

CertaDrive

CertaDrive 8W 0.2A 40V | 230V

September 2, 2014



Affordable and reliable LED Drivers

Affordable LED Driver range offering Philips reliability. The CertaDrive range is compatible with COB and mid-power LEDs from any LED manufacturer.

Benefits

- Driver design based on Philips' experience and knowledge of conventional fluorescent and HID technologies
- Various power wattage Drivers that are related to the lumen packages/applications
- Fixed output Drivers
- Independent-version housing design for stand-alone installations

Features

- High reliability
- Luminaire design flexibility to keep stable/constant
- Lumen output and light quality levels
- Fast Time to Market
- One supplier for professional general lighting LED Drivers
- Affordable LED Drivers

Applications

- Public buildings (airports, cinemas, theaters, exhibition halls)
- Retail (supermarkets, shops)
- Office



PHILIPS

Electrical input data

| Specification item | Value | Unit | Condition |
|---------------------------|-----------|-----------------|---|
| Nominal input voltage | 220...240 | V _{ac} | |
| Nominal input frequency | 50...60 | Hz | |
| Nominal input current | 0.05 | A | Input voltage 230 V _{ac} , full load |
| Nominal input power | 9.5 | W | Input voltage 230 V _{ac} , full load |
| Power factor | ≥ 0.85 | | Input voltage 230 V _{ac} , full load |
| Total harmonic distortion | ? | % | Input voltage 230 V _{ac} , full load |
| Efficiency | 80 | % | Input voltage 230 V _{ac} , full load, maximum output power |
| Input voltage AC | 202...254 | V _{ac} | Performance range |
| Input frequency AC | 47.5...63 | Hz | Maximum permissible range |

Electrical output data

| Specification item | Value | Unit | Condition |
|--------------------------|------------------|-----------------|---------------------------------|
| Regulation method | Constant Current | | |
| Output voltage | 32...40 | V _{dc} | |
| Output voltage max. | 60 | V | Peak voltage (RMS) at open load |
| Output current | 0.2 | A | Full output current setting |
| Output current tolerance | ± 10 | % | |
| Output current ripple | ≤ 40 | % | Ripple (100Hz) = peak / average |
| Output power | 6.4...8 | W | Full output |
| Galvanic isolation | SELV | | Lamp to mains |

Electrical data controls input

| Specification item | Value | Unit | Condition |
|--------------------|-------|------|-----------|
| Control method | Fixed | | |

