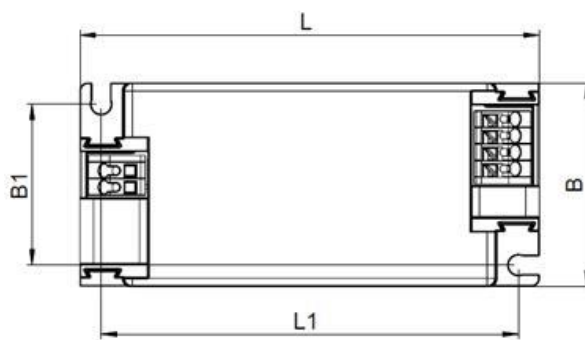


OT FIT 40/220-240/1A0 CS

Constant Current LED Power Supply

800mA - 900mA - 950mA- 1050mA

OPTOTRONIC® LED Power Supply with high reliability in extra small & compact housing. Equips with 4 selectable currents fits in light fixtures for shop and office lighting.



Benefits

- 1 driver with 4 output currents;
- High quality light with very low ripple;
- Extra small housing for compact fixture;
- Long lasting and high reliability
- Safety ensured by OSRAM (SELV)
- 5 years guarantee

Applications

Downlights, Spotlights and Panels

Approval marks (under preparation if not on label)



| | |
|----|---------|
| L | 97 mm |
| L1 | 88 mm |
| B | 43 mm |
| B1 | 34 mm |
| H | 29.5 mm |

Product Features

- Output currents :800/900/950/1050mA
- Output voltage : 25V_{DC} – 42V_{DC}
- Output power : 20W – 44.1W
- Suitable for class I and II luminaires
- Fixed Output (i.e. no dimming)
- Low ripple, low THD
- Extra small housing
- Typ. Efficiency : 90%
- SELV
- 50'000 hours lifetime

Electrical Specifications

| | Item | Value | Unit | Remarks |
|-----------------|--|------------------|-----------------|--|
| INPUT | Nominal voltage | 220 – 240 | V _{AC} | |
| | Nominal frequency | 50 - 60 | Hz | |
| | AC voltage range | 198 – 264 | V _{AC} | Permitted voltage range |
| | DC voltage range | NA | V | |
| | Maximum voltage | 275 | V | 2hrs |
| | Nominal current | 240 | mA | 230V, Refer to Table 1 for details |
| | Total Harmonic Distortion (THD) | < 10 | % | Full load, 230 V, 50 Hz / see graphs |
| | Power factor | 0.98 | | Full load, 230 V, 50 Hz / see graphs |
| | Efficiency | 90 | % | Full load, 230 V, 50 Hz, typical / see graphs |
| | No-load power | < 1.5 | W | 230V, typical |
| | Stand-by power | NA | W | |
| | Power loss | 4.5 | W | at 230V, Input power 50 W max. Refer to Table 1 for details |
| | Protection class | II | | Suitable for class I and class II luminaires |
| | Inrush current | <16 | A | t _{width} = 100 µs typical (measured at 50% I _{peak}) |
| | Max. units per circuit breaker | B16: 50; B10: 30 | | I _{max} = 53 A Th = 230 µs |
| Leakage current | < 0.7 | mA | Output floating | |
| OUTPUT | Nominal voltage range | 25 – 42 | V _{DC} | Refer to Table 1 for details |
| | Maximum voltage | 60 | V _{DC} | Open circuit |
| | Nominal current range | 800/900/950/1050 | mA | |
| | Current accuracy | +/- 7.5 | % | |
| | Current ripple | < 5 | % | Ripple / average @ 100 Hz |
| | Nominal power range | 20 – 44.1 | W | Partial Load. Refer to Table 1 for details |
| | Maximum power | 44.1 | W | T _a ≤ 45°C, Refer to Table 1 for details |
| | Galvanic isolation | SELV | | 3,75 kVrms . Output to mains - Touch current < 0.7 mA |
| DIMMING | Dimming control | No | | Not dimmable |
| | Dimming range | NA | % | |
| | Dimming technique | NA | | |
| | Frequency | NA | Hz | |
| | Galvanic isolation | NA | | |
| ENVIRONMENT | Ambient temperature range t _a | -20 ... +50 | °C | Refer to Table 1 for details |
| | Maximum case temperature t _c | 85 | °C | Measured on t _c point indicated of the product label. |
| | Max. case temp. in fault condition | 110 | °C | |
| | Storage temperature range | -20 ... +80 | °C | Cool down before operating |
| | Relative humidity | 5 ... 85 | % | Not condensing |
| | Surge transient protection | 1 2 | kV | L/N LN/PE acc. IEC 61000-3-2 (ANSI C62.41 Cat.A ...) |
| | Environmental rating | Indoor | | |
| | IP rating | IP 20 | | |
| | Mains switching cycles | > 100'000 | | |
| | Expected lifetime | 30'000 50'000 | hrs | t _c = 85°C, 10% failure rate t _c = 75°C, 10% failure rate |

