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# OT FIT 60/220...240/350 D CS L

OPTOTRONIC FIT D CS L (Dip Switch) EL | Linear / Area Constant Current - Non dimmable



# Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz

Supply voltage: 220...240 VLine voltage: 198...264 V

- DC detection (0 Hz, pulsating DC), on/off switchable

- Wide output current range

- Lifetime: up to 100,000 h (temperature at  $T_c = 65$  °C, max.

10 % failure rate)Non-isolated drivers

### Product family benefits

- Flexible current setting (DIPswitch 6 currents)
- Higher quality of light thanks to low output ripple current
- High efficiency
- User flexibility with six different output currents from one driver
- Safety requirement due to overload, overtemperature, short-circuit protection
- Long reliable life at maximum permitted temperatures
- Enable slim fixture design with flat 21 mm height metal housing



# Areas of application

- Linear and area lighting
- Office, industrial and shop lighting
- Suitable for luminaires of protection class I
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for installation in emergency lighting systems according to EN 60598-2-22



### Technical data

### **Electrical data**

| Nominal input voltage                    | 220240 V  |  |  |  |
|--|---|--|--|--|
| Mains frequency                          | 0/50/60 Hz  |  |  |  |
|  | 198264 V  |  |  |  |
| Input voltage AC                         |   |  |  |  |
| Input voltage DC                         | 176276 V  |  |  |  |
| Current set                              | DipSwitch   |  |  |  |
| Total harmonic distortion                | < 15 %  |  |  |  |
| Power factor λ                           | 0.80C0.95   |  |  |  |
| Efficiency in full-load                  | 92 % <sup>1)</sup>  |  |  |  |
| Device power loss                        | 5.33 W <sup>2)</sup>  |  |  |  |
| Inrush current                           | 24.5 A <sup>3)</sup>  |  |  |  |
| Max. ECG no. on circuit breaker 10 A (B) | 13  |  |  |  |
| Max. ECG no. on circuit breaker 16 A (B) | 21  |  |  |  |
| Surge capability (L/N-Ground)            | 2 kV <sup>4)</sup>  |  |  |  |
| Surge capability (L-N)                   | 1 kV  |  |  |  |
| Nominal output voltage                   | 90175 V   |  |  |  |
| U-OUT (working voltage)                  | 250 V   |  |  |  |
| Nominal output current                   | 100 mA / 150 mA / 200 mA / 250 mA / 300 mA / 350 mA <sup>5)</sup> |  |  |  |
| Output current tolerance                 | ±5 %  |  |  |  |
| Output ripple current (100 Hz)           | < 3 %   |  |  |  |
| Output PSTLM                             | ≤1  |  |  |  |
| Output SVM                               | ≤0.4  |  |  |  |
| Nominal output power                     | 1861.2 W <sup>6)</sup>  |  |  |  |
| Maximum output power                     | 61.2 W  |  |  |  |
| Galvanic isolation                       | Non isolated  |  |  |  |

<sup>1)</sup> at 230 V, 50 Hz

<sup>2)</sup> Full load, 230 Vac, 50Hz / 60Hz

<sup>3)</sup> At 310 µs

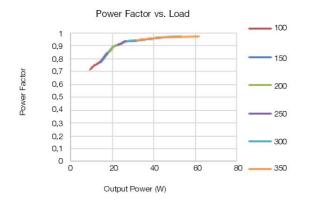
<sup>4)</sup> L/N - PE acc to EN 61547 Cluase 5.7

<sup>5)</sup> Default current 350 mA

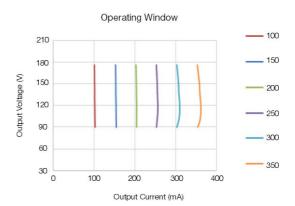
<sup>6)</sup> Partial load

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# Typical Power Factor v Load



# **Operating Window**



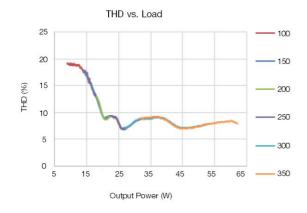
OT FIT 60 220-240 350 D CS L Typical Power Factor vs Load

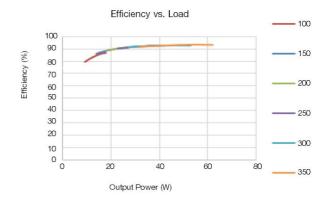
Typical THD v Load

oad

OT FIT 60 220-240 350 D CS L Operating Window

Typical Efficiency v Load 230 V 50 Hz



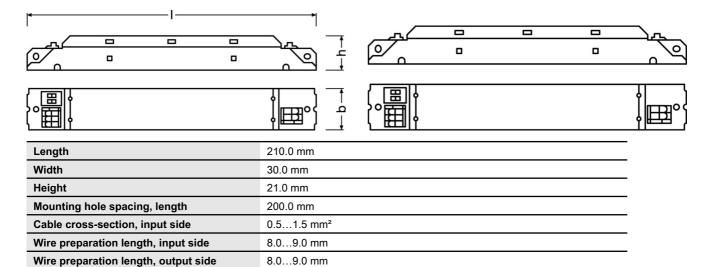


OT FIT 60 220-240 350 D CS L Typical THD vs Load

OT FIT 60 220-240 350 D CS L Typical Efficiency vs Load



### **Dimensions & weight**



### **Colors & materials**

**Product weight** 

| Casing material | Metal  |
|-----------------|--------|
| ouomig matoriai | Wicker |

