

## OTe 13/220...240/350 PC

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



## Technical data

### Electrical data

|  |                           |
|--|---------------------------|
| Nominal input voltage                    | 220...240 V               |
| Mains frequency                          | 50/60 Hz                  |
| Input voltage AC                         | 198...264 V <sup>1)</sup> |
| Total harmonic distortion                | < 20 %                    |
| Power factor $\lambda$                   | 0.95/0.90 <sup>2)</sup>   |
| ECG efficiency                           | 84 % <sup>3)</sup>        |
| Device power loss                        | 2.6 W <sup>4)</sup>       |
| Inrush current                           | 5 A <sup>5)</sup>         |
| Max. ECG no. on circuit breaker 10 A (B) | 82                        |
| Max. ECG no. on circuit breaker 16 A (B) | 130                       |
| Max. ECG no. on circuit breaker 25 A (B) | -                         |
| Surge capability (L/N-Ground)            | 1 kV                      |
| Surge capability (L-N)                   | 1 kV                      |
| Nominal output voltage                   | 18...38 V <sup>6)</sup>   |
| U-OUT (working voltage)                  | 50 V                      |
| Nominal output current                   | 350 mA <sup>7)</sup>      |
| Output current tolerance                 | ±10 %                     |
| Output ripple current (100 Hz)           | 25 % <sup>8)</sup>        |
| Output PSTLM                             | ≤1                        |
| Output SVM                               | ≤0.6                      |
| Nominal output power                     | 13 W <sup>9)</sup>        |
| Galvanic isolation                       | SELV                      |

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

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

<sup>3)</sup> At full load and 230 V

<sup>4)</sup> Maximum

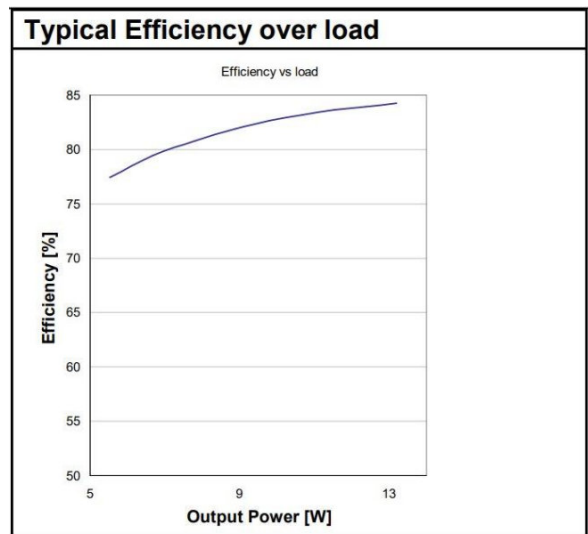
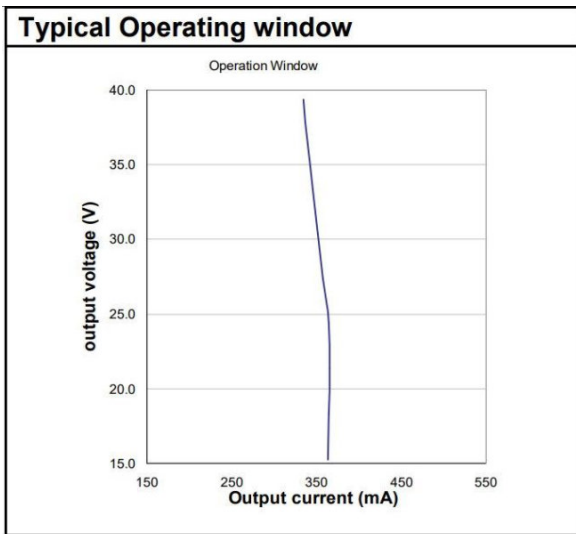
<sup>5)</sup>  $t_{width} = 100 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>6)</sup> Maximum <48 V

<sup>7)</sup> ±10%

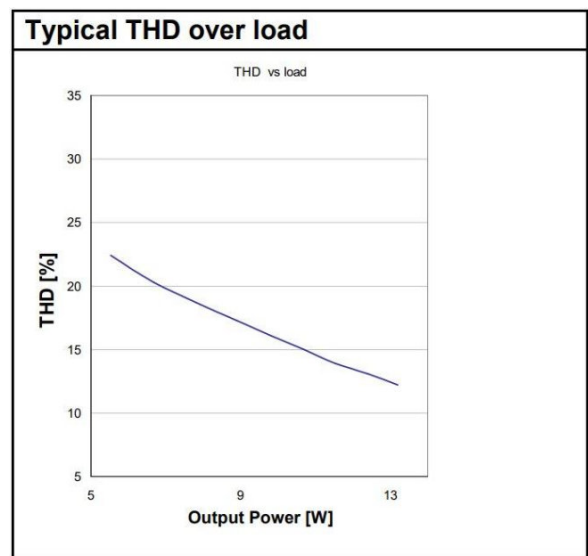
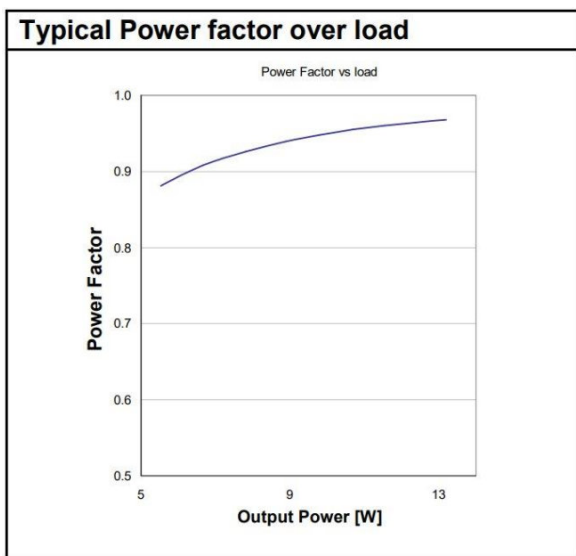
<sup>8)</sup> Typical

