

CV Power supplies 24 V with 1...10 V



Areas of application

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

Product 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 %

Product 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 datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency
OT 20/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	83 %
OT 40/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	85 %
OT 60/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	87 %
OT 100/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	90 %
OT 130/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	90.5 %
OT 250/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	0.95	92 %

Product description	Device power loss	Power loss in stand-by mode	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OT 20/220...240/24 DIM P	3.4 W	<0.5 W	20 A	49	77
OT 40/220...240/24 DIM P	6.0 W	<0.5 W	20 A	36	57
OT 60/220...240/24 DIM P	7.8 W	<0.5 W	30 A	21	34
OT 100/220...240/24 DIM P	10 W	<0.5 W	60 A	10	16
OT 130/220...240/24 DIM P	13.3 W	<0.5 W	60 A	8	13
OT 250/220...240/24 DIM P	20 W	<0.5 W	75 A	3	8

Product description	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output power
OT 20/220...240/24 DIM P	120	4 kV	24.2 V	30 V	20 W
OT 40/220...240/24 DIM P	87	4 kV	24.2 V	30 V	40 W
OT 60/220...240/24 DIM P	53	4 kV	24.2 V	30 V	60 W
OT 100/220...240/24 DIM P	26	4 kV	24.2 V	30 V	100 W
OT 130/220...240/24 DIM P	20	4 kV	24.2 V	30 V	130 W
OT 250/220...240/24 DIM P	13	4 kV	24.2 V	30 V	250 W

Product description	Galvanic isolation	Galvanic isolation primary/secondary	Input voltage DC
OT 20/220...240/24 DIM P	SELV	3 kV	176...276 V
OT 40/220...240/24 DIM P	SELV	3 kV	176...276 V
OT 60/220...240/24 DIM P	SELV	3 kV	176...276 V
OT 100/220...240/24 DIM P	SELV	3 kV	176...276 V
OT 130/220...240/24 DIM P	SELV	3 kV	176...276 V
OT 250/220...240/24 DIM P	SELV	3 kV	176...276 V

Product description	Surge capability (L/N-Ground)
OT 20/220...240/24 DIM P	
OT 40/220...240/24 DIM P	
OT 60/220...240/24 DIM P	
OT 100/220...240/24 DIM P	6 kV

Product family datasheet

Product description	Surge capability (L/N-Ground)
OT 130/220...240/24 DIM P	6 kV
OT 250/220...240/24 DIM P	6 kV

Dimensions & weight

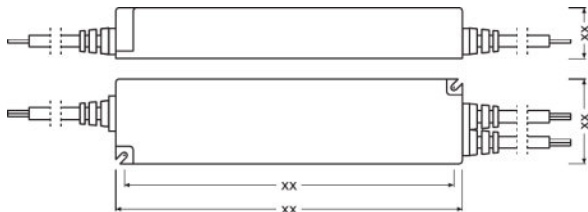
Product description	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT 20/220...240/24 DIM P	178.0 mm	43.0 mm	25.0 mm	169.0 mm	315.00 g	1.0 mm ²
OT 40/220...240/24 DIM P	208.0 mm	43.0 mm	26.0 mm	199.0 mm	416.00 g	1.0 mm ²
OT 60/220...240/24 DIM P	208.0 mm	43.0 mm	26.0 mm	199.0 mm	420.00 g	1.0 mm ²
OT 100/220...240/24 DIM P	240.0 mm	50.0 mm	34.0 mm	227.0 mm	765.00 g	1.0 mm ²
OT 130/220...240/24 DIM P	220.0 mm	63.0 mm	37.0 mm	207.0 mm	943.00 g	1.0 mm ²
OT 250/220...240/24 DIM P	265.0 mm	68.0 mm	40.0 mm	250.0 mm	1340.00 g	1.0 mm ²

Product description	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Cable/wire length, control input
OT 20/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm
OT 40/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm
OT 60/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm
OT 100/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm
OT 130/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm
OT 250/220...240/24 DIM P	1.0 mm ²	90 mm	90 mm	320 mm

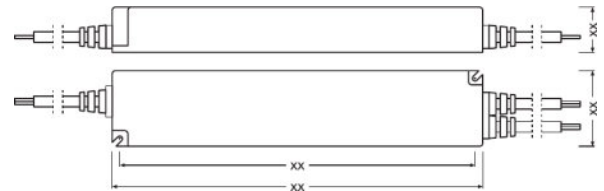
Product description	Cable/wire length, input side	Cable/wire length, output side
OT 20/220...240/24 DIM P	300 mm	300 mm
OT 40/220...240/24 DIM P	300 mm	300 mm
OT 60/220...240/24 DIM P	300 mm	300 mm
OT 100/220...240/24 DIM P	300 mm	300 mm
OT 130/220...240/24 DIM P	300 mm	300 mm
OT 250/220...240/24 DIM P	300 mm	300 mm

Product family datasheet

Product line drawing



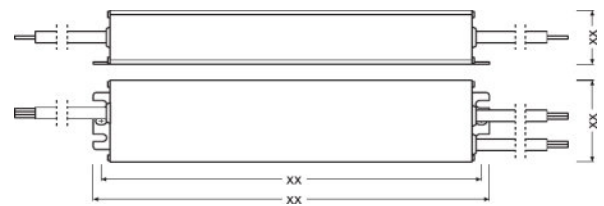
OT 20/220...240/24 DIM P



OT 40/220...240/24 DIM P

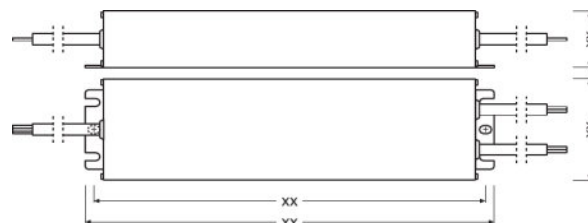
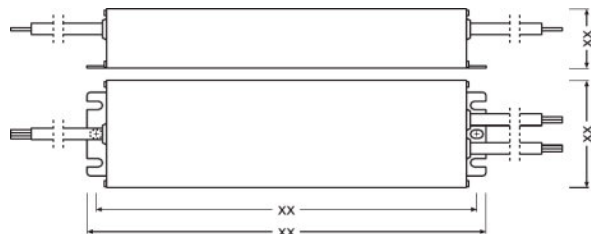


