# CertaDrive CertaDrive 15W 0.35A 42V I 230V

May 12, 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





# Electrical input data

Specification item	Value	Unit	Condition
Nominal input voltage	220240	V <sub>ac</sub>	
Nominal input frequency	5060	Hz	
Nominal input current	0.08	A	Input voltage 230 $V_{ac}$ , full load
Nominal input power	18	W	Input voltage 230 $V_{ac}$ , full load
Power factor	≥ 0.9		Input voltage 230 V <sub>ac</sub> , full load
Total harmonic distortion	?	%	Input voltage 230 V <sub>ac</sub> , full load
Efficiency	85	%	Input voltage 230 $V_{ac}$ , full load, maximum output power
Input voltage AC	202254	V <sub>ac</sub>	Performance range
Input frequency AC	47.563	Hz	Maximum permissible range

# Electrical output data

Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	3242	V <sub>dc</sub>	
Output voltage max.	60	V	Peak voltage (RMS) at open load
Output current	0.35	А	Full output current setting
Output current tolerance	± 10	%	
Output current ripple	≤ 40	%	Ripple (100Hz) = peak / average
Output power	1115.4	W	Full output
Galvanic isolation	SELV		Lamp to mains

# Electrical data controls input

Specification item	Value	Unit	Condition
Control method	Fixed		

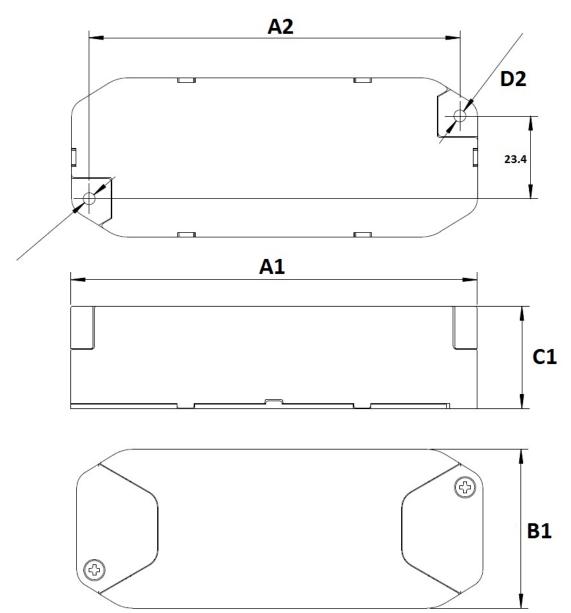
## Wiring

•			
Specification item	Value	Unit	Condition
Input wire cross-section	0.21.5	mm <sup>2</sup>	WAGO250 (3.5 mm), solid wire
	1624	AWG	WAGO250 (3.5 mm), solid wire
Input wire strip length	8.59.5	mm	
Output wire cross-section	0.21.5	mm <sup>2</sup>	WAGO250 (3.5 mm), solid wire
	1624	AWG	WAGO250 (3.5 mm), solid wire
Output wire strip length	8.59.5	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	
Tcase-max	75	°C	Maximum temperature measured at T <sub>c</sub> -point
Tcase-life	65	°C	Measured at Tc-point
Maximum housing temperature	130	°C	In case of a failure
Relative humidity	1090	%	Non-condensing

# Storage temperature and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-25+85	°C	
Relative humidity	595	%	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: 0.35	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		
Short circuit protection	Yes		Automatic recovering
Over power protection	Yes		
Hot wiring	No		
Suitable for fixtures with protection class	Ш		

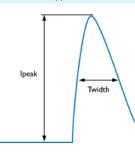
## **Certificates and standards**

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

# **Additional information**

### Inrush current

Specification item	Value	Unit	Condition
Inrush current I <sub>peak</sub>	3.4	А	Input voltage 230V
Inrush current $T_{width}$	29	μs	Input voltage 230V, measured at 50% I <sub>peak</sub>
Drivers / MCB 16A type B	≤ 90	pcs	



Earth	leakage	current
-------	---------	---------

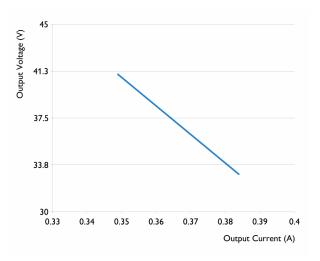
Specification item	Value	Unit	Condition
Earth leakage current	0.7	mApk	LED module contribution not included

# Surge capability

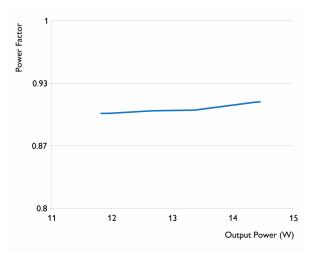
Specification item	Value	Unit	Condition
Mains surge capability (L-N)	0.5	kV	
Mains surge capability (L/N-Ground)	1	kV	

# Graphs

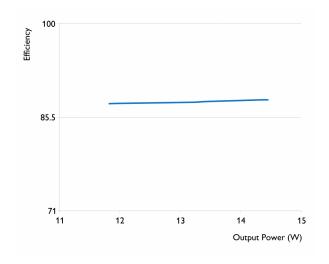
## **Operating window**



#### Power factor versus output power



#### Efficiency versus output power



## Logistical data

Specification item	Value
Product name	CertaDrive 15W 0.35A 42V I 230V
Order code	
Logistic code 12NC	9290 008 98106
EAN3	
Pieces per box	48



©2014 Koninklijke Philips Electronics N.V.

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights. Data subject to change.

Date of release: May 12, 2014

www.philips.com/xitanium