

OT 50/220...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 ¹⁾
Input voltage DC	176...274 V ²⁾
Total harmonic distortion	< 20 %
Power factor λ	0.95/0.90 ³⁾
Efficiency in full-load	85 % ⁴⁾
Device power loss	8.0 W ⁵⁾
Inrush current	45 A ⁶⁾
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 16 A (B)	19
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L-N)	1 kV
Nominal output voltage	24 V ⁷⁾
U-OUT (working voltage)	24 V
Nominal output power	50 W ⁸⁾
Maximum output power	50 W ⁹⁾
Galvanic isolation	SELV
Galvanic isolation primary/secondary	3.75 kV ¹⁰⁾

1) V_{AC} / Permitted voltage range

2) Permitted voltage range

3) Full load at 230 V/Half load at 230 V

4) at 230 V, 50 Hz

5) Maximum

6) $t_{width} = 80 \mu s$ (measured at 50 % I_{peak})

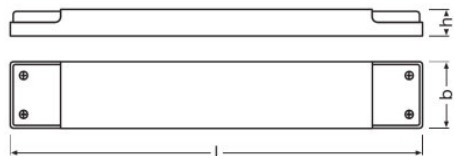
7) +0.9/-0.5 V

8) Partial load 0...50 W

9) at steady state

10) SELV

Dimensions & weight



Product weight	290.00 g
Cable cross-section, input side	0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 mm ² ¹⁾
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	242.0 mm
Width	40.0 mm
Height	16.0 mm

¹⁾ Solid or flexible leads

Colors & materials

Casing material	Plastic
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Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	95 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-30...85 °C
Permitted rel. humidity during operation	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h ¹⁾
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¹⁾ At $T_{case} = 80^{\circ}C$ at T_c point / 10% failure rate

Additional product data

Product datasheet

Successor EAN	4062172135856
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Capabilities

Dimmable	No
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Suitable for fixtures with prot. class	II
Type of connection, output side	Screw terminal

Certificates & standards

Approval marks – approval	CE / CB / RCM / ENEC 18
Standards	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 61547
Protection class	II
Type of protection	IP20

Logistical data

Commodity code	850440829000
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Environmental information







Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	14-04-2022
Primary Article Identifier	4052899905566
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	736fa75f-f2e4-436b-8036-7f708a5ed7b5

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	
	Brochures OPTOTRONIC constant-voltage LED power supplies and controls (EN)
	Certificates 664760_CEAG OT50
	Certificates 664761_ENEC mark approval_OT 5024
	Declarations of conformity 728507_EU Declaration OT
	Declarations of conformity 3540710_EU Declaration of conformity OT 50220-24024
	Installation/Operation notice 343028_Instruction Sheet OT 50220-24024

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
4052899905566	OT 50/220...240/24	Shipping carton box 20	288 mm x 134 mm x 248 mm	9.57 dm ³	4758.00 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.