------------|
|                        |               |          |                    | Type of protection       |
| OT 20/220...240/24 P   | Yes           | No       | 1                  | IP66                     |
| OT 40/220...240/24 P   | Yes           | No       | 1                  | IP66                     |
| OT 60/220...240/24 P   | Yes           | No       | 1                  | IP66                     |
| OT 100/220...240/24 P  | Yes           | No       | 1                  | IP66/IP67                |
| OT 130/220...240/24 P  | Yes           | No       | 1                  | IP66/IP67                |
| OTe 120/220...240/24 E | Yes           | No       | 1                  | IP64                     |
| OT 250/220...240/24 P  | Yes           | No       | 1                  | IP66/IP67                |

| Product description   | Standards                                                                                                                                                | Approval marks – approval   | Logistical data |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------|
|                       |                                                                                                                                                          |                             | Commodity code  |
| OT 20/220...240/24 P  | Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384                                                                                                 | ENEC / RCM / CCC / EAC / CE | 850440829000    |
| OT 40/220...240/24 P  | Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384                                                                                                 | ENEC / RCM / CCC / EAC / CE | 850440829000    |
| OT 60/220...240/24 P  | Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384 | ENEC / RCM / CCC / EAC / CE | 850440829000    |
| OT 100/220...240/24 P | Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384 | ENEC / RCM / CCC / EAC / CE | 850440829000    |

## Product family datasheet

| Product description    | Standards                                                                                                                                                | Approval marks – approval   | Logistical data |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------|
|                        |                                                                                                                                                          |                             | Commodity code  |
| OT 130/220...240/24 P  | Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384 | ENEC / RCM / CCC / EAC / CE | 850440829000    |
| OTe 120/220...240/24 E | Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547              | CE / CB / CCC / BIS         | 850440829000    |
| OT 250/220...240/24 P  | Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 60598-1/Acc. to EN 62384 | ENEC / RCM / CCC / EAC / CE | 850440829000    |

