

CV Power supplies with 1...10 V



Areas of application

- Suitable for use in tight, flat luminaires or installation in suspended ceilings
- Suitable for indoor and outdoor SELV installations

Product benefits

- Versatile 1...10 V window driver up to 240 W due to flexible output characteristic
- Very high efficiency and reliability
- High IP protection (IP67)
- High surge protection: up to 3 kV (L-N) / 6 kV (L/N-PE)

Product features

- Dimmable via fully isolated 1...10 V interface
- Driver with output power range of up to 240 W

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 80/220...240/24 DIM P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.90/0.95 ²⁾	87 % ³⁾
OT 120/220...240/24 DIM P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.90/0.95 ²⁾	89 % ³⁾
OT 240/220...240/24 DIM P	220...240 V	50...60 Hz	198...264 V ¹⁾	< 20 %	0.95/0.90 ²⁾	92 % ³⁾

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 80/220...240/24 DIM P	12 W ⁴⁾	<1,5 W	35 A ⁵⁾	7	10
OT 120/220...240/24 DIM P	15.0 W ⁴⁾	<1,5 W	60 A ⁴⁾	6	10
OT 240/220...240/24 DIM P	21 W ⁴⁾	<1,5 W	70 A ⁴⁾	5	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 80/220...240/24 DIM P	17	3 kV	24 V ⁶⁾	24 V	80 W ⁷⁾
OT 120/220...240/24 DIM P	17	3 kV	24 V ⁶⁾	24 V	120 W ⁹⁾
OT 240/220...240/24 DIM P	13	3 kV	24 V ⁶⁾	24 V	240 W ¹⁰⁾

Product description	Galvanic isolation	Galvanic isolation primary/secondary	Surge capability (L/N-Ground)
OT 80/220...240/24 DIM P	SELV equivalent	3.75 kV ⁸⁾	
OT 120/220...240/24 DIM P	SELV equivalent	3.75 kV ⁸⁾	6 kV
OT 240/220...240/24 DIM P	SELV equivalent	3.75 kV ⁸⁾	6 kV

¹⁾ Permitted voltage range

²⁾ Minimum/Full load at 230 V/Half load at 230 V

³⁾ At full load and 230 V

⁴⁾ Maximum

⁵⁾ At 360 μ s

⁶⁾ +1.0/-0.5 V

⁷⁾ Partial load 0...80 W

⁸⁾ SELV-equivalent

⁹⁾ Partial load 0...120 W

¹⁰⁾ Partial load 0...240 W

Product family datasheet

Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT 80/220...240/24 DIM P	250.0 mm	50.0 mm	34.0 mm	241.0 mm	900.00 g	1.0 mm ² ¹⁾
OT 120/220...240/24 DIM P	250.0 mm	60.0 mm	39.0 mm	241.0 mm	1100.00 g	1.0 mm ² ¹⁾
OT 240/220...240/24 DIM P	250.0 mm	80.0 mm	39.0 mm	241.0 mm	1500.00 g	1.0 mm ² ¹⁾

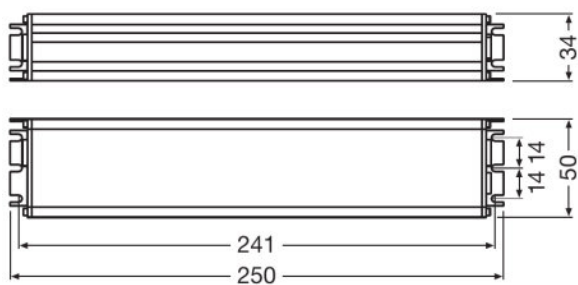
Product description	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Cable/wire length, control input
OT 80/220...240/24 DIM P	1.5 mm ² ¹⁾	10...11 mm	10...11 mm	300 mm
OT 120/220...240/24 DIM P	1.5 mm ² ¹⁾	10...11 mm	10...11 mm	300 mm
OT 240/220...240/24 DIM P	1.5 mm ² ¹⁾	10...11 mm	10...11 mm	300 mm

Product description	Cable/wire length, input side	Cable/wire length, output side	Mounting hole spacing, width
OT 80/220...240/24 DIM P	300 mm	300 mm	14.0 mm
OT 120/220...240/24 DIM P	300 mm	300 mm	15.0 mm
OT 240/220...240/24 DIM P	300 mm	300 mm	16.0 mm

