

## OPTOTRONIC Phase-cut OTE

Compact constant current LED driver – Dimmable



### Product family features

- Dimmable via leading edge/trailing edge
- Type of protection: IP20

### Product family benefits

- Compact housing for mounting in very tight spaces
- Compatible with the most common leading-edge and trailing-edge phase dimmers

### Areas of application

- Optional cable clamp E-style for independent mounting
- Suitable for indoor installations
- Suitable for indoor SELV installations

# Product family datasheet

## Technical data

Product description	Electrical data					
	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor $\lambda$	Efficiency in full-load
OTe 10/220...240/700 PC	220...240 V	50/60 Hz	198...264 V <sup>1)</sup>	< 20 %	0.90C...0.98 <sup>2)</sup>	79 % <sup>3)</sup>
OTe 13/220...240/350 PC	220...240 V	50/60 Hz	198...264 V <sup>1)</sup>	< 20 %	0.95/0.90 <sup>2)</sup>	84 % <sup>3)</sup>
OTe 18/220...240/500 PC	220...240 V	50/60 Hz	198...264 V <sup>1)</sup>	15 %	0.88C...0.97 <sup>2)</sup>	86 % <sup>3)</sup>
OTe 18/220...240/350 PC	220...240 V	50/60 Hz	198...264 V <sup>1)</sup>	15 %	0.88C...0.97 <sup>2)</sup>	86 % <sup>3)</sup>
OTe 25/220...240/700 PC	220...240 V	50/60 Hz	198...264 V <sup>1)</sup>	15 %	0.90C...0.98 <sup>2)</sup>	86 % <sup>3)</sup>

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-Ground)
OTe 10/220...240/700 PC	2.8 W <sup>4)</sup>	5 A <sup>5)</sup>	101	160	-	1 kV
OTe 13/220...240/350 PC	2.6 W <sup>4)</sup>	5 A <sup>5)</sup>	82	130	-	1 kV
OTe 18/220...240/500 PC	3.0 W <sup>4)</sup>	5 A <sup>5)</sup>	53	84	-	1 kV
OTe 18/220...240/350 PC	3.0 W <sup>4)</sup>	5 A <sup>5)</sup>	53	84	-	1 kV
OTe 25/220...240/700 PC	3,9 W <sup>4)</sup>	7 A <sup>5)</sup>	41	65	-	2 kV

Product description	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance
OTe 10/220...240/700 PC	1 kV	7...14 V	25 V	700 mA <sup>6)</sup>	±10 %
OTe 13/220...240/350 PC	1 kV	18...38 V <sup>15)</sup>	50 V	350 mA <sup>6)</sup>	±10 %
OTe 18/220...240/500 PC	1 kV	18...36 V <sup>15)</sup>	60 V	500 mA <sup>6)</sup>	±10 %
OTe 18/220...240/350 PC	1 kV	27...54 V <sup>20)</sup>	50 V	350 mA <sup>6)</sup>	±10 %
OTe 25/220...240/700 PC	1 kV	18...36 V <sup>15)</sup>	50 V	700 mA <sup>6)</sup>	±10 %

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTe 10/220...240/700 PC	35 % <sup>7)</sup>	≤1	≤1.0	10 W <sup>8)</sup>
OTe 13/220...240/350 PC	25 % <sup>7)</sup>	≤1	≤0.6	13 W <sup>16)</sup>
OTe 18/220...240/500 PC	< 35 % <sup>7)</sup>	≤1	≤0.6	18 W <sup>19)</sup>
OTe 18/220...240/350 PC	< 35 % <sup>7)</sup>	≤1	≤0.8	19 W <sup>21)</sup>
OTe 25/220...240/700 PC	< 35 % <sup>7)</sup>	≤1	≤0.8	25 W <sup>22)</sup>