1) Maximum 56 days/year at 85 %

2) Partial load 12...120 W

3) At 230 V

4) Maximum

5) Full load at 230 V

6) At full load and 230 V

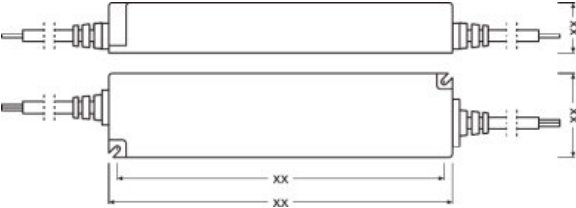
7) At 300 µs

8) SELV-equivalent

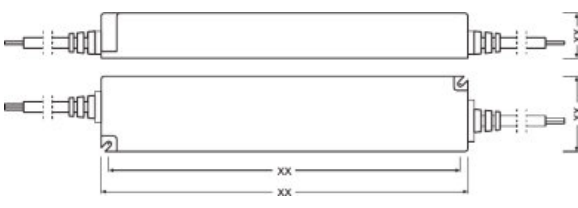
9) ±5 %

10) Permitted voltage range

Product family datasheet



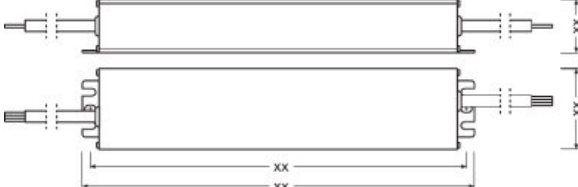
OT 20220-24024 P



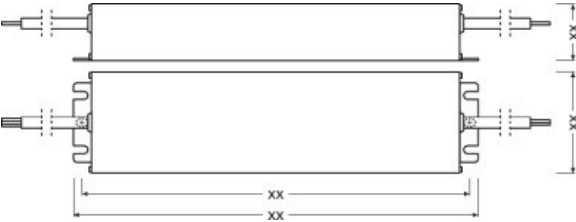
OT 40220-24024 P



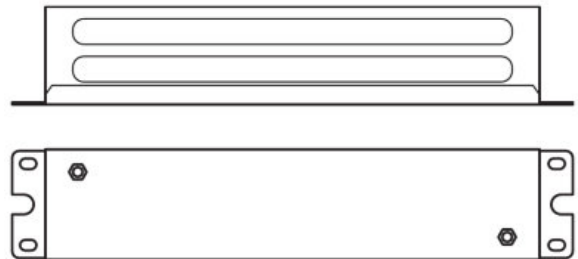
OT 60220-24024 P



OT 100220-24024 P

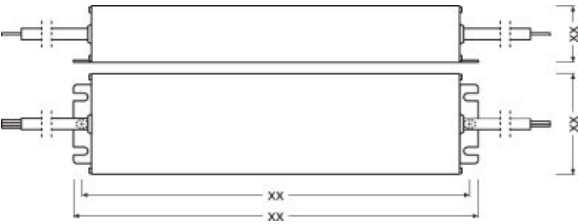


OT 130220-24024 P



330217\_OTe 120220-24024 E

Product family datasheet



OT 250220-24024 P

Application advice

For more detailed application information and graphics please see product datasheet.

Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

Download Data

| File                                                                                |                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  | User instruction<br>OPTOTRONIC LED Power Supply                                 |
|  | Product Datasheet<br>Datasheet OT 20220-24024 P                                 |
|  | Brochures<br>OPTOTRONIC constant-voltage LED power supplies and controls (EN)   |
|  | Certificates<br>CCC Certificate No. 2018011002044637                            |
|  | Certificates<br>CB Test Certificate No. SG PSB-LE-00930                         |
|  | Certificates<br>ENEC Certificate No. U6 18 01 84117 051                         |
|  | Declarations of conformity<br>EU Declaration of Conformity 3537796              |
|  | Declarations of conformity<br>Attestation of Conformity No. N8A 18 01 84117 055 |
|  | Declarations of conformity<br>Attestation of Conformity No. E8A 18 01 84117 050 |

## Product family datasheet

|                                                                                     |                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|    | Declarations of conformity<br>EU Declaration of Conformity OT 24V P_DIMP        |
|    | Product Datasheet<br>Datasheet OT 40220-24024 P                                 |
|    | Certificates<br>CCC Certificate No. 2018011002043864                            |
|    | Product Datasheet<br>Datasheet OT 60220-24024 P                                 |
|    | Product Datasheet<br>Datasheet OT 100220-24024 P                                |
|    | Certificates<br>CCC Certificate No. 2018011002043871                            |
|    | Certificates<br>CB Test Certificate No. SG PSB-LE-00906                         |
|    | Certificates<br>ENEC Certificate No. U6 18 01 84117 048                         |
|    | Declarations of conformity<br>Attestation of Conformity No. N8A 18 01 84117 054 |
|    | Declarations of conformity<br>Attestation of Conformity No. E8A 18 01 84117 049 |
|   | Product Datasheet<br>Datasheet OT 130220-24024 P                                |
|  | User instruction<br>Instruction Sheet fo OTe 120220-24024 E                     |
|  | Product Datasheet<br>Product datasheet of OTe 120220-24024 E                    |
|  | Declarations of conformity<br>EU Declaration of Conformity 3565780              |
|  | Product Datasheet<br>Datasheet OT 250220-24024 P                                |

### 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.

## Product family datasheet

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### Logistical Data

| Product code  | Product description    | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume                | Gross weight |
|---------------|------------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4052899545922 | OT 20/220...240/24 P   | Shipping carton box<br>20    | 334 mm x 277 mm x 186 mm             | 17.21 dm <sup>3</sup> | 7416.00 g    |
| 4052899545946 | OT 40/220...240/24 P   | Shipping carton box<br>20    | 334 mm x 310 mm x 194 mm             | 20.09 dm <sup>3</sup> | 9525.00 g    |
| 4052899545960 | OT 60/220...240/24 P   | Shipping carton box<br>20    | 334 mm x 310 mm x 194 mm             | 20.09 dm <sup>3</sup> | 9605.00 g    |
| 4052899545984 | OT 100/220...240/24 P  | Shipping carton box<br>10    | 384 mm x 324 mm x 134 mm             | 16.67 dm <sup>3</sup> | 8704.00 g    |
| 4052899546004 | OT 130/220...240/24 P  | Shipping carton box<br>10    | 439 mm x 299 mm x 126 mm             | 16.54 dm <sup>3</sup> | 10590.00 g   |
| 4008321645715 | OTe 120/220...240/24 E | Shipping carton box<br>10    | 408 mm x 302 mm x 141 mm             | 17.37 dm <sup>3</sup> | 11959.00 g   |
| 4052899546028 | OT 250/220...240/24 P  | Shipping carton box<br>10    | 459 mm x 344 mm x 144 mm             | 22.74 dm <sup>3</sup> | 14752.00 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.

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### Disclaimer

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