Protections

Over temperature

Automatic, reversible

Overload

Automatic, reversible

No load

Yes

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 275V AC

Output overvoltage

Yes, Limitation of Output voltage < 60V

Output under voltage

NA

LED load protection

NA

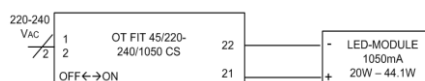
Wiring Diagram

Terminal:
Max. cable length - system: 2 m
Geometry (l x b x h): 97 x 43 x 29.5 mm
Weight: 110 g

Push in terminals
2 m
97 x 43 x 29.5 mm
110 g

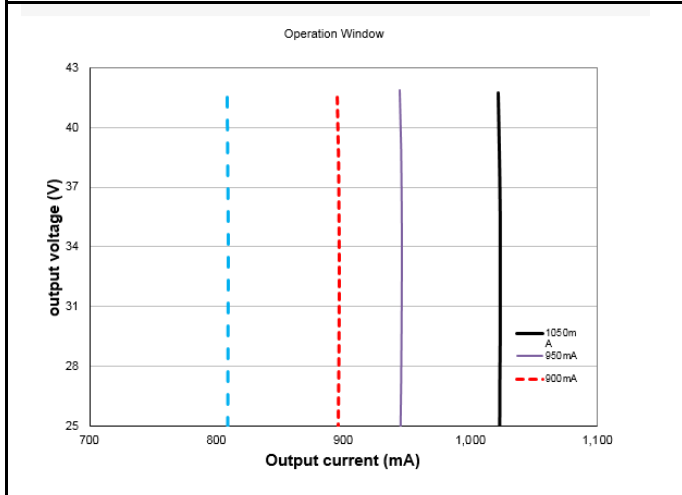
Wire preparation:

