

CV Power supplies 24 V



Areas of application

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

Product family benefits

- Installation in cold and hot environments
- Very stable output power
- High electrical reversible short-circuit, overload, overtemperature protection
- Independent installation possible

Product family features

- Type of protection: IP20
- Wide operating temperature range: -20...+50 °C
- Lifetime: up to 30,000 h (temperature at max. t_c)



Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Power factor λ	ECG efficiency	Device power loss
OT 6/200...240/24 CE	200...240 V	50...60 Hz	180...264 V ¹⁾	0.50 ²⁾	80 %	1.5 W ³⁾
OT 8/200...240/24	200...240 V	50...60 Hz	180...264 V ¹⁾	0.50 ²⁾	75 %	2.5 W ³⁾
OT 20/200...240/24	220...240 V	50...60 Hz	198...264 V ¹⁾	0.50 ²⁾	83 %	4.0 W ⁹⁾
OT 75/220...240/24	220...240 V	50...60 Hz	198...264 V ¹⁾	0.97 ²⁾	90 % ¹¹⁾	9.0 W ³⁾
OTz 30/220...240/24	220...240 V	50...60 Hz				
OTz 90/220...240/24	220...240 V	50...60 Hz				
OT 50/220...240/24	220...240 V	50...60 Hz	198...264 V ¹⁵⁾	0.95/0.90 ¹⁶⁾	85 % ¹¹⁾	8.0 W ⁹⁾
OTz 60/220...240/24	220...240 V	50...60 Hz				

Product description	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 6/200...240/24 CE	15 A ⁴⁾	30	48	-	1 kV
OT 8/200...240/24	15 A ⁴⁾	30	48	-	1 kV
OT 20/200...240/24	17 A	23	42	-	1 kV
OT 75/220...240/24	41 A ¹²⁾	7	11	-	1 kV
OTz 30/220...240/24				-	
OTz 90/220...240/24				-	
OT 50/220...240/24	45 A ¹⁷⁾	12	19	-	1 kV
OTz 60/220...240/24				-	

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output power	Galvanic isolation
OT 6/200...240/24 CE	24 V ⁵⁾	25 V	6 W ⁶⁾	SELV
OT 8/200...240/24	24 V ⁷⁾	24 V	8 W ⁸⁾	SELV equivalent
OT 20/200...240/24	24 V ⁷⁾	24 V	20 W ¹⁰⁾	SELV
OT 75/220...240/24	24 V ⁷⁾	24 V	75 W ¹³⁾	SELV
OTz 30/220...240/24	24 V		30 W	
OTz 90/220...240/24	24 V		90 W	
OT 50/220...240/24	24 V ¹⁸⁾	24 V	50 W ¹⁹⁾	SELV
OTz 60/220...240/24	24 V		60 W	

Product description	Galvanic isolation primary/secondary	Input voltage DC	Total harmonic distortion	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (C)
OT 6/200...240/24 CE	3 kV				
OT 8/200...240/24	3 kV				
OT 20/200...240/24	3 kV	-	< 20 %	-	-
OT 75/220...240/24	3 kV ¹⁴⁾		< 20 %		
OTz 30/220...240/24					

Product family datasheet

Product description	Galvanic isolation primary/secondary	Input voltage DC	Total harmonic distortion	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (C)
OTz 90/220...240/24					
OT 50/220...240/24	3.75 kV ¹⁴⁾	176...274 V ¹⁾	< 20 %		
OTz 60/220...240/24					

Product description	Output ripple Voltage (100 Hz)	Surge capability (L/N-Ground)	Protective conductor current
OT 6/200...240/24 CE			
OT 8/200...240/24			
OT 20/200...240/24	-	-	
OT 75/220...240/24			<2.0 mA
OTz 30/220...240/24			
OTz 90/220...240/24			
OT 50/220...240/24			
OTz 60/220...240/24			

1) Permitted voltage range

2) Minimum

3) Maximum at 230 V_{AC}, P_{out} = maximum, Ta=25 °C, steady state

4) At 240 V_{AC}

5) ±0.8 V

6) Partial load 0.9...6 W

7) ±1.0 V

8) Partial load 0...8 W

9) Maximum

10) Partial load 0.5...20 W

11) At full load and 230 V

12) $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})

