

CV Power supplies 12 V



Areas of application

- Suitable for indoor and outdoor installations
- Ideal for mounting in very tight spaces

Product benefits

- Versatile scope of application due to output power range of up to 120 W
- Very high efficiency and reliability
- High IP protection (up to IP67)
- High surge protection: up to 3 kV (L-N) / 6 kV (L/N-PE)

Product family datasheet

Technical data

Electrical data

Product description	Nominal voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency
OT 15/220...240/12 P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	> 0.5 ²⁾	80 % ³⁾
OT 30/220...240/12 P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.95/0.90 ⁸⁾	85 % ³⁾
OTe 60/110...277/12 E	110...277 V	50...60 Hz	100...305 V ¹⁾	< 20 %	0.95/0.90/0.95/0.90 ¹⁰⁾	\geq 85 % ¹¹⁾
OT 60/220...240/12 P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.98/0.93 ⁸⁾	86 % ³⁾
OTe 120/110...277/12 E	110...277 V	50...60 Hz	100...305 V ¹⁵⁾	< 20 %	0.95/0.90 ⁸⁾	85 % ¹¹⁾
OT 120/220...240/12 P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.98/0.95 ⁸⁾	88 % ³⁾

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)
OT 15/220...240/12 P	3.0 W	20 A ⁴⁾	32	51	-
OT 30/220...240/12 P	5.0 W	30 A ⁴⁾	13	21	-
OTe 60/110...277/12 E	9.0 W	15 / 40 A ¹²⁾	7	12	-
OT 60/220...240/12 P	9.0 W	35 A ⁴⁾	11	17	-
OTe 120/110...277/12 E	18 W ¹⁶⁾	109 A ¹⁷⁾	3	6	-
OT 120/220...240/12 P	18 W	40 A ¹⁹⁾	6	10	-

Product description	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output power	Galvanic isolation
OT 15/220...240/12 P	4 kV	12.5 V ⁵⁾	12.5 V	15 W ⁶⁾	SELV equivalent
OT 30/220...240/12 P	4 kV	12.5 V ⁵⁾	12.5 V	30 W ⁹⁾	SELV equivalent
OTe 60/110...277/12 E	2 kV	12.5 V ⁵⁾	12.5 V	60 W ¹³⁾	SELV equivalent
OT 60/220...240/12 P	3 kV	12.5 V ⁵⁾	12.5 V	60 W ¹⁴⁾	SELV
OTe 120/110...277/12 E	2 kV	12.5 V ⁵⁾	12.5 V	120 W ¹⁸⁾	SELV equivalent
OT 120/220...240/12 P	3 kV	12.5 V ⁵⁾	12.5 V	120 W ²⁰⁾	SELV equivalent

Product description	Galvanic isolation primary/secondary	Protective conductor current	Surge capability (L/N-Ground)
OT 15/220...240/12 P	3.75 kV ⁷⁾		
OT 30/220...240/12 P	3.75 kV ⁷⁾		
OTe 60/110...277/12 E	3.75 kV ⁷⁾	<2.0 mA	3 kV
OT 60/220...240/12 P	3.75 kV ⁷⁾	<2.0 mA	
OTe 120/110...277/12 E	3.75 kV ⁷⁾	<2.0 mA	3 kV
OT 120/220...240/12 P	3.75 kV ⁷⁾	<2.0 mA	6 kV

¹⁾ V_{AC}

²⁾ Full load at 230 V

³⁾ At full load and 230 V

⁴⁾ $t_{width} = 170 \mu s$ (measured at 50 % I_{peak})

Product family datasheet

- 5) ± 0.5 V
- 6) Partial load 0...15 W
- 7) SELV-equivalent
- 8) Full load at 230 V/Half load at 230 V
- 9) Partial load 0...30 W
- 10) Full load at 110 V/Half load at 110 V/Full load at 230 V/Half load at 230 V
- 11) At full load and 110...230 V
- 12) 200 μ s at 110 V
- 13) Partial load 6...60 W
- 14) Partial load 0...60 W
- 15) Permitted voltage range
- 16) Maximum
- 17) At 250 μ s
- 18) Partial load 12...120 W
- 19) At 300 μ s
- 20) Partial load 0...120 W

Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT 15/220...240/12 P	237.0 mm	20.0 mm	22.0 mm	228.0 mm	170.00 g	1.0 mm ^{2 1)}
OT 30/220...240/12 P	220.0 mm	40.0 mm	22.0 mm	213.0 mm	330.00 g	1.0 mm ^{2 1)}
OTe 60/110...277/12 E	241.0 mm	43.0 mm	30.0 mm	227.0 mm	600.00 g	0.83 mm ²
OT 60/220...240/12 P	180.0 mm	50.0 mm	34.0 mm	171.0 mm	700.00 g	1.0 mm ^{2 1)}
OTe 120/110...277/12 E	258.0 mm	51.2 mm	44.5 mm	246.0 mm	1150.00 g	0.83 mm ^{2 1)}
OT 120/220...240/12 P	250.0 mm	60.0 mm	39.0 mm	241.0 mm	1150.00 g	1.0 mm ^{2 1)}

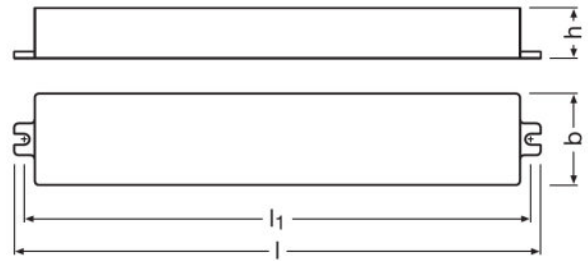
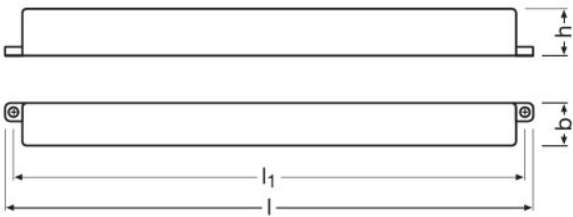
Product description	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Cable/wire length, input side
OT 15/220...240/12 P	1.0 mm ^{2 1)}	10 mm	10 mm	300 mm
OT 30/220...240/12 P	1.0 mm ^{2 1)}	10 mm	10 mm	300 mm
OTe 60/110...277/12 E	0.83 mm ²	10 mm	10 mm	
OT 60/220...240/12 P	1.0 mm ^{2 1)}	10 mm	10 mm	500 mm
OTe 120/110...277/12 E	0.83 mm ^{2 1)}	8.0 mm	8.0 mm	
OT 120/220...240/12 P	1.0 mm ^{2 1)}	10 mm	10 mm	450 mm

Product description	Cable/wire length, output side	Mounting hole spacing, width
OT 15/220...240/12 P	300 mm	
OT 30/220...240/12 P	300 mm	
OTe 60/110...277/12 E		
OT 60/220...240/12 P	500 mm	14.0 mm ²⁾
OTe 120/110...277/12 E		
OT 120/220...240/12 P	450 mm	15.0 mm ²⁾

Product family datasheet

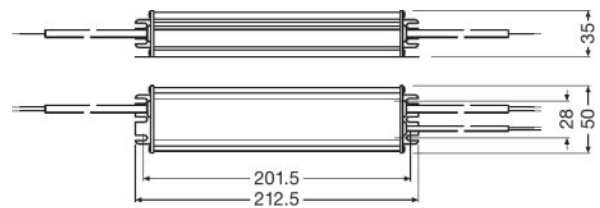
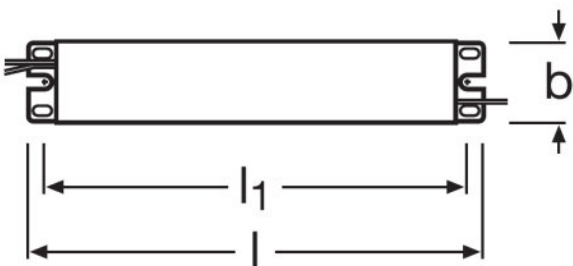
- 1) Flexible
- 2) Side mounting

