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 electronical 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

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Technical data

	Electrical data					
Product description	**Nominal input voltage**	**Mains frequency**	**Input voltage AC**	**Total harmonic distortion**	**Power factor λ**	**Efficiency in full-load**
OT 20/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	83 % [1]
OT 40/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	85 % [1]
OT 60/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	86 % [1]
OT 100/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	90 % [1]
OT 130/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	90.5 % [1]
OT 250/220…240/24 DIM P	220…240 V	0…60 Hz	198…264 V	< 15 %	0.95	92 % [1]

Product description	**Device power loss**	**Inrush current**	**Max. ECG no. on circuit breaker 10 A (B)**	**Max. ECG no. on circuit breaker 16 A (B)**	**Max. ECG no. on circuit breaker 25 A (B)**	**Surge capability (L-N)**
OT 20/220…240/24 DIM P	3.4 W	20 A	49	77	120	4 kV
OT 40/220…240/24 DIM P	6.0 W	20 A	36	57	87	4 kV
OT 60/220…240/24 DIM P	7.8 W	30 A	21	34	53	4 kV
OT 100/220…240/24 DIM P	10 W	60 A	10	16	26	4 kV
OT 130/220…240/24 DIM P	13.3 W	60 A	8	13	20	4 kV
OT 250/220…240/24 DIM P	20 W	75 A	3	8	13	4 kV

Product description	**Nominal output voltage**	**U-OUT (working voltage)**	**Nominal output power**	**Maximum output power**	**Galvanic isolation**
OT 20/220…240/24 DIM P	24.2 V	30 V	20 W	20 W [2]	SELV
OT 40/220…240/24 DIM P	24.2 V	30 V	40 W	40 W [2]	SELV
OT 60/220…240/24 DIM P	24.2 V	30 V	60 W	60 W [2]	SELV
OT 100/220…240/24 DIM P	24.2 V	30 V	100 W	100 W [2]	SELV
OT 130/220…240/24 DIM P	24.2 V	30 V	130 W	130 W [2]	SELV
OT 250/220…240/24 DIM P	24.2 V	30 V	250 W	250 W [2]	SELV

				Dimensions & weight
Product description	**Galvanic isolation primary/secondary**	**Input voltage DC**	**Surge capability (L/N-Ground)**	**Mounting hole spacing, length**
OT 20/220…240/24 DIM P	3 kV	176…276 V		169.0 mm
OT 40/220…240/24 DIM P	3 kV	176…276 V		199.0 mm
OT 60/220…240/24 DIM P	3 kV	176…276 V		199.0 mm
OT 100/220…240/24 DIM P	3 kV	176…276 V	6 kV	227.0 mm
OT 130/220…240/24 DIM P	3 kV	176…276 V	6 kV	207.0 mm
OT 250/220…240/24 DIM P	3 kV	176…276 V	6 kV	250.0 mm

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Product description	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side
OT 20/220…240/24 DIM P	315.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm
OT 40/220…240/24 DIM P	416.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm
OT 60/220…240/24 DIM P	420.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm
OT 100/220…240/24 DIM P	765.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm
OT 130/220…240/24 DIM P	943.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm
OT 250/220…240/24 DIM P	1340.00 g	1.0 mm²	1.0 mm²	90 mm	90 mm

Product description	Cable/wire length, control input	Cable/wire length, input side	Cable/wire length, output side	Height
OT 20/220…240/24 DIM P	320 mm	300 mm	300 mm	25.0 mm
OT 40/220…240/24 DIM P	320 mm	300 mm	300 mm	26.0 mm
OT 60/220…240/24 DIM P	320 mm	300 mm	300 mm	26.0 mm
OT 100/220…240/24 DIM P	320 mm	300 mm	300 mm	34.0 mm
OT 130/220…240/24 DIM P	320 mm	300 mm	300 mm	37.0 mm
OT 250/220…240/24 DIM P	320 mm	300 mm	300 mm	40.0 mm

