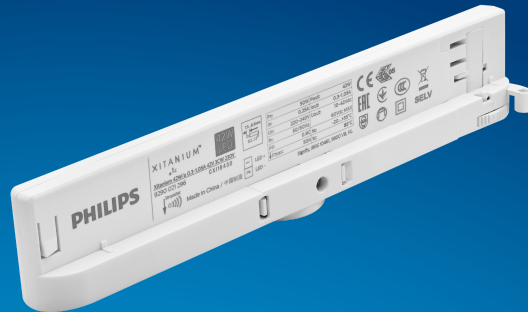


# PHILIPS

## Xitanium

### LED driver



## Datasheet

### Xitanium track adaptor drivers (3C)

Xitanium 42W/a 0.3-1.05A 42V 3CW 230V

9290 021 29606

#### Affordable and reliable LED Drivers

Affordable LED driver range offering Philips reliability. The Xitanium track driver 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 ratings matching common lumen packages/applications
- Track adaptor housing design for compact track luminaire designs

#### Features

- Compact size
- Specific, optimized dual-output current choice
- Long lifetime
- Low output current ripple, low input current THD
- Suitable for 3-phase track systems
- Available in white, black and grey housing color

#### Application

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

## Electrical input data

| Specification item          | Value     | Unit            | Condition  |
|-----------------------------|-----------|-----------------|--|
| Rated input voltage range   | 220...240 | V <sub>ac</sub> | Performance range  |
| Rated input voltage         | 230       | V <sub>ac</sub> |  |
| Rated input frequency range | 50...60   | Hz              | Performance range  |
| Rated input current         | 0.22      | A               | @ full output power @ rated input voltage                          |
| Max. input current          | 0.25      | A               | @ rated output power @ minimum performance input voltage           |
| Rated input power           | 50        | W               | @ rated output power @ rated input voltage                         |
| Power factor                | 0.9       |                 | @ full output power @ rated input voltage                          |
| Total harmonic distortion   | 20        | %               | @ rated output power @ rated input voltage                         |
| Efficiency                  | 87        | %               | @ rated input voltage @ rated output power @ max. I <sub>out</sub> |
| Input voltage AC range      | 198...264 | V <sub>ac</sub> | Safety operational range   |
| Input frequency AC range    | 45...66   | Hz              | Safety operational range   |
| Isolation input to output   | SELV      |                 |  |

## Electrical output data

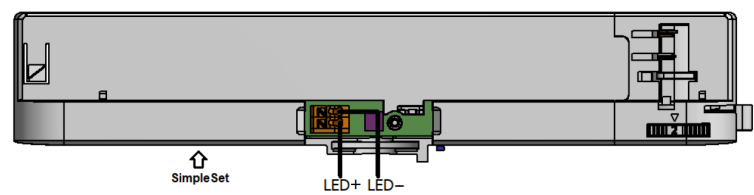
| Specification item                   | Value            | Unit            | Condition                       |
|--------------------------------------|------------------|-----------------|---------------------------------|
| Regulation method                    | Constant Current |                 |                                 |
| Output voltage                       | 10...42          | V <sub>dc</sub> |                                 |
| Output voltage max.                  | 60               | V               | Maximum output voltage (rms)    |
| Output current                       | 0.3...1.05       | A               |                                 |
| Output current tolerance ±           | 5                | %               |                                 |
| Output current ripple LF             | ≤ 4              | %               | Ripple = peak / average, < 3kHz |
| Output P <sub>st</sub> <sup>LM</sup> | ≤ 0.06           |                 |                                 |
| Output SVM                           | ≤ 0.07           |                 |                                 |
| Output power                         | 11...42          | W               |                                 |

## Electrical data controls input

| Specification item | Value | Unit | Condition                              |
|--------------------|-------|------|--|
| Control method     | Fixed |      | Set output current via SimpleSet (AOC) |

