

OPTOTRONIC - DIM (1-10V) ADJ IP66

Constant Current Outdoor – Dimmable



Areas of application

- Spot light and down light
- Street and urban lighting
- Industry lighting
- Suitable for luminaires of protection class I

Product family benefits

- Easily current adjustment by potentiometer
- High surge protection: up to 6 kV
- 0...10 V dimming (minimum 10%)
- High efficiency up to 88%
- Adjustable and wide output current range
- Wide output voltage & current range for multiple applications
- Double isolation between primary/secondary sides (SELV)
- Over temperature protection
- IP66 (Independent installation)
- Long lifetime
- Very low ripple < 3%

Product family datasheet

Technical data

Electrical data

Product description	Nominal voltage	Input voltage AC	Nominal current	Mains frequency	Power factor λ	Total harmonic distortion
OT 30/220-240/850 DIM P6	220...240 V	198...264 V	0.17 A ¹⁾	50/60 Hz	> 0.95	< 10 % ²⁾
OT 50/220-240/1A4 DIM P6	220...240 V	198...264 V	0.28 A ¹⁾	50/60 Hz	> 0.95	< 10 % ²⁾
OT 60/220-240/1A4 DIM P6	220...240 V	198...264 V	0.34 A ¹⁾	50/60 Hz	> 0.95	< 10 % ²⁾

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 30/220-240/850 DIM P6	3.2 W ¹⁾	35 A ³⁾	4	7	11
OT 50/220-240/1A4 DIM P6	6.8 W ¹⁾	35 A ³⁾	4	7	11
OT 60/220-240/1A4 DIM P6	8.0 W ¹⁾	35 A ³⁾	4	7	11

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output power	Maximum output power
OT 30/220-240/850 DIM P6	6 kV	4 kV	3...30 W	30 W
OT 50/220-240/1A4 DIM P6	6 kV	4 kV	5...50 W	50 W
OT 60/220-240/1A4 DIM P6	6 kV	4 kV	6...60 W	60 W

Product description	Efficiency in full-load	Output current tolerance	Output ripple current (100 Hz)
OT 30/220-240/850 DIM P6	86 % ⁴⁾	±5 %	< ±3 % ⁵⁾
OT 50/220-240/1A4 DIM P6	87 % ⁴⁾	±5 %	< ±3 % ⁵⁾
OT 60/220-240/1A4 DIM P6	88 % ⁴⁾	±5 %	< ±3 % ⁵⁾

Product description	Minimum output current	Galvanic isolation
OT 30/220-240/850 DIM P6	0.62 A	Double
OT 50/220-240/1A4 DIM P6	1.05 A	Double
OT 60/220-240/1A4 DIM P6	1.2 A	Double