## Product family datasheet

Product description	Maximum output power	Galvanic isolation primary/secondary	Current set	Dimensions & weight	
				Mounting hole spacing, length	Mounting hole spacing, width
OTe 10/220...240/700 PC	10 W	SELV	Fixed current	-	-
OTe 13/220...240/350 PC	13 W	SELV	Fixed current	-	-
OTe 18/220...240/500 PC	18 W	SELV	Fixed current	-	-
OTe 18/220...240/350 PC	19 W	SELV	Fixed current	-	-
OTe 25/220...240/700 PC	25 W	SELV	Fixed current	-	-

Product description	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side
OTe 10/220...240/700 PC	81.00 g	0.75...1.5 mm <sup>2 9)</sup>	0.5...1.5 mm <sup>2 9)</sup>	8.0...9.0 mm	8.0...9.0 mm
OTe 13/220...240/350 PC	81.00 g	0.75...1.5 mm <sup>2 9)</sup>	0.5...1.5 mm <sup>2 9)</sup>	8.0...9.0 mm	8.0...9.0 mm
OTe 18/220...240/500 PC	93.00 g	0.75...1.5 mm <sup>2 9)</sup>	0.5...1.5 mm <sup>2 9)</sup>	8.0...9.0 mm	8.0...9.0 mm
OTe 18/220...240/350 PC	93.00 g	0.75...1.5 mm <sup>2 9)</sup>	0.5...1.5 mm <sup>2 9)</sup>	8.0...9.0 mm	8.0...9.0 mm
OTe 25/220...240/700 PC	93.00 g	0.75...1.5 mm <sup>2 9)</sup>	0.5...1.5 mm <sup>2 9)</sup>	8.0...9.0 mm	8.0...9.0 mm

Product description	Length	Height	Width	Colors & materials		Temperatures & operating conditions	
				Casing material		Ambient temperature range	Maximum temperature at tc test point
OTe 10/220...240/700 PC	95.0 mm	25.0 mm	53.0 mm	Plastic		-20...+55 °C	80 °C <sup>10)</sup>
OTe 13/220...240/350 PC	95.0 mm	25.0 mm	53.0 mm	Plastic		-20...+55 °C	85 °C <sup>10)</sup>
OTe 18/220...240/500 PC	95.0 mm	30.0 mm	53.0 mm	Plastic		-20...+55 °C	75 °C <sup>10)</sup>
OTe 18/220...240/350 PC	95.0 mm	30.0 mm	53.0 mm	Plastic		-20...+50 °C	75 °C <sup>10)</sup>
OTe 25/220...240/700 PC	95.0 mm	30.0 mm	53.0 mm	Plastic		-20...+50 °C	75 °C <sup>10)</sup>

Product description	Max.housing temperature in case of fault	Temperature range at storage	Permitted rel. humidity during operation	Lifespan		Capabilities	
				ECG lifetime		Dimmable	
OTe 10/220...240/700 PC	110 °C	-25...75 °C	5...85 % <sup>11)</sup>	50000 h <sup>12)</sup>		Yes	
OTe 13/220...240/350 PC	110 °C	-25...75 °C	5...85 % <sup>11)</sup>	50000 h <sup>17)</sup>		Yes	
OTe 18/220...240/500 PC	110 °C	-25...75 °C	5...85 % <sup>11)</sup>	50000 h <sup>12)</sup>		Yes	
OTe 18/220...240/350 PC	110 °C	-25...75 °C	5...85 % <sup>11)</sup>	50000 h <sup>12)</sup>		Yes	
OTe 25/220...240/700 PC	110 °C	-25...75 °C	5...85 % <sup>11)</sup>	50000 h <sup>12)</sup>		Yes	