Push in
s: 0.5-1.5 mm
f: 0.75-1.5 mm
8-9 mm

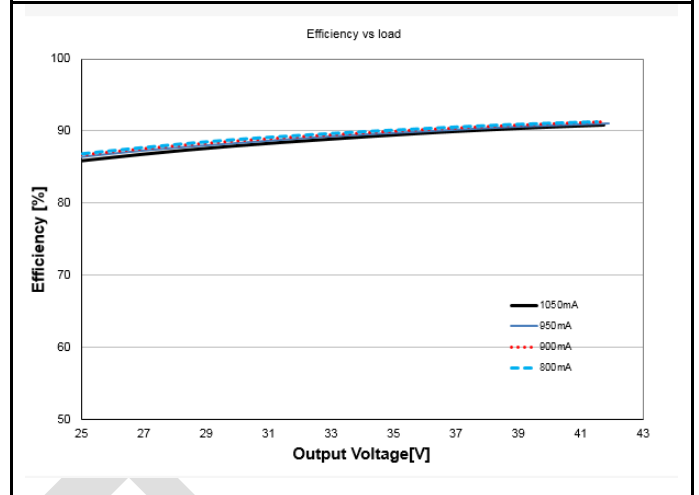


Example with 700mA LED module

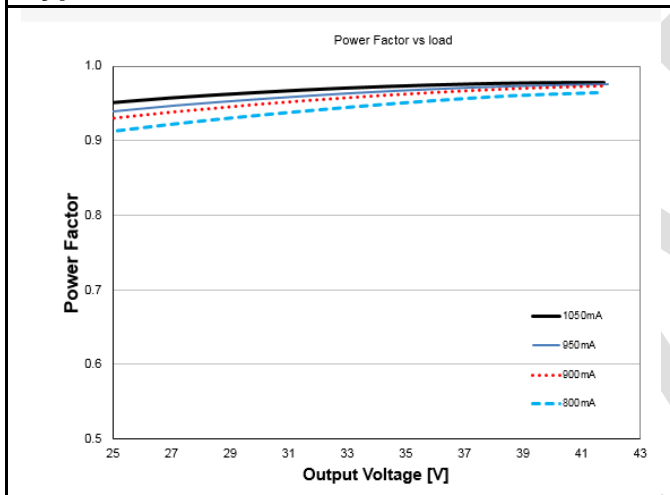
Typical Operating window



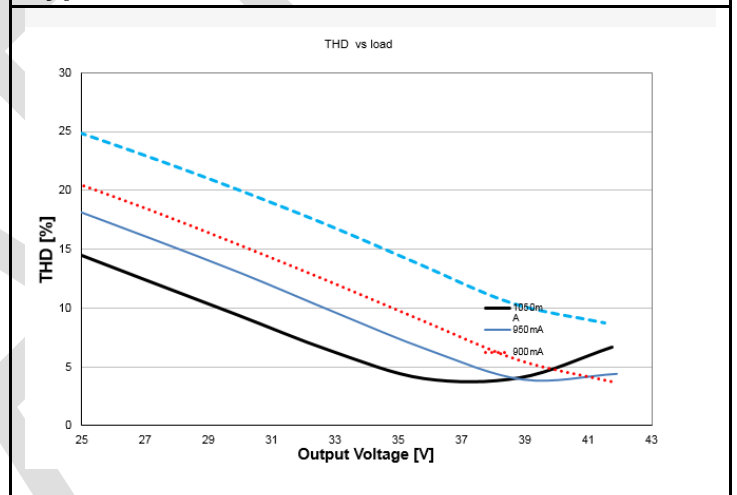
Typical Efficiency over load



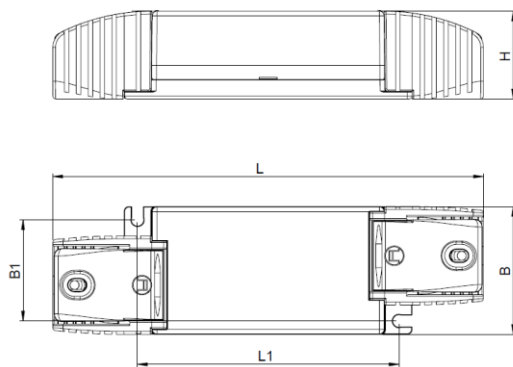
Typical Power factor over load



Typical THD over load



An optional cable clamp is available. This cable clamp can be snapped onto the ECG and thus converts it into an ECG suitable for independent installation.



| | |
|----|--------|
| L | 145mm |
| L1 | 88mm |
| B | 43mm |
| B1 | 34mm |
| 1 | 29.5mm |

| Table 1 - Rated output power and current sets | | | | | |
|---|------------|------------|------------|-------------|--|
| I_{out} (mA) | 800 | 900 | 950 | 1050 | |
| U_{min} [V] | 25 | 25 | 25 | 30 | |
| U_{max} [V] | 42 | 42 | 42 | 42 | |
| P_{min} [W] | 20 | 22.5 | 23.8 | 31.5 | |
| P_{max} [W] | 33.6 | 37.8 | 39.9 | 44.1 | |
| T_a [°C] | 50 | 50 | 50 | 45 | |
| T_c [°C] | 85 | 85 | 85 | 85 | |
| Line Current, nominal@230V mA | 190 | 210 | 220 | 240 | |
| Max Power Loss@230V [W] | 3.5 | 4.0 | 4.3 | 4.5 | |
| Input Power @230V [W] | 37.1 | 41.8 | 44.2 | 49 | |

| Pin1 | Pin2 | Current |
|------|------|---------|
| ON | ON | 1050 |
| ON | OFF | 950 |
| OFF | ON | 900 |
| OFF | OFF | 800 |

Current selection by DIP-switch

Standards

Safety: IEC 61347-1, IEC 61347-2-13

Performance: IEC 62384

Radio interference: CISPR 15

Harmonic content: IEC 61000-3-2

Immunity: IEC 61000-3-3

IEC 61547

| Product name | EAN10 | EAN40 | Pieces / box |
|---------------------------|---------------|---------------|--------------|
| OT FIT 45/220-240/1050 CS | TBD | TBD | 20 |
| OT Cable Clamp D-style | 4052899077904 | 4052899077911 | 20 |

Manufacturer's address:

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Disclaimer (Engineering Samples)

This product is a demonstration model from our development laboratories made available for your information only.

The model is not binding in respect to its fitness for use, i.e. service life, luminous flux, color temperature and performance.

Prior to production the design, including dimensions, is subject to modification.

You will, therefore, appreciate that at this stage of development we are unable to assume any liability also for damages which may be caused by this product.

Should you urgently require binding information for the preparation of construction data for your applications, please contact our marketing department.