¹⁾ V_{in} 230V 50Hz

²⁾ At full load

³⁾ Max, $t_h = 350\mu s$

⁴⁾ at 230 V, 50 Hz

⁵⁾ Low frequency $\leq 100\text{Hz}$, full load @ 230V

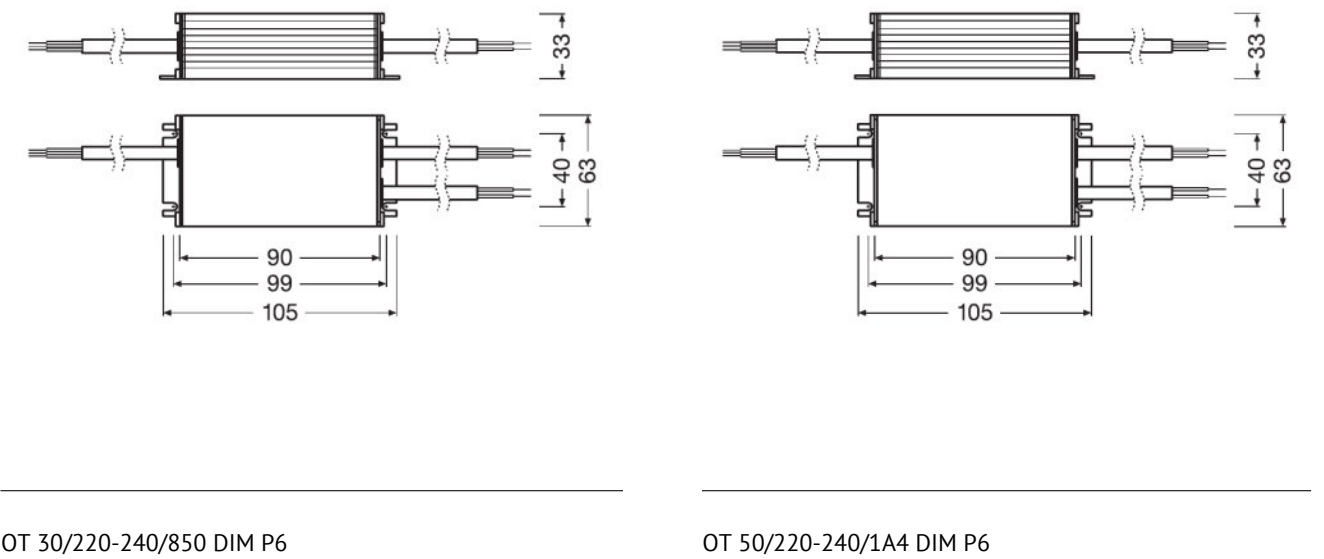
Product family datasheet

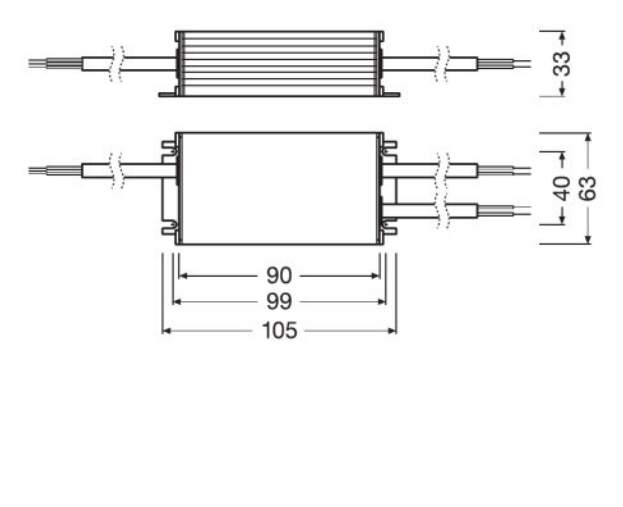
Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT 30/220-240/850 DIM P6	105.0 mm	63.0 mm	33.0 mm	99.0 mm	400.00 g	1.0 mm²
OT 50/220-240/1A4 DIM P6	105.0 mm	63.0 mm	33.0 mm	99.0 mm	400.00 g	1.0 mm²
OT 60/220-240/1A4 DIM P6	105.0 mm	63.0 mm	33.0 mm	99.0 mm	400.00 g	1.0 mm²

Product description	Cable cross-section, output side	Wire preparation length, input side
OT 30/220-240/850 DIM P6	1.0 mm²	10 mm
OT 50/220-240/1A4 DIM P6	1.0 mm²	10 mm
OT 60/220-240/1A4 DIM P6	1.0 mm²	10 mm

Product line drawing





OT 60/220-240/1A4 DIM P6

Temperatures & operating conditions

Product description	Ambient temperature range	Temperature range at storage	Maximum temperature at tc test point	Max.housing temperature in case of fault
OT 30/220-240/850 DIM P6	-40...+55 °C	-40...+85 °C	90 °C	110 °C
OT 50/220-240/1A4 DIM P6	-40...+55 °C	-40...+85 °C	90 °C	110 °C
OT 60/220-240/1A4 DIM P6	-40...+55 °C	-40...+85 °C	90 °C	110 °C

Product description	Permitted rel. humidity during operation
OT 30/220-240/850 DIM P6	5...85 % ¹⁾
OT 50/220-240/1A4 DIM P6	5...85 % ¹⁾
OT 60/220-240/1A4 DIM P6	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OT 30/220-240/850 DIM P6	50000 h ¹⁾
OT 50/220-240/1A4 DIM P6	50000 h ¹⁾
OT 60/220-240/1A4 DIM P6	50000 h ¹⁾

¹⁾ At maximum T_c = 80°C / 10% failure rate

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Suitable for fixtures with prot. class
OT 30/220-240/850 DIM P6	Yes	0-10V	10...100 %	I
OT 50/220-240/1A4 DIM P6	Yes	0-10V	10...100 %	I
OT 60/220-240/1A4 DIM P6	Yes	0-10V	10...100 %	I

Product description	Short-circuit protection	No-load proof	Intended for no-load operation	Max. cable length to lamp/LED module
OT 30/220-240/850 DIM P6	Yes	Yes	No	2.0 m ¹⁾
OT 50/220-240/1A4 DIM P6	Yes	Yes	No	2.0 m ¹⁾
OT 60/220-240/1A4 DIM P6	Yes	Yes	No	2.0 m ¹⁾

Product description	Number of channels	Control interface	Overload protection
OT 30/220-240/850 DIM P6	1	0-10V	Yes
OT 50/220-240/1A4 DIM P6	1	0-10V	Yes
OT 60/220-240/1A4 DIM P6	1	0-10V	Yes

¹⁾ Output wires must be routed as close as possible to each other

Certificates & standards

Product description	Type of protection	Standards	Approval marks – approval
OT 30/220-240/850 DIM P6	IP66	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 (ED.8)/Acc. to EN 62384	CCC / CE / ENEC 25 / SELV
OT 50/220-240/1A4 DIM P6	IP66	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61547/Acc. to EN 60598-1 (ED.8)/Acc. to EN 62384	CCC / CE / ENEC 25 / SELV
OT 60/220-240/1A4 DIM P6	IP66	Acc. to EN 55015/Acc. to EN 60598-1 (ED.8)/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 61547	CCC / CE / ENEC 25 / SELV

Product family datasheet

Logistical data

Product description	Commodity code
OT 30/220-240/850 DIM P6	850440829000
OT 50/220-240/1A4 DIM P6	850440829000
OT 60/220-240/1A4 DIM P6	850440829000

Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OT 30/220-240/850 DIM P6	23-12-2021	4062172125666	Lead
OT 50/220-240/1A4 DIM P6	23-12-2021	4062172125697	Lead
OT 60/220-240/1A4 DIM P6	23-12-2021	4062172125710	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT 30/220-240/850 DIM P6	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	a5c028fa-290c-47e1-b7de-328c08ffbd34
OT 50/220-240/1A4 DIM P6	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	79ec4b60-e266-412d-b831-c012e342511a
OT 60/220-240/1A4 DIM P6	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8b4ff049-3f4b-4eab-880e-c53b7e765b36

Application advice

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

Product family datasheet



Certificates
CCC certificate of OT P6 family

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
4062172125666	OT 30/220-240/850 DIM P6	Shipping carton box 20	461 mm x 356 mm x 117 mm	19.20 dm ³	8400.00 g
4062172125697	OT 50/220-240/1A4 DIM P6	Shipping carton box 20	461 mm x 356 mm x 117 mm	19.20 dm ³	8400.00 g
4062172125710	OT 60/220-240/1A4 DIM P6	Shipping carton box 20	461 mm x 356 mm x 117 mm	19.20 dm ³	8400.00 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.