Product line drawing



OT 15/220...240/12 P

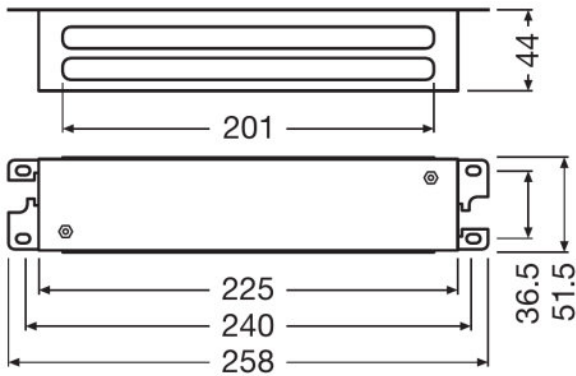
OT 30/220...240/12 P



OTe 60/110...277/12 E

OT 60/220...240/12 P

Product family datasheet



OTe 120/110...277/12 E

OT 120/220...240/12 P

Colors & materials

Product description	Casing material
OT 15/220...240/12 P	Plastic
OT 30/220...240/12 P	Plastic
OTe 60/110...277/12 E	Metal
OT 60/220...240/12 P	Metal
OTe 120/110...277/12 E	Metal
OT 120/220...240/12 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 15/220...240/12 P	-25...+55 °C	80 °C	110 °C	5...85 % ¹⁾
OT 30/220...240/12 P	-25...+55 °C	80 °C	110 °C	5...85 % ¹⁾
OTe 60/110...277/12 E	-25...+55 °C	80 °C	110 °C	5...85 % ²⁾
OT 60/220...240/12 P	-25...+55 °C	80 °C	100 °C	5...85 % ¹⁾
OTe 120/110...277/12 E	-25...+55 °C	85 °C ³⁾	110 °C	5...85 % ²⁾
OT 120/220...240/12 P	-25...+55 °C	80 °C	100 °C	5...85 % ¹⁾

¹⁾ Non-condensing

²⁾ Maximum 56 days/year at 85 %

³⁾ Maximum at the Tc-point

Product family datasheet

Lifespan

Product description	ECG lifetime
OT 15/220...240/12 P	50000 h ¹⁾
OT 30/220...240/12 P	50000 h ¹⁾
OTe 60/110...277/12 E	50000 h ²⁾
OT 60/220...240/12 P	50000 h ²⁾
OTe 120/110...277/12 E	50000 h ³⁾
OT 120/220...240/12 P	50000 h ²⁾

¹⁾ At $T_a = 70^\circ\text{C}$ / 10% failure rate

²⁾ At $T_{\text{case}} = 70^\circ\text{C}$ at T_c point / 10% failure rate

³⁾ At $T_{\text{case}} = 75^\circ\text{C}$ at T_c point / 10% failure rate

Additional product data

Product description	Encapsulated
OT 15/220...240/12 P	No
OT 30/220...240/12 P	No
OTe 60/110...277/12 E	No
OT 60/220...240/12 P	No
OTe 120/110...277/12 E	No
OT 120/220...240/12 P	No

Capabilities

Product description	Dimmable	Dimming interface	Overheating protection
OT 15/220...240/12 P	No ¹⁾	Not dimmable	Automatic reversible
OT 30/220...240/12 P	No ¹⁾	Not dimmable	Automatic reversible
OTe 60/110...277/12 E	No	Not dimmable	Automatic reversible
OT 60/220...240/12 P	No ¹⁾	Not dimmable	Automatic reversible
OTe 120/110...277/12 E	No	Not dimmable	Automatic reversible
OT 120/220...240/12 P	No ¹⁾	Not dimmable	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof	Suitable for fixtures with prot. class
OT 15/220...240/12 P	Automatic reversible	Automatic reversible	Yes	II
OT 30/220...240/12 P	Automatic reversible	Automatic reversible	Yes	II
OTe 60/110...277/12 E	Automatic reversible	Automatic reversible	Yes	I
OT 60/220...240/12 P	Automatic reversible	Automatic reversible	Yes	II
OTe 120/110...277/12 E	Automatic reversible	Automatic reversible	Yes	I
OT 120/220...240/12 P	Automatic reversible	Automatic reversible	Yes	I

Product description	Number of channels
OT 15/220...240/12 P	1
OT 30/220...240/12 P	1
OTe 60/110...277/12 E	1

Product family datasheet

Product description	Number of channels
OT 60/220...240/12 P	1
OTe 120/110...277/12 E	1
OT 120/220...240/12 P	1

