

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

Technical data

Product description	Electrical data					
	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 %	095	83 % ¹⁾
OT 40/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	095	85 % ¹⁾
OT 60/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	095	86 % ¹⁾
OT 100/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	095	90 % ¹⁾
OT 120/220...240/24 DIM P	220...240 V	50...60 Hz	198...264 V ⁴⁾	< 20 %	090/095 ⁵⁾	
OT 130/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	095	90.5 % ¹⁾
OT 240/220...240/24 DIM P	220...240 V	50...60 Hz	198...264 V ⁴⁾	< 20 %	095/090 ⁵⁾	
OT 250/220...240/24 DIM P	220...240 V	0...60 Hz	198...264 V	< 15 %	095	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 120/220...240/24 DIM P	15.0 W ⁶⁾	60 A ⁶⁾	6	10	17	3 kV
OT 130/220...240/24 DIM P	13.3 W	60 A	8	13	20	4 kV
OT 240/220...240/24 DIM P	21 W ⁶⁾	70 A ⁶⁾	5	8	13	3 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 120/220...240/24 DIM P	24 V ⁷⁾	24 V	120 W ⁸⁾		SELV
OT 130/220...240/24 DIM P	24.2 V	30 V	130 W	130 W ²⁾	SELV
OT 240/220...240/24 DIM P	24 V ⁷⁾	24 V	240 W ¹⁶⁾		SELV
OT 250/220...240/24 DIM P	24.2 V	30 V	250 W	250 W ²⁾	SELV

Product description	Dimensions & weight			
	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

Product family datasheet

Product description	Galvanic isolation primary/secondary	Input voltage DC	Surge capability (L/N-Ground)	Dimensions & weight
				Mounting hole spacing, length
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 120/220...240/24 DIM P	3.75 kV ⁹⁾		6 kV	241.0 mm
OT 130/220...240/24 DIM P	3 kV	176...276 V	6 kV	207.0 mm
OT 240/220...240/24 DIM P	3.75 kV ⁹⁾		6 kV	241.0 mm
OT 250/220...240/24 DIM P	3 kV	176...276 V	6 kV	250.0 mm

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	31500 g	1.0 mm ²	1.0 mm ²	90 mm	90 mm
OT 40/220...240/24 DIM P	41600 g	1.0 mm ²	1.0 mm ²	90 mm	90 mm
OT 60/220...240/24 DIM P	42000 g	1.0 mm ²	1.0 mm ²	90 mm	90 mm
OT 100/220...240/24 DIM P	76500 g	1.0 mm ²	1.0 mm ²	90 mm	90 mm
OT 120/220...240/24 DIM P	110000 g	1.0 mm ² ¹⁰⁾	1.5 mm ² ¹⁰⁾	10...11 mm	10...11 mm
OT 130/220...240/24 DIM P	94300 g	1.0 mm ²	1.0 mm ²	90 mm	90 mm
OT 240/220...240/24 DIM P	150000 g	1.0 mm ² ¹⁰⁾	1.5 mm ² ¹⁰⁾	10...11 mm	10...11 mm
OT 250/220...240/24 DIM P	134000 g	1.0 mm ²	1.0 mm ²	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	250 mm
OT 40/220...240/24 DIM P	320 mm	300 mm	300 mm	260 mm
OT 60/220...240/24 DIM P	320 mm	300 mm	300 mm	260 mm
OT 100/220...240/24 DIM P	320 mm	300 mm	300 mm	340 mm
OT 120/220...240/24 DIM P	300 mm	300 mm	300 mm	390 mm
OT 130/220...240/24 DIM P	320 mm	300 mm	300 mm	370 mm
OT 240/220...240/24 DIM P	300 mm	300 mm	300 mm	390 mm
OT 250/220...240/24 DIM P	320 mm	300 mm	300 mm	400 mm