<sup>9)</sup> Partial load 6.5...13.5 W



OTE 13220-240350 PC Operating Window

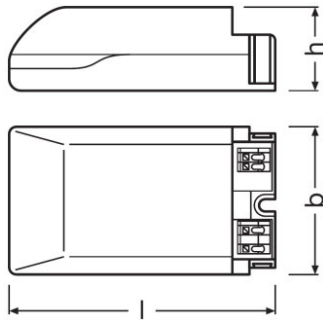
OTE 13220-240350 PC Typical Efficiency vs. Load (230 V 50 Hz)



OTE 13220-240350 PC Typical Power Factor vs. Load

OTE 13220-240350 PC Typical THD Vs Load

## Dimensions & weight



|                                      |  |
|--------------------------------------|--|
| Mounting hole spacing, length        | -  |
| Mounting hole spacing, width         | -  |
| Product weight                       | 81.00 g                                  |
| Cable cross-section, input side      | 0.75...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> <sup>1)</sup>  |
| Wire preparation length, input side  | 8.0...9.0 mm                             |
| Wire preparation length, output side | 8.0...9.0 mm                             |
| Length                               | 95.0 mm                                  |
| Width                                | 53.0 mm                                  |
| Height                               | 25.0 mm                                  |

<sup>1)</sup> Flexible / Solid leads

## Colors & materials

|                 |         |
|-----------------|---------|
| Casing material | Plastic |
|-----------------|---------|

## Temperatures & operating conditions

|  |                        |
|--|------------------------|
| Ambient temperature range                | -20...+55 °C           |
| Maximum temperature at tc test point     | 85 °C <sup>1)</sup>    |
| Max.housing temperature in case of fault | 110 °C                 |
| Temperature range at storage             | -25...75 °C            |
| Permitted rel. humidity during operation | 5...85 % <sup>2)</sup> |

<sup>1)</sup> Maximum at the T<sub>c</sub>-point

<sup>2)</sup> Maximum 56 days/year at 85 %

## Lifespan

|              |                       |
|--------------|-----------------------|
| ECG lifetime | 50000 h <sup>1)</sup> |
|--------------|-----------------------|

<sup>1)</sup> At T<sub>case</sub> = 75 °C at T<sub>c</sub> point / 10% failure rate

## Product datasheet

### Capabilities

|   |                         |
|---|-------------------------|
| <b>Dimmable</b>                               | Yes                     |
| <b>Dimming interface</b>                      | Phase Cut <sup>1)</sup> |
| <b>Dimming range</b>                          | 10...100 %              |
| <b>Dimming method</b>                         | Amplitude Modulation    |
| <b>Overheating protection</b>                 | Automatic reversible    |
| <b>Overload protection</b>                    | Automatic reversible    |
| <b>Short-circuit protection</b>               | Automatic reversible    |
| <b>No-load proof</b>                          | Yes                     |
| <b>Max. cable length to lamp/LED module</b>   | 2.0 m                   |
| <b>Suitable for fixtures with prot. class</b> | I / II                  |
| <b>Type of connection, output side</b>        | Push terminal           |

<sup>1)</sup> Leading edge / Trailing edge







### Certificates & standards

|                                  |   |
|----------------------------------|---|
| <b>Approval marks – approval</b> | CE / ENEC 10 / VDE / CB   |
| <b>Standards</b>                 | 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 |
| <b>Protection class</b>          | II  |
| <b>Type of protection</b>        | IP20  |

### Logistical data






|                       |              |
|-----------------------|--------------|
| <b>Commodity code</b> | 850440829000 |
|-----------------------|--------------|

### Download Data

| File  |  |
|---|--|
|  | Product Datasheet<br>496533_OT Technical DS OTe 13 350 PC        |
|  | Certificates<br>OT EMC 40038482 060720                           |
|  | Certificates<br>OT ENEC 40038447 210721                          |
|  | Certificates<br>496535_CB report OTe 10 700 PC and OTe 13 350 PC |
|  | Declarations of conformity<br>OTe PC UK DoC 4281102 180221       |
|  | Declarations of conformity<br>OTE PC CE 3365230 180221           |

## Product datasheet

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|   |   |
|---|---|
|  | Installation/Operation notice<br>OT PC dimmer list (EN)         |
|  | Installation guide<br>501497_OTe 13220-240350 PC                |
|  | CAD data 3-dim<br>377012_OTe 10-13 PC -cable clamp              |
|  | CAD data 3-dim<br>377013_OTe 10-13 PC -housing                  |
|  | CAD data 3-dim<br>377014_OTe 10-13 PC -housing with cable clamp |

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## Logistical Data

| Product code  | Product description     | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|-------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4052899105324 | OTe 13/220...240/350 PC | Shipping carton box<br>20    | 284 mm x 207 mm x 90 mm              | 5.29 dm <sup>3</sup> | 2270.00 g    |

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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.

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## Disclaimer

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