			Colors & materials	Temperatures & operating conditions		
Product description	Width	Length	Casing material	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault
OT 20/220…240/24 DIM P	43.0 mm	178.0 mm	Plastic	-30…+55 °C	85 °C	110 °C
OT 40/220…240/24 DIM P	43.0 mm	208.0 mm	Plastic	-30…+55 °C	90 °C	110 °C
OT 60/220…240/24 DIM P	43.0 mm	208.0 mm	Plastic	-30…+55 °C	90 °C	110 °C
OT 100/220…240/24 DIM P	50.0 mm	240.0 mm	Metal	-30…+55 °C	80 °C	110 °C
OT 130/220…240/24 DIM P	63.0 mm	220.0 mm	Metal	-30…+55 °C	80 °C	110 °C
OT 250/220…240/24 DIM P	68.0 mm	265.0 mm	Metal	-30…+55 °C	85 °C	110 °C

			Lifespan	Capabilities	
Product description	Temperature range at storage	Permitted rel. humidity during operation	ECG lifetime	Dimmable	Dimming interface
OT 20/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V
OT 40/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V
OT 60/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V
OT 100/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V
OT 130/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V
OT 250/220…240/24 DIM P	-40…+85 °C	5…85 % [3)]	50000 h	Yes	1…10 V

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Product description	Dimming range	Dimming method	Overheating protection	Overload protection
OT 20/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes
OT 40/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes
OT 60/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes
OT 100/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes
OT 130/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes
OT 250/220…240/24 DIM P	1…100 %	Pulse Width Modulation	Yes	Yes

Product description	Short-circuit protection	No-load proof	Intended for no-load operation
OT 20/220…240/24 DIM P	Yes	Yes	No
OT 40/220…240/24 DIM P	Yes	Yes	No
OT 60/220…240/24 DIM P	Yes	Yes	No
OT 100/220…240/24 DIM P	Yes	Yes	No
OT 130/220…240/24 DIM P	Yes	Yes	No
OT 250/220…240/24 DIM P	Yes	Yes	No

				Certificates & standards
Product description	Suitable for fixtures with prot. class	Type of connection, output side	Number of channels	Approval marks – approval
OT 20/220…240/24 DIM P	II	Cables	1	ENEC / RCM / CCC / EAC
OT 40/220…240/24 DIM P	II	Cables	1	ENEC / RCM / CCC / EAC
OT 60/220…240/24 DIM P	II	Fixed connection (terminal)	1	ENEC / RCM / CCC / EAC
OT 100/220…240/24 DIM P	I	Cables	1	ENEC / RCM / CCC / EAC
OT 130/220…240/24 DIM P	I	Cables	1	ENEC / RCM / CCC / EAC
OT 250/220…240/24 DIM P	I	Fixed connection (terminal)	1	ENEC / RCM / CCC / EAC

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				Logistical data
Product description	**Standards**	**Protection class**	**Type of protection**	**Commodity code**
OT 20/220...240/24 DIM 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	II	IP66	85044083900
OT 40/220...240/24 DIM 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	II	IP66	85044083900
OT 60/220...240/24 DIM 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	II	IP66	85044083900
OT 100/220...240/24 DIM 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	I	IP66/IP67	85044083900
OT 130/220...240/24 DIM 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	I	IP66/IP67	85044083900
OT 250/220...240/24 DIM 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	I	IP66/IP67	85044083900

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	Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)			
Product description	**Date of Declaration**	**Primary Article Identifier**	**Candidate List Substance 1**	**CAS No. of substance 1**
OT 20/220...240/24 DIM P	23-06-2023	4052899545809	Lead	7439-92-1
OT 40/220...240/24 DIM P	23-06-2023	4052899545823	Lead	7439-92-1
OT 60/220...240/24 DIM P	26-05-2023	4052899545847	Lead	7439-92-1
OT 100/220...240/24 DIM P	23-06-2023	4052899545861	Lead	7439-92-1
OT 130/220...240/24 DIM P	23-06-2023	4052899545885	Lead	7439-92-1
OT 250/220...240/24 DIM P	28-04-2023	4052899545908	Lead	7439-92-1