13) Partial load 0...75 W

14) SELV

15) V_{AC} / Permitted voltage range

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

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

18) +0.9/-0.5 V

19) Partial load 0...50 W

Product family datasheet

Dimensions & weight

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 6/200...240/24 CE	52.00 g	1.0 mm ²	1.0 mm ²	10 mm	10 mm
OT 8/200...240/24	51.00 g	0.75...1.5 mm ²	0.5...1.5 mm ²	10 mm	10 mm
OT 20/200...240/24	108.00 g	0.75...1.5 mm ²	0.5...1.5 mm ²	10 mm	10 mm
OT 75/220...240/24	290.00 g	0.75...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾	6.0 mm	6.0 mm
OTz 30/220...240/24	145.00 g				
OTz 90/220...240/24	564.00 g				
OT 50/220...240/24	290.00 g	0.75...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾	10 mm	10 mm
OTz 60/220...240/24	205.00 g				

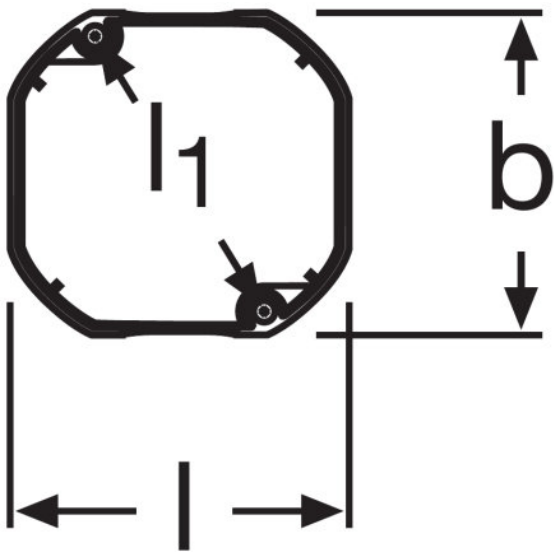
Product description	Cable/wire length, input side	Cable/wire length, output side	Length	Width	Height
OT 6/200...240/24 CE	185 mm	135 mm	51.0 mm	50.0 mm	22.0 mm
OT 8/200...240/24	-	-	80.0 mm	40.0 mm	22.0 mm
OT 20/200...240/24	-	-	109.0 mm	50.0 mm	35.0 mm
OT 75/220...240/24	-	-	220.0 mm	47.0 mm	44.0 mm
OTz 30/220...240/24			140.0 mm	45.0 mm	27.5 mm
OTz 90/220...240/24			230.0 mm	60.0 mm	35.0 mm
OT 50/220...240/24	-	-	242.0 mm	40.0 mm	16.0 mm
OTz 60/220...240/24			238.9 mm	45.5 mm	30.0 mm

Product description	Mounting hole spacing, length
OT 6/200...240/24 CE	
OT 8/200...240/24	72.0 mm
OT 20/200...240/24	-
OT 75/220...240/24	180.0 mm
OTz 30/220...240/24	
OTz 90/220...240/24	
OT 50/220...240/24	
OTz 60/220...240/24	