## Product family datasheet

Product description	Dimming interface	Dimming range	Dimming method	Overheating protection
OTe 10/220...240/700 PC	Phase Cut <sup>13)</sup>	10...100 %	Amplitude Modulation	Automatic reversible
OTe 13/220...240/350 PC	Phase Cut <sup>18)</sup>	10...100 %	Amplitude Modulation	Automatic reversible
OTe 18/220...240/500 PC	Phase Cut <sup>18)</sup>	10...100 %	Amplitude Modulation	Automatic reversible
OTe 18/220...240/350 PC	Phase Cut <sup>18)</sup>	10...100 %	Amplitude Modulation	Automatic reversible
OTe 25/220...240/700 PC	Phase Cut <sup>18)</sup>	10...100 %	Amplitude Modulation	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof	Intended for no-load operation
OTe 10/220...240/700 PC	Automatic reversible	Automatic reversible	Yes	No
OTe 13/220...240/350 PC	Automatic reversible	Automatic reversible	Yes	No
OTe 18/220...240/500 PC	Automatic reversible	Automatic reversible	Yes	No
OTe 18/220...240/350 PC	Automatic reversible	Automatic reversible	Yes	No
OTe 25/220...240/700 PC	Automatic reversible	Automatic reversible	Yes	No

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, output side
OTe 10/220...240/700 PC	2.0 m <sup>14)</sup>	I / II	Push terminal
OTe 13/220...240/350 PC	2.0 m <sup>14)</sup>	I / II	Push terminal
OTe 18/220...240/500 PC	2.0 m <sup>14)</sup>	I / II	Push terminal
OTe 18/220...240/350 PC	2.0 m <sup>14)</sup>	I / II	Push terminal
OTe 25/220...240/700 PC	2.0 m <sup>14)</sup>	I / II	Push terminal

Product description	Suitable for through-wiring	Certificates & standards		
		Approval marks – approval	Standards	Protection class
OTe 10/220...240/700 PC	No	CE / ENEC 10 / VDE / CB	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

## Product family datasheet

Product description	Suitable for through-wiring	Certificates & standards		
		Approval marks – approval	Standards	Protection class
OTe 13/220...240/350 PC	No	CE / ENEC 10 / VDE / CB	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 18/220...240/500 PC	No	CE / ENEC 10 / VDE / CB	Acc. to IEC 61347/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 18/220...240/350 PC	No	CE / ENEC 10 / VDE / CB	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 25/220...240/700 PC	No	CE / ENEC 10 / VDE / CB	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61347	II

Product description	Type of protection	Logistical data	Environmental information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)
		Commodity code	Date of Declaration
OTe 10/220...240/700 PC	IP20	850440839000	05-05-2023
OTe 13/220...240/350 PC	IP20	850440839000	05-05-2023
OTe 18/220...240/500 PC	IP20	850440839000	05-05-2023
OTe 18/220...240/350 PC	IP20	850440839000	05-05-2023
OTe 25/220...240/700 PC	IP20	850440839000	05-05-2023

## Product family datasheet

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
OTe 10/220...240/700 PC	4052899105300	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTe 13/220...240/350 PC	4052899105324	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTe 18/220...240/500 PC	4052899105362	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTe 18/220...240/350 PC	4052899105348	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTe 25/220...240/700 PC	4052899105386	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product description	Declaration No. in SCIP database
OTe 10/220...240/700 PC	f368e186-7e2c-44b7-81c4-c02f433b94fa
OTe 13/220...240/350 PC	a00aea49-8dd4-48d8-b0a5-4190000b7d45
OTe 18/220...240/500 PC	2ad87682-b11a-4765-911e-98b6a0618a5f
OTe 18/220...240/350 PC	57669464-49fd-40ec-ac45-64d14aa31c37
OTe 25/220...240/700 PC	0324db9a-533b-47ff-ad8f-eceaa5912679

<sup>1)</sup> Permitted voltage range

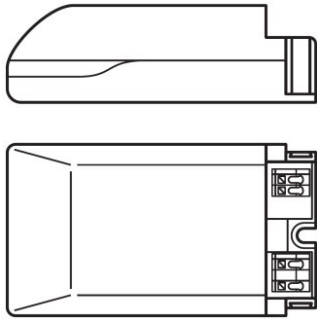
<sup>2)</sup> Full load at 230 V/Minimum load at 230 V