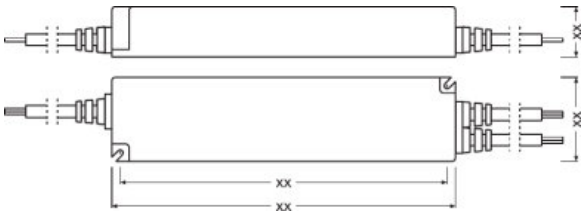
Product description	**Safe Use Instruction**	**Declaration No. in SCIP database**
OT 20/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	45a1ad4a-59ef-45dd-9d76-aa88ea19039d
OT 40/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	805f645e-b0e6-4962-a500-7749a5851396
OT 60/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	514ea1ca-5514-42d1-a479-dcbd386967b2
OT 100/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	4a1ede5f-216f-45c0-9328-9fff99e880b5
OT 130/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f1105f25-6e31-4c8a-ac85-f86a35b70f5b
OT 250/220...240/24 DIM P	The identification of the Candidate List substance is sufficient to allow safe use of the article.	6106517c-2d32-4662-a057-18d404237ee9

[1] at 230 V, 50 Hz

[2] at steady state

[3] Maximum 56 days/year at 85 %

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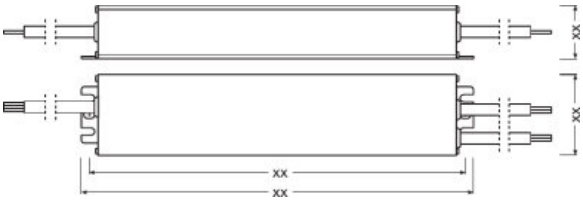
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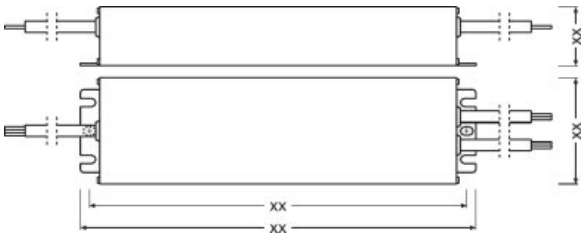
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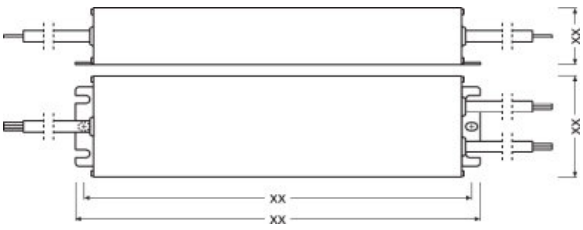
OT 60220-24024 DIM P



OT 100220-24024 DIM P



OT 130220-24024 DIM P



OT 250220-24024 DIM P

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Product family datasheet

Application advice

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

Sales and Technical Support

Sales and Technical Support www.osram.com

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 Certficate No. U6 18 01 84117 051
	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 09 080823
	CAD data 3-dim OT 20 220-240 24 DIM P-3D stp file
	Product Datasheet Datasheet OT 40220-24024 DIM P
	Certificates CCC Certificate No. 2018011002043864
	Product Datasheet Datasheet OT 60220-24024 DIM P
	Product Datasheet Datasheet OT 100220-24024 DIM P

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	Certificates CCC Certificate No. 2018011002043871
	Certificates OT 24 P CB 4163267 01 101023
	Certificates ENEC Certificate No. U6 18 01 84117 048
	Declarations of conformity Attestation of Conformity No. N8A 18 01 84117 054
	Declarations of conformity Attestation of Conformity No. E8A 18 01 84117 049
	CAD data 3-dim OT 100 220-240 24 DIM P - 3D stp file
	Product Datasheet Datasheet OT 130220-24024 DIM P
	CAD data 3-dim OT 130 220-240 24 DIM P - 3D stp file
	Product Datasheet Datasheet OT 250220-24024 DIM P
	CAD data 3-dim OT 250 220-240 24 DIM P - 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
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
4052899545823	OT 40/220...240/24 DIM P	Shipping carton box 20	334 mm x 310 mm x 194 mm	20.09 dm^3	9965.00 g
4052899545847	OT 60/220...240/24 DIM P	Shipping carton box 20	334 mm x 310 mm x 194 mm	20.09 dm^3	10005.00 g

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Logistical Data

4052899545861	OT 100/220...240/24 DIM P	Shipping carton box 10	384 mm x 324 mm x 134 mm	16.67 dm³	8884.00 g
4052899545885	OT 130/220...240/24 DIM P	Shipping carton box 10	439 mm x 299 mm x 126 mm	16.54 dm³	10590.00 g
4052899545908	OT 250/220...240/24 DIM P	Shipping carton box 10	459 mm x 344 mm x 144 mm	22.74 dm³	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.

Disclaimer

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