Product description	Width	Length	Mounting hole spacing, width	Colors & materials	Temperatures & operating conditions	
				Casing material	Ambient temperature range	Maximum temperature at tc test point
OT 20/220...240/24 DIM P	430 mm	1780 mm		Plastic	-30...+55 °C	85 °C
OT 40/220...240/24 DIM P	430 mm	2080 mm		Plastic	-30...+55 °C	90 °C
OT 60/220...240/24 DIM P	430 mm	2080 mm		Plastic	-30...+55 °C	90 °C
OT 100/220...240/24 DIM P	500 mm	2400 mm		Metal	-30...+55 °C	80 °C
OT 120/220...240/24 DIM P	600 mm	2500 mm	15.0 mm	Metal	-25...+55 °C	80 °C ¹¹⁾
OT 130/220...240/24 DIM P	630 mm	2200 mm		Metal	-30...+55 °C	80 °C
OT 240/220...240/24 DIM P	800 mm	2500 mm	16.0 mm	Metal	-25...+55 °C	80 °C ¹¹⁾

Product family datasheet

Product description	Width	Length	Mounting hole spacing, width	Colors & materials	Temperatures & operating conditions	
				Casing material	Ambient temperature range	Maximum temperature at tc test point
OT 250/220...240/24 DIM P	680 mm	2650 mm		Metal	-30...+55 °C	85 °C

Product description	Max.housing temperature in case of fault	Temperature range at storage	Permitted rel. humidity during operation	Lifespan	Capabilities
				ECG lifetime	Dimmable
OT 20/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes
OT 40/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes
OT 60/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes
OT 100/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes
OT 120/220...240/24 DIM P	100 °C	-40...+85 °C	5...85 % ¹²⁾	50000 h ¹³⁾	Yes
OT 130/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes
OT 240/220...240/24 DIM P	100 °C	-40...+85 °C	5...85 % ¹²⁾	50000 h ¹³⁾	Yes
OT 250/220...240/24 DIM P	110 °C	-40...+85 °C	5...85 % ³⁾	50000 h	Yes

Product description	Dimming interface	Dimming range	Dimming method	Overheating protection
OT 20/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes
OT 40/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes
OT 60/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes
OT 100/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes
OT 120/220...240/24 DIM P	1...10 V ¹⁴⁾	3...100 % ¹⁵⁾	Pulse Width Modulation	Automatic reversible
OT 130/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes
OT 240/220...240/24 DIM P	1...10 V ¹⁴⁾	3...100 %	Pulse Width Modulation	Automatic reversible
OT 250/220...240/24 DIM P	1...10 V	1...100 %	Pulse Width Modulation	Yes

Product description	Overload protection	Short-circuit protection	No-load proof
OT 20/220...240/24 DIM P	Yes	Yes	Yes
OT 40/220...240/24 DIM P	Yes	Yes	Yes
OT 60/220...240/24 DIM P	Yes	Yes	Yes
OT 100/220...240/24 DIM P	Yes	Yes	Yes
OT 120/220...240/24 DIM P	Automatic reversible	Automatic reversible	Yes
OT 130/220...240/24 DIM P	Yes	Yes	Yes
OT 240/220...240/24 DIM P	Automatic reversible	Automatic reversible	Yes
OT 250/220...240/24 DIM P	Yes	Yes	Yes

Product family datasheet

Product description	Intended for no-load operation	Suitable for fixtures with prot. class	Type of connection, output side	Number of channels
OT 20/220...240/24 DIM P	No	II	Cables	1
OT 40/220...240/24 DIM P	No	II	Cables	1
OT 60/220...240/24 DIM P	No	II	Fixed connection (terminal)	1
OT 100/220...240/24 DIM P	No	I	Cables	1
OT 120/220...240/24 DIM P		I	Wires	1
OT 130/220...240/24 DIM P	No	I	Cables	1
OT 240/220...240/24 DIM P		I	Wires	1
OT 250/220...240/24 DIM P	No	I	Fixed connection (terminal)	1

Certificates & standards				
Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT 20/220...240/24 DIM P	ENEC / RCM / CCC / EAC	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	ENEC / RCM / CCC / EAC	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	ENEC / RCM / CCC / EAC	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	ENEC / RCM / CCC / EAC	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