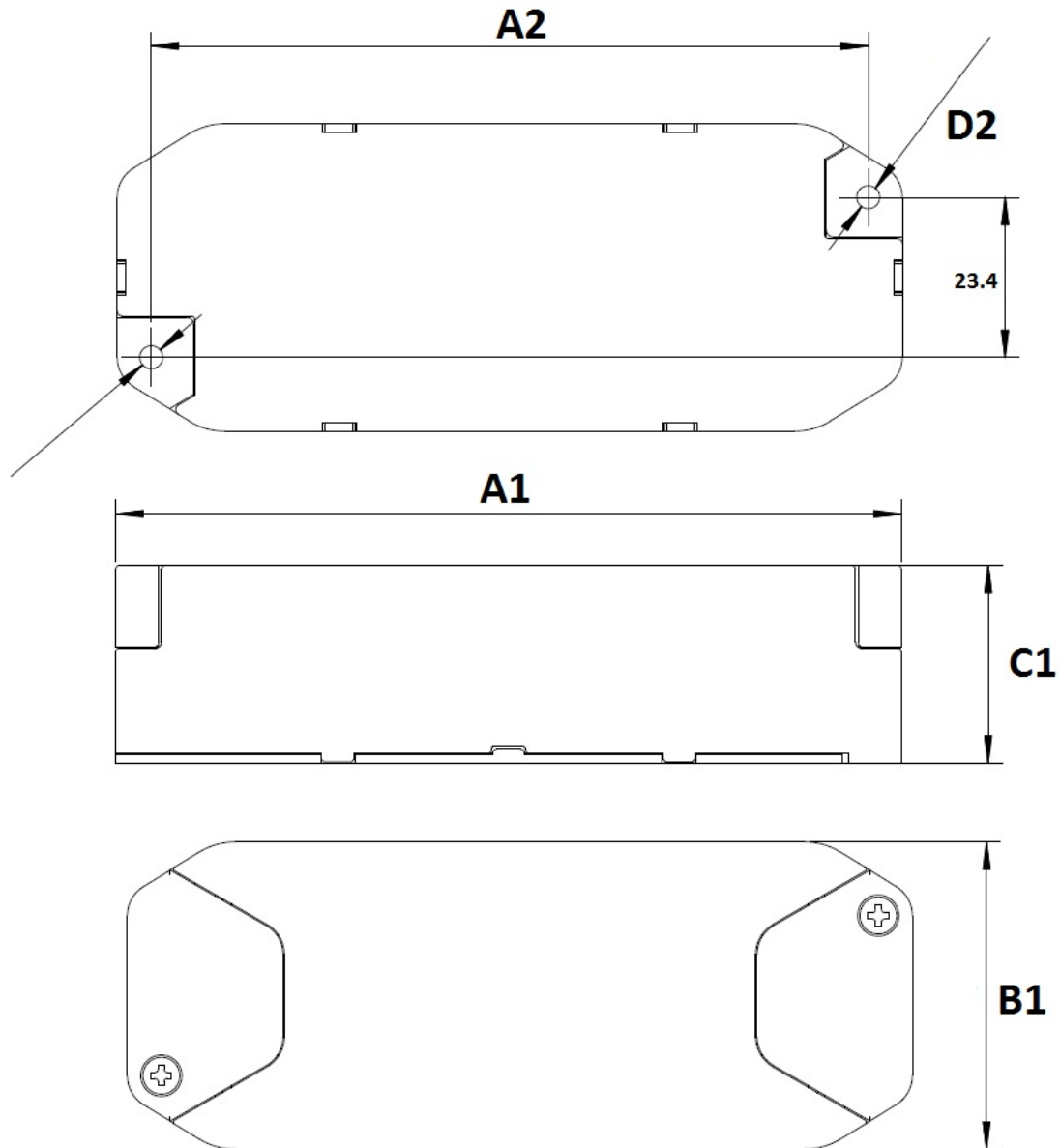
Wiring

| Specification item | Value | Unit | Condition |
|---------------------------|-----------|-----------------|--|
| Input wire cross-section | 0.2...1.5 | mm ² | WAGO250 (3.5 mm), solid wire |
| | 16...24 | AWG | WAGO250 (3.5 mm), solid wire |
| Input wire strip length | 8.5...9.5 | mm | |
| Output wire cross-section | 0.2...1.5 | mm ² | WAGO250 (3.5 mm), solid wire |
| | 16...24 | AWG | WAGO250 (3.5 mm), solid wire |
| Output wire strip length | 8.5...9.5 | mm | |
| Maximum cable length | 60 | mm | Total length of wiring including LED module, one way |



Dimensions and weight

| Specification item | Value | Unit | Condition |
|---------------------------|-------|------|-----------|
| Length (A1) | 115 | mm | |
| Width (B1) | 45 | mm | |
| Height (C1) | 29 | mm | |
| Fixing hole diameter (D1) | 3.4 | mm | |
| Fixing hole distance (A2) | 105 | mm | |
| Weight | 70 | gram | |



Operational temperatures and humidity

| Specification item | Value | Unit | Condition |
|-----------------------------|----------|------|---|
| Ambient temperature | +0...+50 | °C | |
| T _{case-max} | 75 | °C | Maximum temperature measured at T _c -point |
| T _{case-life} | 65 | °C | Measured at T _c -point |
| Maximum housing temperature | 130 | °C | In case of a failure |
| Relative humidity | 10...90 | % | Non-condensing |

Storage temperature and humidity

| Specification item | Value | Unit | Condition |
|---------------------|-----------|------|----------------|
| Ambient temperature | -25...+85 | °C | |
| Relative humidity | 5...95 | % | Non-condensing |

Lifetime

| Specification item | Value | Unit | Condition |
|--------------------|--------|-------|---|
| Driver lifetime | 30,000 | hours | Measured temperature at T_c -point is T_{case} -life. Maximum failures = 10% |

Programmable features

| Specification item | Value | Remark | Condition |
|---------------------------------------|-------|---|-----------|
| Set output current (AOC) | No | See Design-in guide. Default output current: 0.2 A | |
| LED module temperature derating (MTP) | No | | |
| Constant Lumen Over Lifetime (CLO) | No | | |
| DC emergency dimming (DCemDIM) | No | | |
| Corridor mode | No | | |
| Energy metering | No | | |
| Diagnostics | No | | |

