

OT 20/220...240/24 DIM P

CV Power supplies 24 V with 1...10 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)
- Dimmable via fully isolated 1...10 V interface

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 electrical reversible short-circuit, overload, overtemperature protection
- Smart Power Supply: boosting power to turn on cold LEDs
- Independent installation possible
- Dimming range: 1...100 %

Areas of application

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

Product datasheet

Technical data

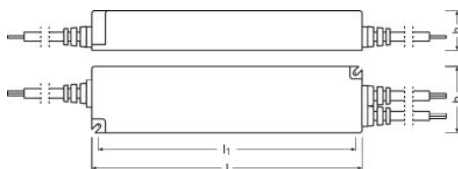
Electrical data

| | |
|--|----------------------|
| Nominal input voltage | 220...240 V |
| Mains frequency | 0...60 Hz |
| Input voltage AC | 198...264 V |
| Total harmonic distortion | < 15 % |
| Power factor λ | 0.95 |
| Efficiency in full-load | 83 % ¹⁾ |
| Device power loss | 3.4 W |
| Standby power | 0.50 W ¹⁾ |
| Inrush current | 20 A |
| Max. ECG no. on circuit breaker 10 A (B) | 49 |
| Max. ECG no. on circuit breaker 16 A (B) | 77 |
| Max. ECG no. on circuit breaker 25 A (B) | 120 |
| Surge capability (L-N) | 4 kV |
| Nominal output voltage | 24.2 V |
| U-OUT (working voltage) | 30 V |
| Nominal output power | 20 W |
| Maximum output power | 20 W ²⁾ |
| Galvanic isolation | SELV |
| Galvanic isolation primary/secondary | 3 kV |
| Input voltage DC | 176...276 V |

¹⁾ at 230 V, 50 Hz

²⁾ at steady state

Dimensions & weight



| | |
|-------------------------------|----------|
| Mounting hole spacing, length | 169.0 mm |
| Product weight | 315.00 g |

Product datasheet

| | |
|--------------------------------------|---------------------|
| Cable cross-section, input side | 1.0 mm ² |
| Cable cross-section, output side | 1.0 mm ² |
| Wire preparation length, input side | 90 mm |
| Wire preparation length, output side | 90 mm |
| Cable/wire length, control input | 320 mm |
| Cable/wire length, input side | 300 mm |
| Cable/wire length, output side | 300 mm |
| Length | 178.0 mm |
| Width | 43.0 mm |
| Height | 25.0 mm |

Colors & materials

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

Temperatures & operating conditions

| | |
|--|------------------------|
| Ambient temperature range | -30...+55 °C |
| Maximum temperature at tc test point | 85 °C |
| Max.housing temperature in case of fault | 110 °C |
| Temperature range at storage | -40...+85 °C |
| Permitted rel. humidity during operation | 5...85 % ¹⁾ |

¹⁾ Maximum 56 days/year at 85 %

Lifespan

| | |
|--------------|---------|
| ECG lifetime | 50000 h |
|--------------|---------|

Capabilities

| | |
|--|------------------------|
| Dimmable | Yes |
| Dimming interface | 1...10 V |
| Dimming range | 1...100 % |
| Dimming method | Pulse Width Modulation |
| Overheating protection | Yes |
| Overload protection | Yes |
| Short-circuit protection | Yes |
| No-load proof | Yes |
| Intended for no-load operation | No |
| Suitable for fixtures with prot. class | II |
| Type of connection, output side | Cables |
| Number of channels | 1 |

Product datasheet














Certificates & standards

| | |
|---------------------------|--|
| Approval marks – approval | ENEC / RCM / CCC / EAC |
| Standards | 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 |
| Protection class | II |
| Type of protection | IP66 |

Logistical data

| | |
|----------------|--------------|
| Commodity code | 850440829000 |
|----------------|--------------|

Download Data

| File |
|---|
|  User instruction OPTOTRONIC LED Power Supply |
|  Addon Technical Information Dimming table for OT (EN) |
|  Product Datasheet Datasheet OT 20220-24024 DIM P |
|  Brochures OPTOTRONIC constant-voltage LED power supplies and controls (EN) |
|  Certificates Certificate of NSW27873-3 Mod OT 24V P G2 DIM |
|  Certificates CCC Certificate No. 2018011002044637 |
|  Certificates CB Test Certificate No. SG PSB-LE-00930 |
|  Certificates ENEC Certificate No. U6 18 01 84117 051 |
|  Declarations of conformity EU Declaration of Conformity 3537796 |
|  Declarations of conformity Attestation of Conformity No. N8A 18 01 84117 055 |
|  Declarations of conformity Attestation of Conformity No. E8A 18 01 84117 050 |
|  Declarations of conformity OT 24V P DIMP CE 3537796 05 210921 |
|  CAD data 3-dim OT 20 220-240 24 DIM P-3D stp file |

Product datasheet

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 |
|---------------|--------------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4052899545809 | OT 20/220...240/24 DIM P | Shipping carton box 20 | 334 mm x 277 mm x 186 mm | 17.21 dm ³ | 8116.00 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.