Product family datasheet

Certificates & standards				
Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT 120/220...240/24 DIM P	CE / CB / RCM / EAC / ENEC 18 / BIS	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	I	IP67
OT 130/220...240/24 DIM P	ENEC / RCM / CCC / EAC	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
OT 240/220...240/24 DIM P	CE / CB / RCM / EAC / ENEC 18 / BIS	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	I	IP67
OT 250/220...240/24 DIM P	ENEC / RCM / CCC / EAC	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
Logistical data				
Environmental information				
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)				
Product description	Commodity code	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OT 20/220...240/24 DIM P	85044083900	23-06-2023	4052899545809	Lead
OT 40/220...240/24 DIM P	85044083900	23-06-2023	4052899545823	Lead
OT 60/220...240/24 DIM P	85044083900	26-05-2023	4052899545847	Lead
OT 100/220...240/24 DIM P	85044083900	23-06-2023	4052899545861	Lead
OT 120/220...240/24 DIM P	850440829000	11-10-2022	4008321981691	
OT 130/220...240/24 DIM P	85044083900	23-06-2023	4052899545885	Lead
OT 240/220...240/24 DIM P	850440829000	11-10-2022	4008321981714	
OT 250/220...240/24 DIM P	85044083900	28-04-2023	4052899545908	Lead

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT 20/220...240/24 DIM P	7439-92-1	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	7439-92-1	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	7439-92-1	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	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	4a1ede5f-216f-45c0-9328-9fff99e880b5
OT 120/220...240/24 DIM P			In work
OT 130/220...240/24 DIM P	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f1105f25-6e31-4c8a-ac85-f86a35b70f5b
OT 240/220...240/24 DIM P			In work
OT 250/220...240/24 DIM P	7439-92-1	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 %
4) Permitted voltage range
5) Minimum/Full load at 230 V/Half load at 230 V
6) Maximum
7) +1.0/-0.5 V
8) Partial load 0...120 W
9) SELV
10) Flexible
11) Maximum at the Tc-point
12) Non-condensing

Product family datasheet

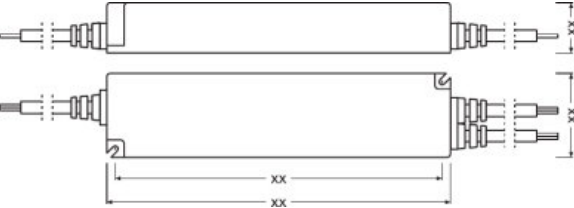
13) At $T_{case} = 70^{\circ}\text{C}$ at T_c point / 10% failure rate

14) Do not switch off by 1...10 V interface to avoid infringing the ErP regulations

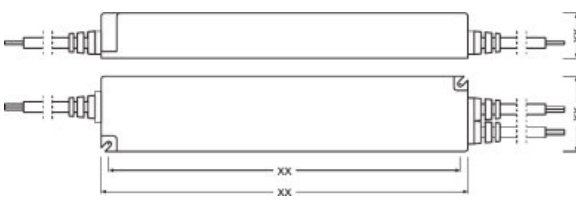
15) Depends on the lamp type (please see www.osram.com/dim)