OT 60/220...240/24 DIM P



OT 100/220...240/24 DIM P

Product family datasheet



OT 130/220...240/24 DIM P

OT 250/220...240/24 DIM P

Colors & materials

Product description	Casing material
OT 20/220...240/24 DIM P	Plastic
OT 40/220...240/24 DIM P	Plastic
OT 60/220...240/24 DIM P	Plastic
OT 100/220...240/24 DIM P	Metal
OT 130/220...240/24 DIM P	Metal
OT 250/220...240/24 DIM P	Metal

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation
OT 20/220...240/24 DIM P	-30...+55 °C	85 °C	110 °C	5...85 % ¹⁾
OT 40/220...240/24 DIM P	-30...+55 °C	90 °C	110 °C	5...85 % ¹⁾
OT 60/220...240/24 DIM P	-30...+55 °C	90 °C	110 °C	5...85 % ¹⁾
OT 100/220...240/24 DIM P	-30...+55 °C	80 °C	110 °C	5...85 % ¹⁾
OT 130/220...240/24 DIM P	-30...+55 °C	80 °C	110 °C	5...85 % ¹⁾
OT 250/220...240/24 DIM P	-30...+55 °C	85 °C	110 °C	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Product family datasheet

Lifespan

Product description	ECG lifetime
OT 20/220...240/24 DIM P	50000 h
OT 40/220...240/24 DIM P	50000 h
OT 60/220...240/24 DIM P	50000 h
OT 100/220...240/24 DIM P	50000 h
OT 130/220...240/24 DIM P	50000 h
OT 250/220...240/24 DIM P	50000 h

Additional product data

Product description	Encapsulated
OT 20/220...240/24 DIM P	Yes
OT 40/220...240/24 DIM P	Yes
OT 60/220...240/24 DIM P	Yes
OT 100/220...240/24 DIM P	Yes
OT 130/220...240/24 DIM P	Yes
OT 250/220...240/24 DIM P	Yes

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT 20/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation
OT 40/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation
OT 60/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation
OT 100/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation
OT 130/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation
OT 250/220...240/24 DIM P	Yes	1...10 V	1...100 %	Pulse Width Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT 20/220...240/24 DIM P	Yes	Yes	Yes	Yes
OT 40/220...240/24 DIM P	Yes	Yes	Yes	Yes
OT 60/220...240/24 DIM P	Yes	Yes	Yes	Yes
OT 100/220...240/24 DIM P	Yes	Yes	Yes	Yes
OT 130/220...240/24 DIM P	Yes	Yes	Yes	Yes
OT 250/220...240/24 DIM P	Yes	Yes	Yes	Yes

Product description	Suitable for fixtures with prot. class	Type of connection, output side	Number of channels
OT 20/220...240/24 DIM P	II	Cables	1
OT 40/220...240/24 DIM P	II	Cables	1
OT 60/220...240/24 DIM P	II	Fixed connection (terminal)	1
OT 100/220...240/24 DIM P	I	Cables	1
OT 130/220...240/24 DIM P	I	Cables	1

Product family datasheet

Product description	Suitable for fixtures with prot. class	Type of connection, output side	Number of channels
OT 250/220...240/24 DIM P	I	Fixed connection (terminal)	1

Certificates & standards

Product description	Approval marks – approval
OT 20/220...240/24 DIM P	ENEC / RCM / CCC / EAC
OT 40/220...240/24 DIM P	ENEC / RCM / CCC / EAC
OT 60/220...240/24 DIM P	ENEC / RCM / CCC / EAC
OT 100/220...240/24 DIM P	ENEC / RCM / CCC / EAC
OT 130/220...240/24 DIM P	ENEC / RCM / CCC / EAC
OT 250/220...240/24 DIM P	ENEC / RCM / CCC / EAC

Product description	Standards	Protection class	Type of protection
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
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
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
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
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
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

Logistical data

Product description	Temperature range at storage
OT 20/220...240/24 DIM P	-40...85 °C
OT 40/220...240/24 DIM P	-40...85 °C
OT 60/220...240/24 DIM P	-40...85 °C
OT 100/220...240/24 DIM P	-40...85 °C
OT 130/220...240/24 DIM P	-40...85 °C
OT 250/220...240/24 DIM P	-40...85 °C

Application advice
















Product family datasheet

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)
	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 EU Declaration of Conformity OT 24V P_DIMP
	Certificates CCC Certificate No. 2018011002043864
	Certificates CCC Certificate No. 2018011002043871
	Certificates CB Test Certificate No. SG PSB-LE-00906
	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

Logistical Data

Product family datasheet

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
4052899545861	OT 100/220...240/24 DIM P	Shipping carton box 10	384 mm x 324 mm x 134 mm	16.67 dm ³	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 dm ³	10860.00 g
4052899545908	OT 250/220...240/24 DIM P	Shipping carton box 10	459 mm x 344 mm x 144 mm	22.74 dm ³	15002.00 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.