Wiring and Connections

| Specification item        | Value               | Unit      | Type   |
|---------------------------|---------------------|-----------|--|
| Output wire cross-section | 0.5...1.5 / 20...16 | mm² / AWG | solid / stranded wire                                |
| Output wire strip length  | 7.5...8.5           | mm        |  |
| Maximum cable length      | 0.3                 | m         |  |
|                           |                     |           | Total length of wiring including LED module, one way |

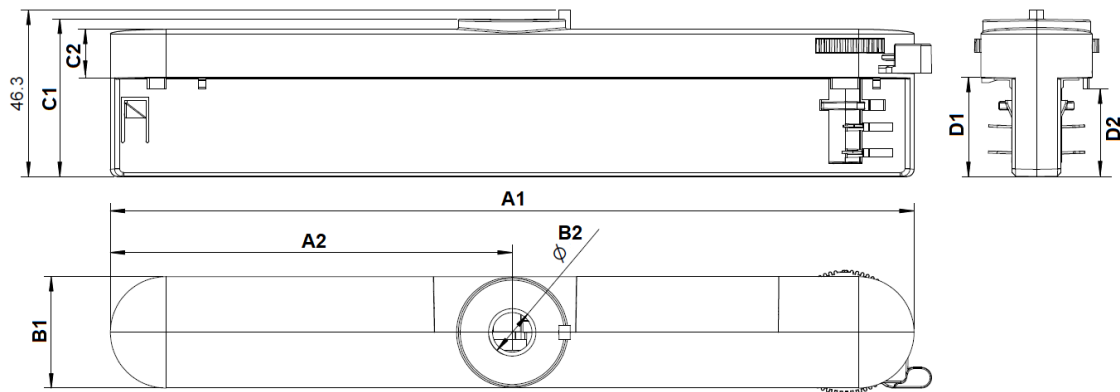


Insulation

| Insulation per IEC61347-1 | Input | Output |
|---------------------------|-------|--------|
| Input                     |       | SELV   |
| Output                    | SELV  |        |

## Dimensions and weight

| Specification item          | Value            | Unit | Tolerance (mm) |
|-----------------------------|------------------|------|----------------|
| Length (A1)                 | 224              | mm   |                |
| Mounting hole distance (A2) | 112              | mm   |                |
| Width (B1)                  | 31               | mm   |                |
| Height (C1)                 | 43.8             | mm   |                |
| Height (C2)                 | 13.7             | mm   |                |
| Mounting hole diameter (D1) | 27.3             | mm   |                |
| Mounting hole diameter (D2) | 24.4             | mm   |                |
| Weight                      | 160              | gram |                |
| Housing color               | White (RAL 9003) |      |                |



## Logistical data

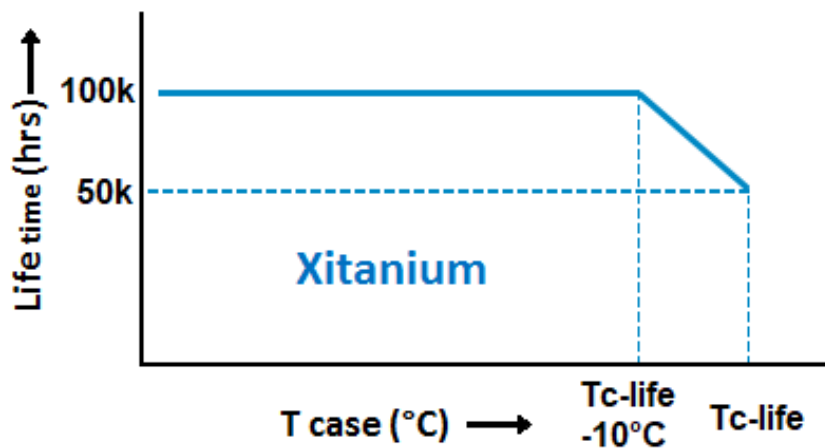
| Specification item | Value                                 |
|--------------------|---------------------------------------|
| Product name       | Xitanium 42W/a 0.3-1.05A 42V 3CW 230V |
| EOC                | 871869973472500                       |
| Logistic code 12NC | 9290 021 29606                        |
| EAN1 (GTIN)        | 8718699734725                         |
| EAN3 (box)         | 8718699734732                         |
| Pieces per box     | 40                                    |