Features

| Specification item | Value | Remark | Condition |
|---|-------|--------|----------------------|
| Open load protection | Yes | | Automatic recovering |
| Short circuit protection | Yes | | Automatic recovering |
| Over power protection | Yes | | Automatic recovering |
| Hot wiring | No | | |
| Suitable for fixtures with protection class | II | | |

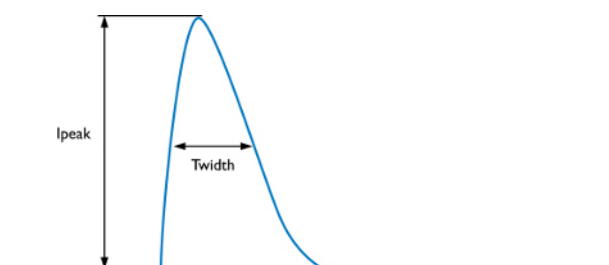
Certificates and standards

| Specification item | Value | Unit | Condition |
|-----------------------------------|----------------------|------|-----------|
| Approval marks | CB / CE / CQC / ENEC | | |
| Ingress Protection classification | 20 | | |

Additional information

Inrush current

| Specification item | Value | Unit | Condition |
|----------------------------|-----------|---------|--|
| Inrush current I_{peak} | 3.4 | A | Input voltage 230V |
| Inrush current T_{width} | 29 | μs | Input voltage 230V, measured at 50% I_{peak} |
| Drivers / MCB 16A type B | ≤ 90 | pcs | |



Earth leakage current

| Specification item | Value | Unit | Condition |
|-----------------------|-------|------|--------------------------------------|
| Earth leakage current | 0.7 | mApk | LED module contribution not included |

Surge capability

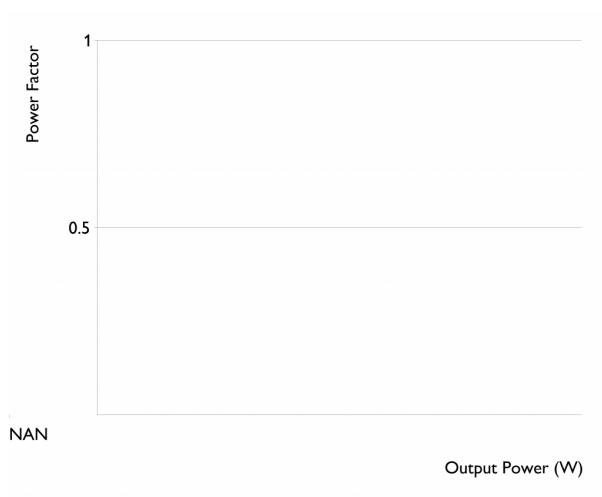
| Specification item | Value | Unit | Condition |
|-------------------------------------|-------|------|-----------|
| Mains surge capability (L-N) | 0.5 | kV | |
| Mains surge capability (L/N-Ground) | 1 | kV | |

Graphs

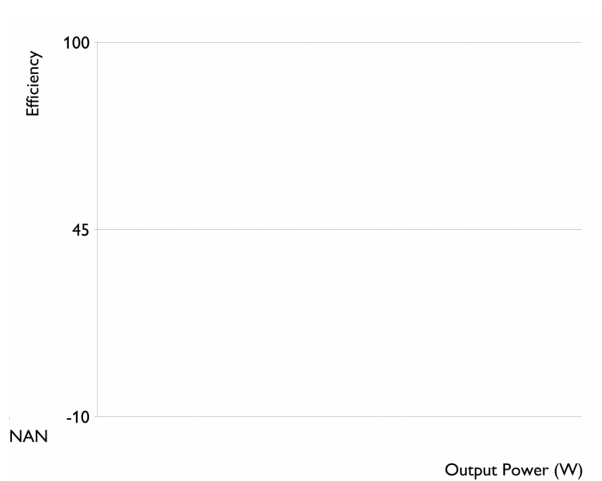
Operating window

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Power factor versus output power



Efficiency versus output power



Logistical data

| Specification item | Value |
|--------------------|-------------------------------|
| Product name | CertaDrive 8W 0.2A 40V I 230V |
| Order code | |
| Logistic code 12NC | 9290 009 56080 |
| EAN3 | |
| Pieces per box | 48 |



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www.philips.com/xitanium