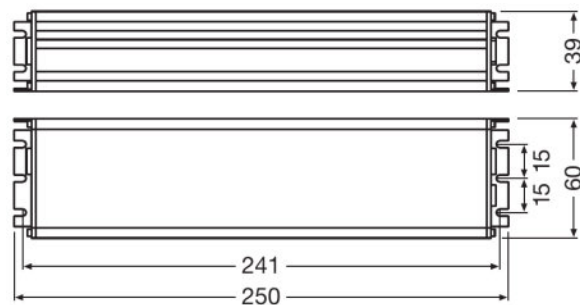
¹⁾ Flexible

Product family datasheet

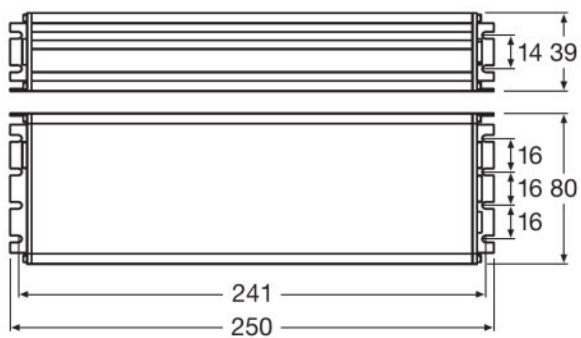
Product line drawing



OT 80/220...240/24 DIM P



OT 120/220...240/24 DIM P



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

Product family datasheet

Colors & materials

Product description	Casing material
OT 80/220...240/24 DIM P	Metal
OT 120/220...240/24 DIM P	Metal
OT 240/220...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 80/220...240/24 DIM P	-25...+55 °C	80 °C ¹⁾	100 °C	5...85 % ²⁾
OT 120/220...240/24 DIM P	-25...+55 °C	80 °C ¹⁾	100 °C	5...85 % ²⁾
OT 240/220...240/24 DIM P	-25...+55 °C	80 °C ¹⁾	100 °C	5...85 % ²⁾

¹⁾ Maximum at the T_c-point

²⁾ Non-condensing

Lifespan

Product description	ECG lifetime
OT 80/220...240/24 DIM P	50000 h ¹⁾
OT 120/220...240/24 DIM P	50000 h ¹⁾
OT 240/220...240/24 DIM P	50000 h ¹⁾

¹⁾ At T_{case} = 70°C at T_c point / 10% failure rate

Additional product data

Product description	Encapsulated
OT 80/220...240/24 DIM P	No
OT 120/220...240/24 DIM P	No
OT 240/220...240/24 DIM P	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT 80/220...240/24 DIM P	Yes	1...10 V ¹⁾	3...100 %	Pulse Width Modulation
OT 120/220...240/24 DIM P	Yes	1...10 V ¹⁾	3...100 % ²⁾	Pulse Width Modulation
OT 240/220...240/24 DIM P	Yes	1...10 V ¹⁾	3...100 %	Pulse Width Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT 80/220...240/24 DIM P	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT 120/220...240/24 DIM P	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT 240/220...240/24 DIM P	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product family datasheet

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, output side
OT 80/220...240/24 DIM P	10 m	II	Wires
OT 120/220...240/24 DIM P	10 m	I	Wires
OT 240/220...240/24 DIM P	10 m	I	Wires

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

²⁾ Depends on the lamp type (please see www.osram.com/dim)

Certificates & standards

Product description	Approval marks – approval
OT 80/220...240/24 DIM P	CE / CB / RCM / EAC / ENEC 18 / BIS
OT 120/220...240/24 DIM P	CE / CB / RCM / EAC / ENEC 18 / BIS
OT 240/220...240/24 DIM P	CE / CB / RCM / EAC / ENEC 18 / BIS

Product description	Standards	Protection class
OT 80/220...240/24 DIM 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
OT 120/220...240/24 DIM 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
OT 240/220...240/24 DIM 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 80/220...240/24 DIM P	IP67
OT 120/220...240/24 DIM P	IP67
OT 240/220...240/24 DIM P	IP67

Logistical data

Product description	Temperature range at storage
OT 80/220...240/24 DIM P	-40...85 °C
OT 120/220...240/24 DIM P	-40...85 °C
OT 240/220...240/24 DIM P	-40...85 °C

Application advice

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

Sales and Technical Support








Product family datasheet

Sales and Technical Support www.osram.com

Country specific information

Product description	Product code	METEL-Code	SEG-No.	STK number	UK Org
OT 80/220...240/24 DIM P	4008321981677	-	-	4030037	-
OT 120/220...240/24 DIM P	4008321981691	-	-	4030038	-
OT 240/220...240/24 DIM P	4008321981714	-	-	4030039	-

Download Data

File
 Brochures 24V OPTOTRONIC outdoor drivers (GB)
 Certificates ENEC certificate OT 80 220-240 24 DIM P
 Declarations of conformity Declaration of conformity - OT 80220-24024 P - OT 120220-24024 P - OT 240
 Installation/Operation notice Instruction Sheet OT 80220-24024 DIM P
 Certificates ENEC certificate OT 120 220-240 24 DIM P
 Certificates ENEC certificate-117-N OT 240220-24024 DIM P
 Installation/Operation notice Instruction Sheet OT 24022024024 DIM P

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321981677	OT 80/220...240/24 DIM P	Shipping carton box 10	499 mm x 140 mm x 393 mm	27.45 dm ³	10006.00 g
4008321981691	OT 120/220...240/24 DIM P	Shipping carton box 10	560 mm x 155 mm x 400 mm	34.72 dm ³	13400.00 g
4008321981714	OT 240/220...240/24 DIM P	Shipping carton box 8	540 mm x 193 mm x 400 mm	41.69 dm ³	14460.00 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.