## Operational temperatures and humidity

| Specification item          | Value     | Unit | Condition   |
|-----------------------------|-----------|------|---|
| Ambient temperature         | -20...+35 | °C   | Higher ambient temperature allowed as long as Tcase-max is not exceeded |
| Tcase-max                   | 85        | °C   | Maximum temperature measured at Tcase-point                             |
| Tcase-life                  | 85        | °C   | Measured at Tcase-point   |
| Maximum housing temperature | 130       | °C   | In case of a failure, inherent by design                                |
| Relative humidity           | 10...90   | %    | Non-condensing  |

## Lifetime

| Specification item | Value  | Unit  | Condition   |
|--------------------|--------|-------|---|
| Driver lifetime    | 50,000 | hours | Measured temperature at Tcase-point is Tcase-life. Maximum failures = 10% |



## Storage temperature and humidity

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

## Programmable features

| Specification item                  | Available | Default setting | Condition |
|-------------------------------------|-----------|-----------------|-----------|
| Set Adjustable Output Current (AOC) | SimpleSet | 300 mA          |           |
| OEM Write Protection (OWP)          | Yes       | OFF             |           |
| Luminaire Info (DALI part 251)      | Yes       | —               |           |

## Features

| Specification item                          | Value |  | 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 | I     |  | per IEC60598         |

## Inrush current

| Specification item       | Value | Unit | Condition                                   |
|--------------------------|-------|------|---|
| Inrush current           | 14    | A    | Input voltage 230V                          |
| Inrush peak width        | 255   | μs   | Input voltage 230 V, measured at 50% height |
| Drivers / MCB 16A type B | ≤ 36  | pcs  | Indicative value                            |



Please refer to the driver design in guide if you use other MCB-types.

## Driver touch current / protective conductor current

| Specification item                    | Value | Unit    | Condition   |
|---------------------------------------|-------|---------|---|
| Typical Touch Current (ins. Class II) | 0.7   | mA peak | Acc. IEC61347-1. LED module contribution not included |

## Surge immunity

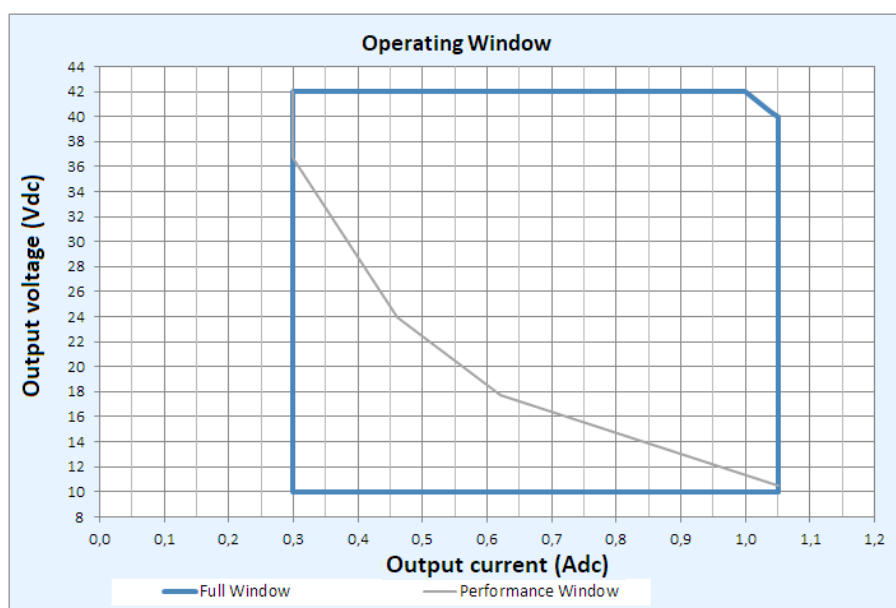
| Specification item                | Value | Unit | Condition                                   |
|-----------------------------------|-------|------|---|
| Mains surge immunity (diff. mode) | 1     | kV   | Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us  |
| Mains surge immunity (comm. mode) | 2     | kV   | Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us |