16) Partial load 0...240 W

Product family datasheet



OT 20220-24024 DIM P



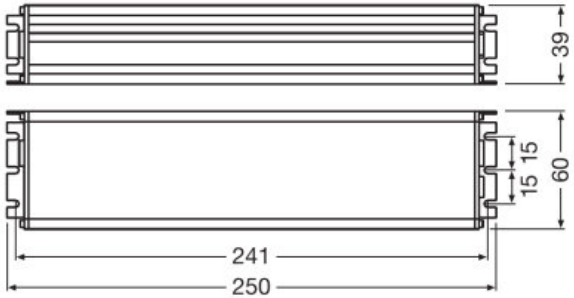
OT 40220-24024 DIM P



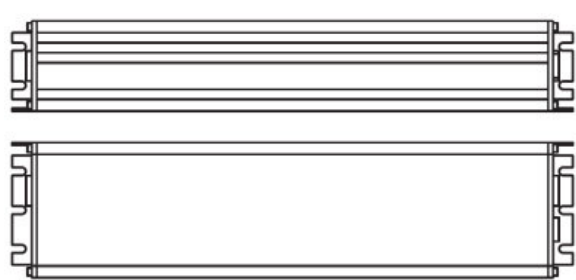
OT 60220-24024 DIM P



OT 100220-24024 DIM P

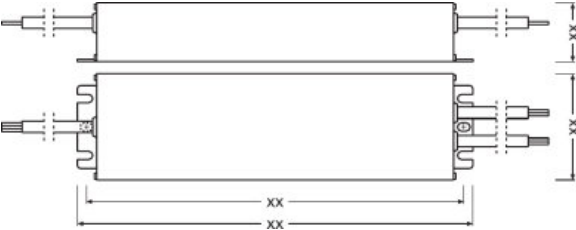


502929_OT 120220-24024 DIM P

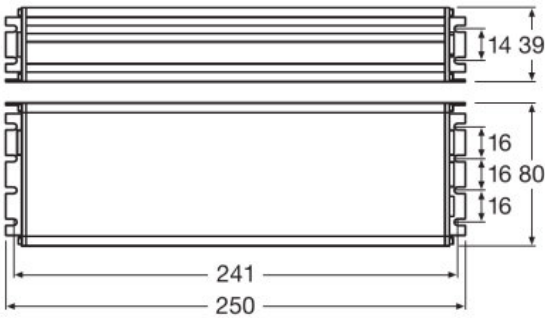


329501_OPTOTRONIC OT 120220-24024 DIM P

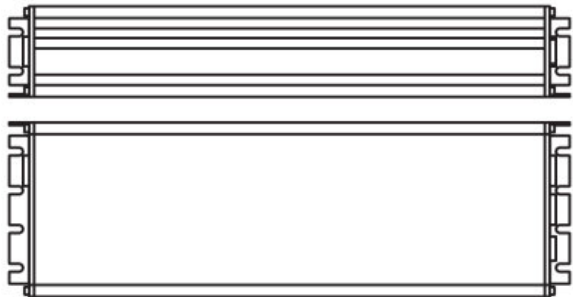
Product family datasheet



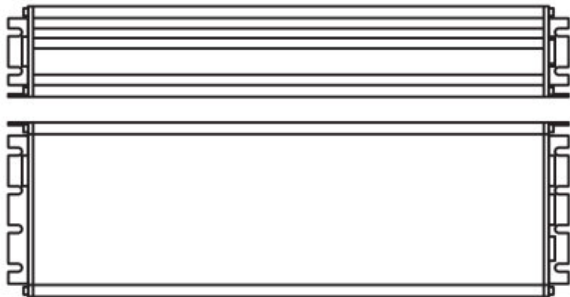
OT 130220-24024 DIM P



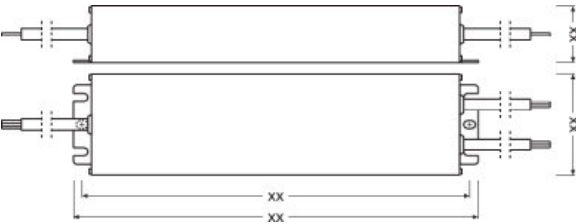
346105_OT 240220-24024 DIM P



329590_OPTOTRONIC OT 240220-24024 DIM P



346106_OT 240220-24024 DIM P



OT 250220-24024 DIM P

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

Country specific information

Product description	Product code	METEL-Code	SEG-No.	STK number	UK Org
OT 120/220...240/24 DIM P	4008321981691	-	-	4030038	-
OT 120/220...240/24 DIM P	4008321981691	-	-	4030038	-
OT 240/220...240/24 DIM P	4008321981714	-	-	4030039	-
OT 240/220...240/24 DIM P	4008321981714	-	-	4030039	-

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 Attestation of Conformity No. N8A 18 01 84117 055
	Declarations of conformity Attestation of Conformity No. E8A 18 01 84117 050

Product family datasheet

	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
	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
	Addon Technical Information 728639_Dimming table for OT (EN)
	Brochures 730792_Light is universal - Easy installation of efficient complete systems (DE)
	Brochures 730791_Light is universal - Easy installation of efficient complete systems (EN)
	Brochures 493514_24V OPTOTRONIC outdoor drivers (GB)
	Certificates 546125_ENEC certificate OT 120 220-240 24 DIM P
	Product Datasheet Datasheet OT 130220-24024 DIM P
	CAD data 3-dim OT 130 220-240 24 DIM P - 3D stp file
	Certificates 545904_ENEC certificate-117-N OT 240220-24024 DIM P
	Product Datasheet Datasheet OT 250220-24024 DIM P
	CAD data 3-dim OT 250 220-240 24 DIM P - 3D stp file

Product family 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
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
4008321981691	OT 120/220...240/24 DIM P	Shipping carton box 10	560 mm x 400 mm x 155 mm	34.72 dm ³	13400.00 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	10590.00 g
4008321981714	OT 240/220...240/24 DIM P	Shipping carton box 8	540 mm x 400 mm x 193 mm	41.69 dm ³	14460.00 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	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

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