¹⁾ With OPTOTRONIC dimmers

Certificates & standards

Product description	Approval marks – approval
OT 15/220...240/12 P	CE / ENEC 18 / CB / CCC / EAC
OT 30/220...240/12 P	CE / ENEC 18 / CB / CCC / RCM / EAC / BIS
OTe 60/110...277/12 E	CE / CB / CCC / BIS
OT 60/220...240/12 P	CE / ENEC 18 / CB / CCC / RCM / EAC / BIS
OTe 120/110...277/12 E	CE / CB / CCC / BIS
OT 120/220...240/12 P	CE / ENEC 18 / CB / CCC / RCM / EAC / BIS

Product description	Standards	Protection class
OT 15/220...240/12 P	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to EN 61000-3-2/Acc. to EN 61547	II
OT 30/220...240/12 P	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	II
OTe 60/110...277/12 E	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
OT 60/220...240/12 P	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	II
OTe 120/110...277/12 E	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	I
OT 120/220...240/12 P	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

Product description	Type of protection
OT 15/220...240/12 P	IP66
OT 30/220...240/12 P	IP66
OTe 60/110...277/12 E	IP64
OT 60/220...240/12 P	IP67
OTe 120/110...277/12 E	IP64
OT 120/220...240/12 P	IP67

Product family datasheet

Logistical data

Product description	Temperature range at storage
OT 15/220...240/12 P	-40...85 °C
OT 30/220...240/12 P	-40...85 °C
OTe 60/110...277/12 E	-40...85 °C
OT 60/220...240/12 P	-40...85 °C
OTe 120/110...277/12 E	-40...85 °C
OT 120/220...240/12 P	-40...85 °C

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 15/220...240/12 P	4052899905559	-	-	4030247	-
OT 30/220...240/12 P	4052899905542	-	-	4030248	-
OT 60/220...240/12 P	4008321790811	-	-	4030025	-
OT 120/220...240/12 P	4008321790835	-	-	4030026	-

Download Data

File
 Product Datasheet 344924_Datasheet_OT 15220-24012 P
 Certificates 345363_CB-Certificate OT15 220 240 12P
 Declarations of conformity 728507_EU Declaration OT
 Declarations of conformity EU Declaration of Conformity 3540579

Product family datasheet

	Installation/Operation notice 344925_Instruction Sheet_OT 15220-24012 P
	Product Datasheet 342094_Datasheet_OT 30220-24012 P
	Installation guide 387989_Instruction Sheet OT 30220-24012 P
	Product Datasheet 343030_Datasheet OTe 60110-27712 E
	Declarations of conformity EU Declaration of Conformity 3565780
	Installation guide 387990_Instruction Sheet OTe 60110-27012 E
	Product Datasheet 340365_OPTOTRONIC OT 60220-24012 P
	Installation guide 387988_Instruction Sheet_OT 60220-24012 P
	Addon Technical Information 350855_Data sheet_OTe 120110-27712 E
	Installation/Operation notice 350856_Instruction sheet OTe 120_110-277 12 E
	Product Datasheet 340366_OPTOTRONIC OT 120220-24012 P
	Certificates 545902_ENEC certificate OT 120220-24012 P
	Certificates 545903_ENEC certificate-R OT 120220-24012 P
	Installation guide 343881_Instruction Sheet_OT 120220-24012 P

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899905559	OT 15/220...240/12 P	Shipping carton box 50	356 mm x 309 mm x 209 mm	22.99 dm ³	8753.00 g
4052899905542	OT 30/220...240/12 P	Shipping carton box 30	356 mm x 292 mm x 223 mm	23.18 dm ³	12005.00 g
4008321794338	OTe 60/110...277/12 E	Shipping carton box 10	278 mm x 268 mm x 126 mm	9.39 dm ³	6546.00 g
4008321790811	OT 60/220...240/12 P	Shipping carton box 10	574 mm x 137 mm x 323 mm	25.40 dm ³	7593.00 g
4008321821263	OTe 120/110...277/12 E	Shipping carton box 10	408 mm x 302 mm x 141 mm	17.37 dm ³	12459.00 g
4008321790835	OT 120/220...240/12 P	Shipping carton box 10	589 mm x 155 mm x 399 mm	36.43 dm ³	13000.00 g

Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
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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.