<sup>3)</sup> at 230 V, 50 Hz

## Product family datasheet

- 4) Maximum
- 5)  $t_{\text{width}} = 100 \mu\text{s}$  (measured at 50 %  $I_{\text{peak}}$ )
- 6)  $\pm 10\%$
- 7) Typical
- 8) Partial load 5...10 W
- 9) Flexible
- 10) Maximum at the  $T_c$ -point
- 11) Maximum 56 days/year at 85 %
- 12) At  $T_{\text{case}} = 70^\circ\text{C}$  at  $T_c$  point / 10% failure rate
- 13) Trailing edge
- 14) Output wires must be routed as close as possible to each other
- 15) Maximum <48 V
- 16) Partial load 6.5...13.5 W
- 17) At  $T_{\text{case}} = 75^\circ\text{C}$  at  $T_c$  point / 10% failure rate
- 18) Leading edge
- 19) Partial load 9...18 W
- 20) Maximum 60 V
- 21) Partial load 9.5...19 W
- 22) Partial load 12.5...25 W

## Product family datasheet



654797\_OTe 10131825 PC + OTi DALI 15 LT2

### Application advice

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



### Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

### Country specific information








Product description	Product code	METEL-Code	SEG-No.	STK number	UK Org
OTe 13/220...240/350 PC	4052899105324	-	-	4030292	-
OTe 13/220...240/350 PC	4052899105324	-	-	4030292	-
OTe 18/220...240/350 PC	4052899105348	-	-	4030293	-
OTe 18/220...240/350 PC	4052899105348	-	-	4030293	-

### Download Data

File
 Certificates OT EMC 40038482 290922
 Certificates OT ENEC 40038447 130722



## Product family datasheet

	Certificates 496535_CB report OTe 10 700 PC and OTe 13 350 PC
	Declarations of conformity OTe PC UK DoC 4281102 220322
	Declarations of conformity OTe PC CE 3365230 220322
	Installation/Operation notice OT PC dimmer list (EN)
	Installation guide 501498_OTe 10220-240700 PC
	CAD data 3-dim 377012_OTe 10-13 PC -cable clamp
	CAD data 3-dim 377013_OTe 10-13 PC -housing
	CAD data 3-dim 377014_OTe 10-13 PC -housing with cable clamp
	Installation guide 501497_OTe 13220-240350 PC
	Certificates 503096_CB report OTe 25 700 PC - OTe 18 350 PC - OTe 18 500
	Installation guide 501495_OTe 18220-240500 PC
	CAD data 3-dim 377015_OTe 18-25 PC -cable clamp
	CAD data 3-dim 377016_OTe 18-25 PC -housing
	CAD data 3-dim 377017_OTe 18-25 PC -housing with cable clamp
	Installation guide 501496_OTe 18220-240350 PC
	Installation guide 501494_OTe 25220-240700 PC

### 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.

## Product family datasheet

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899105300	OTe 10/220...240/700 PC	Shipping carton box 20	284 mm x 207 mm x 96 mm	5.64 dm <sup>3</sup>	1890.00 g
4052899105324	OTe 13/220...240/350 PC	Shipping carton box 20	284 mm x 207 mm x 96 mm	5.64 dm <sup>3</sup>	1890.00 g
4052899105362	OTe 18/220...240/500 PC	Shipping carton box 20	284 mm x 207 mm x 100 mm	5.88 dm <sup>3</sup>	2138.00 g
4052899105348	OTe 18/220...240/350 PC	Shipping carton box 20	284 mm x 207 mm x 100 mm	5.88 dm <sup>3</sup>	2138.00 g
4052899105386	OTe 25/220...240/700 PC	Shipping carton box 20	284 mm x 207 mm x 100 mm	5.88 dm <sup>3</sup>	2138.00 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.

### Accessories Optional

Product description	Accessory name	Accessory code
OTe 10/220...240/700 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896
OTe 13/220...240/350 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896
OTe 18/220...240/500 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896
OTe 18/220...240/350 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896
OTe 25/220...240/700 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896

### Disclaimer

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