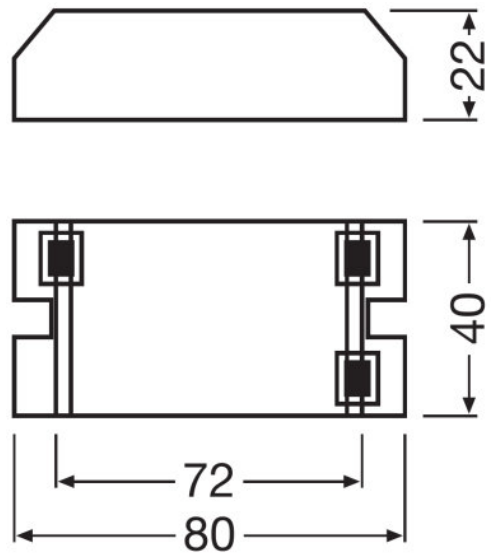
¹⁾ Solid or flexible leads

Product family datasheet

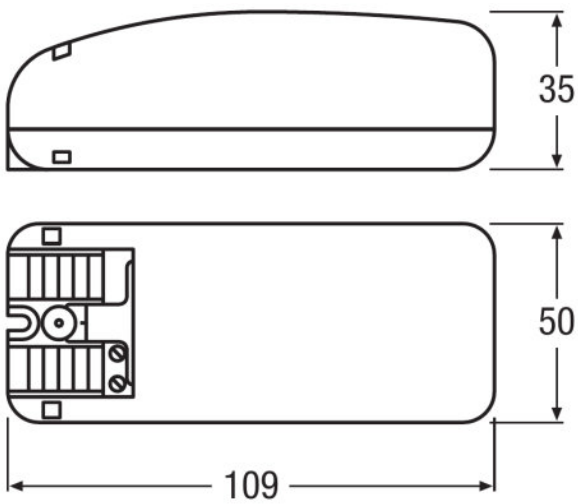
Product line drawing



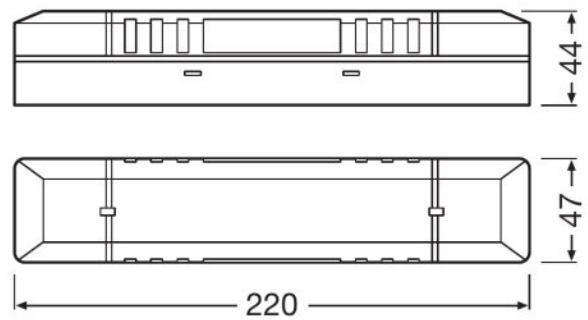
OT 6/200...240/24 CE



OT 8/200...240/24

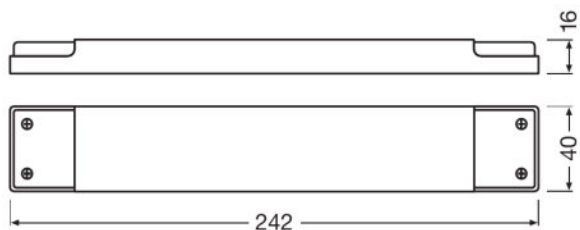


OT 20/200...240/24



OT 75/220...240/24

Product family datasheet



OT 50/220...240/24

Colors & materials

Product description	Casing material
OT 6/200...240/24 CE	Plastic
OT 8/200...240/24	Plastic
OT 20/200...240/24	Plastic
OT 75/220...240/24	Plastic
OTz 30/220...240/24	Plastic
OTz 90/220...240/24	Plastic
OT 50/220...240/24	Plastic
OTz 60/220...240/24	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OT 6/200...240/24 CE	-20...+50 °C	70 °C	100 °C	-40...85 °C
OT 8/200...240/24	-20...+50 °C	80 °C	110 °C	-40...85 °C
OT 20/200...240/24	0...+50 °C	70 °C	90 °C	-40...85 °C
OT 75/220...240/24	-20...+50 °C	80 °C	110 °C	-40...85 °C
OTz 30/220...240/24			110 °C	-40...85 °C
OTz 90/220...240/24			110 °C	-40...85 °C
OT 50/220...240/24	-20...+45 °C	95 °C	110 °C	-30...85 °C
OTz 60/220...240/24			110 °C	-40...85 °C

Product family datasheet

Product description	Permitted rel. humidity during operation
OT 6/200...240/24 CE	5...85 % ¹⁾
OT 8/200...240/24	5...85 % ¹⁾
OT 20/200...240/24	5...85 % ¹⁾
OT 75/220...240/24	5...85 % ¹⁾
OTz 30/220...240/24	5...85 % ¹⁾
OTz 90/220...240/24	5...85 % ¹⁾
OT 50/220...240/24	5...85 % ¹⁾
OTz 60/220...240/24	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OT 6/200...240/24 CE	50000 h ¹⁾
OT 8/200...240/24	30000 h
OT 20/200...240/24	30000 h
OT 75/220...240/24	50000 h ²⁾
OTz 30/220...240/24	
OTz 90/220...240/24	
OT 50/220...240/24	50000 h ²⁾
OTz 60/220...240/24	