## Application Info

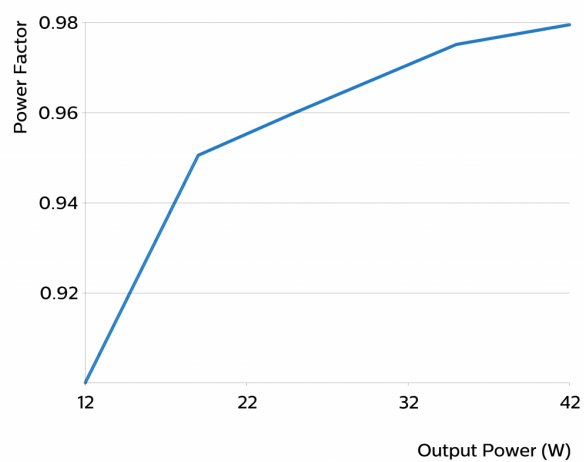
| Specification item                     | Value                                   |
|--|---|
| Approval marks                         | CE / CQC / EAC / ENEC / RCM / SELV / UA |
| Ingress Protection classification (IP) | 20                                      |
| Application                            | Indoor Point                            |
| Mounting Type                          | Track mounting                          |

## Graphs

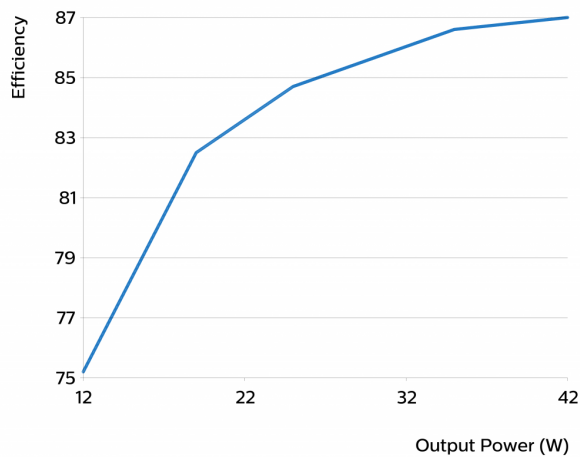
### Operating window



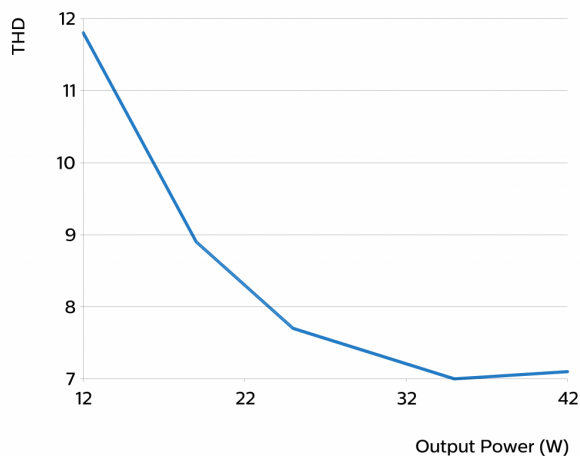
### Power factor versus output power



## Efficiency versus output power



## THD versus output power



## Notes

The adapter is compatible with Global Trac Pro, Stucchi OneTrack 3 Circuit tracks.



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