154.00 g

# Temperatures & operating conditions

| Ambient temperature range                | -25+50 °C           |
|--|---------------------|
| Maximum temperature at tc test point     | 75 °C               |
| Max.housing temperature in case of fault | 110 °C              |
| Temperature range at storage             | -2585 °C            |
| Permitted rel. humidity during operation | 585 % <sup>1)</sup> |

<sup>1)</sup> Non-condensing

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# Lifespan

| ECG lifetime | 50000 h / 100000 h <sup>1)</sup> |
|--------------|----------------------------------|

1) At maximum T<sub>c</sub> = 75°C / 10% failure rate / At maximum T<sub>c</sub> = 65°C / 10% failure rate

# Capabilities

| Programming interface                  | Dipswitch            |
|--|----------------------|
| Dimmable                               | No                   |
| Max. cable length to lamp/LED module   | 2.0 m <sup>1)</sup>  |
| Suitable for fixtures with prot. class | I                    |
| Type of connection, output side        | Push terminal        |
| Number of channels                     | 1                    |
| Overheating protection                 | Automatic reversible |
| Overload protection                    | Automatic reversible |
| Short-circuit protection               | Automatic reversible |
| Intended for no-load operation         | No                   |
| No-load proof                          | Yes                  |

<sup>1)</sup> Output wires must be routed as close as possible to each other



# **Programming**

| Programming device | DIPswitch |
|--------------------|-----------|

### Certificates & standards

| Approval marks – approval | CE / ENEC / CCC / RCM / UKCA / BIS / EAC  |  |  |  |
|---------------------------|---|--|--|--|
| Standards                 | Acc. to IEC 61347-1 / Acc. to IEC 61347-2-13 / Acc. to IEC 62384 / Acc. to IEC 61000-3-2 / Acc. to IEC 61000-3-3 / Acc. to IEC 61547 / Acc. to EN 55015 |  |  |  |
| Type of protection        | IP20  |  |  |  |
| Protection class          | 1   |  |  |  |

### Logistical data

| Commodity code | 85044083900 |
|----------------|-------------|
|                |             |

### **Environmental information**

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh) |               |  |
|---|---------------|--|
| Date of Declaration   | 22-03-2024    |  |
| Primary Article Identifier  | 4062172285292 |  |
| Declaration No. in SCIP database                                      | In work       |  |



### Additional product information

- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
- Indication that the lamp control gear relies upon the luminaire enclosure for protection against accidental contact with live parts.
- The control gear is not intended for use in luminaires for high-risk task area lighting.
- Input overvoltage protection: the driver withstands an input voltage up to 305 Vac for a maximum of two hours, shut down of the output load might occur in case the supply voltage exceeds the declared input voltage range.
- Input surge protection: the unit is protected against surge up to 1kV between L-N (symmetric surge) and 2 kV L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- Output short circuit / undervoltage protection: shut down of the load happens if Vout is out of the operating range.
- Output over voltage protection: shut down of the load might happen if Vout exceeds the outpurt maximum voltage (depending on current).
- Step 1: output current reduction to decrease Vout;
- Step 2: shut down of the load at longer or extreme overvoltage.
- No load protection: the driver automatically adjusts the output voltage to the maximum output voltage which is auto defined by output current setting if no load is connected. Auto-reversible with the correct load connected;
- Over temperature protection: the unit is protected against temporary overheating by automatic reduction of the output current when tc > 75°C.
- Switch over time: lower than 0.5 s, from AC to DC mains and viceversa.
- Output power hold time: > 4 ms, in case of mains dips.
- Emergency lighting: this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22; according to EN 61347-2-13 Annex J.



### **Download Data**

| File                   |     |  |
|------------------------|-----|--|
| Certificates           | PDF | ►OT FIT 60 75 D CS L CCC 2022171002004620 102122 |
| Certificates           | PDF | ►OT FIT D CS L ENEC 35-124598 102122             |
| Mandatory Publications | PDF | ►OT FIT D CS L CE 4424929 100822                 |
| Mandatory Publications | PDF | ►OT FIT D CS L UK DoC 4308625 100822             |
| User instruction       | PDF | ►OPTOTRONIC LED Power Supply                     |

### 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 |
|---------------|--------------------------------|-------------------------------|--------------------------------------|----------|--------------|
| 4062172285292 | OT FIT 60/220240/350<br>D CS L | Shipping carton box 20 Pieces | 237 x 162 x 130 mm                   | 4.99 dm³ | 3389.00 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.