¹⁾ At $T_{case} = 60^{\circ}\text{C}$ at T_c point / 10% failure rate

²⁾ At $T_{case} = 80^{\circ}\text{C}$ at T_c point / 10% failure rate

Additional product data

Product description	Encapsulated
OT 6/200...240/24 CE	No
OT 8/200...240/24	No
OT 20/200...240/24	No
OT 75/220...240/24	No
OTz 30/220...240/24	
OTz 90/220...240/24	
OT 50/220...240/24	No
OTz 60/220...240/24	

Product family datasheet

Capabilities

Product description	Dimmable	Overheating protection	Overload protection
OT 6/200...240/24 CE	No ¹⁾	Automatic reversible	Automatic reversible
OT 8/200...240/24	No ¹⁾	Automatic reversible	Automatic reversible
OT 20/200...240/24	No ¹⁾	Automatic reversible	Automatic reversible
OT 75/220...240/24	No ¹⁾	Automatic reversible	Automatic reversible
OTz 30/220...240/24	No		
OTz 90/220...240/24	No		
OT 50/220...240/24	No ¹⁾	Automatic reversible	Automatic reversible
OTz 60/220...240/24	No		

Product description	Short-circuit protection	No-load proof	Suitable for fixtures with prot. class	Type of connection, output side
OT 6/200...240/24 CE	Automatic reversible	Yes	II	
OT 8/200...240/24	Automatic reversible	Yes	II / I	Push terminal
OT 20/200...240/24	Automatic reversible	Yes	II	Screw terminal
OT 75/220...240/24	Automatic reversible	Yes	II	Screw terminal
OTz 30/220...240/24				
OTz 90/220...240/24				
OT 50/220...240/24	Automatic reversible	Yes	II	Screw terminal
OTz 60/220...240/24				

Product description	Dimming interface	Dimming range	Number of channels
OT 6/200...240/24 CE			
OT 8/200...240/24			
OT 20/200...240/24	-	-	1
OT 75/220...240/24			
OTz 30/220...240/24			
OTz 90/220...240/24			
OT 50/220...240/24			
OTz 60/220...240/24			

¹⁾ With OPTOTRONIC dimmers

Certificates & standards

Product description	Approval marks – approval
OT 6/200...240/24 CE	CE / VDE / ENEC 10 / CB
OT 8/200...240/24	CE / VDE / ENEC 10 / EMC
OT 20/200...240/24	CE / ENEC 10 / VDE / VDE-EMC / RCM
OT 75/220...240/24	CE / ENEC 10 / VDE / VDE-EMC / RCM
OTz 30/220...240/24	
OTz 90/220...240/24	
OT 50/220...240/24	CE / CB / RCM / ENEC 18
OTz 60/220...240/24	

Product family datasheet

Product description	Standards	Protection class	Type of protection
OT 6/200...240/24 CE	Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to EN 55015/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 ¹⁾	II	IP65
OT 8/200...240/24	Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to EN 55015/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20
OT 20/200...240/24	Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to EN 55015/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20
OT 75/220...240/24	Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to EN 55015/Acc. to IEC 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61547	II	IP20
OTz 30/220...240/24		II	IP20
OTz 90/220...240/24		II	IP20
OT 50/220...240/24	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	IP20
OTz 60/220...240/24		II	IP20

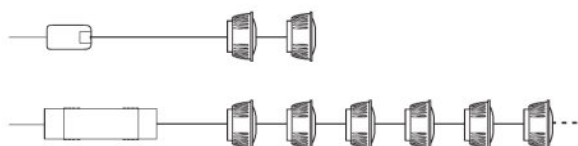
¹⁾ Secondary switching not allowed

Logistical data

Product description	Commodity code
OT 6/200...240/24 CE	850440829000
OT 8/200...240/24	850440829000
OT 20/200...240/24	850440829000
OT 75/220...240/24	850440829000
OTz 30/220...240/24	850440829000
OTz 90/220...240/24	850440829000
OT 50/220...240/24	850440829000
OTz 60/220...240/24	850440829000

Product family datasheet

Wiring Diagram



OT 75/220...240/24



OT 75/220...240/24

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 6/200...240/24 CE	4008321113269	OSROT624CE	-	4031154	-
OT 8/200...240/24	4008321040169	OSROT0824	-	4031156	-
OT 20/200...240/24	4050300618111	OSROT2024	-	4031160	-
OT 75/220...240/24	4050300817477	OSROT7524	-	4031164	-
OT 50/220...240/24	4052899905566	-	-	4030200	-

Download Data

Product family datasheet

File	
	User instruction OPTOTRONIC CONSTANT VOLTAGE
	Addon Technical Information 313236_ADDON TECHNICAL INFO OT 6200-24010 CE VS20 and OT 6200-24024 CE VS20 (GB)
	Brochures 730792_Light is universal - Easy installation of efficient complete systems (DE)
	Brochures 730791_Light is universal - Easy installation of efficient complete systems (EN)
	Certificates VDE ENEC Certificate 40038447
	Declarations of conformity 334859_Declaration of conformity – OT 6200-24010 CE
	Declarations of conformity EU Declaration of Conformity 3578669
	CAD data 3-dim 313445_51x52x22 9900045
	CAD data 3-dim 313473_51x52x22 9900045
	CAD data PDF 313405_51x52x22 9900045
	Addon Technical Information 313228_ADDON TECHNICAL INFORMATION OT 8200-24024 VS50 OSRAM (GB)
	Brochures 538836_Light is universal - OPTOTRONIC LED drivers (GB)
	Certificates VDE EMC Certificate 40011668
	Declarations of conformity 727842_Declaration OT 8
	CAD data 3-dim 317456_OT 9 80x40x22 9900053
	CAD data 3-dim 317457_OT 9 80x40x22 9900053
	CAD data 3-dim 317458_OT 9 80x40x22 9900053
	CAD data PDF 317455_OT 9 80x40x22 9900053
	User instruction OPTOTRONIC LED Power Supply
	Addon Technical Information 313233_ADDON TECHNICAL INFORMATION OT 20230-24024 VS20 OSRAM (GB)
	Declarations of conformity 334871_Declaration of conformity – OT 20220-24024
	Addon Technical Information 313226_ADDON TECHNICAL INFORMATION OT 75220-24024 VS10 OSRAM (GB)

Product family datasheet

	Declarations of conformity 334875_Declaration of conformity OT 75220-24024
	CAD data 3-dim 313470_220x47x44 9900016
	CAD data 3-dim 313501_220x47x44 9900016
	CAD data 3-dim 314272_220x47x44 9900016
	CAD data PDF 313401_220x47x44 9900016
	Declarations of conformity EU Declaration of Conformity 3644440 (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

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321113269	OT 6/200...240/24 CE	Shipping carton box 20	328 mm x 76 mm x 138 mm	3.44 dm ³	1212.50 g
4008321040169	OT 8/200...240/24	Shipping carton box 50	212 mm x 143 mm x 121 mm	3.67 dm ³	2701.00 g
4050300618111	OT 20/200...240/24	Shipping carton box 20	270 mm x 105 mm x 229 mm	6.49 dm ³	2396.00 g
4050300817477	OT 75/220...240/24	Shipping carton box 10	252 mm x 118 mm x 246 mm	7.32 dm ³	3135.50 g
4052899932142	OTz 30/220...240/24	Shipping carton box 20	242 mm x 153 mm x 162 mm	6.00 dm ³	3180.00 g
4052899932166	OTz 90/220...240/24	Shipping carton box 20	317 mm x 244 mm x 197 mm	15.24 dm ³	11956.00 g
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
4052899932159	OTz 60/220...240/24	Shipping carton box 20	255 mm x 244 mm x 177 mm	11.01 dm ³	4679.00 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.

Product family datasheet

Disclaimer

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