

PHILIPS

Xitanium

LED driver



Datasheet

Xitanium Spot / Downlight LED Drivers Single Current

Xitanium 30W/m 0.65A 46V SC 230V

9290 021 39106

Single current LED drivers for enhanced lighting performance

Reliable and cost effective Xitanium single current drivers enable luminaires to deliver high quality light over an industry standard lifetime of 50,000 hours. Specifically designed with low ripple current to address luminaire flickering issues - making this optimal for camera, scanner, and barcode operation. These drivers provide assured reliability, safety, and long-term energy savings.

Benefits

- Designed to operate solutions based on Chip On Board (COB) or mid-power LEDs
- Various power wattage Drivers that are related to the lumen packages/applications
- Independent-version housing design for stand-alone installations

Features

- Small, compact dimensions
- Fixed, SELV output
- Low ripple, low THD
- Specific current and voltage
- Fast Time to Market
- 50,000 hours lifetime

Application

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

Electrical input data

Specification item	Value	Unit	Condition
Rated input voltage range	220...240	V _{ac}	Performance range
Rated input voltage	230	V _{ac}	
Rated input frequency range	50...60	Hz	Performance range
Rated input current	0.15	A	@ rated output power @ rated input voltage
Rated input power	35	W	@ rated output power @ rated input voltage
Power factor	0.9		@ rated output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	87.6	%	@ rated output power @ rated input voltage
Input voltage AC range	198...264	V _{ac}	Safety operational range
Input frequency AC range	45...66	Hz	Safety operational range
Isolation input to output	SELV		

Electrical output data

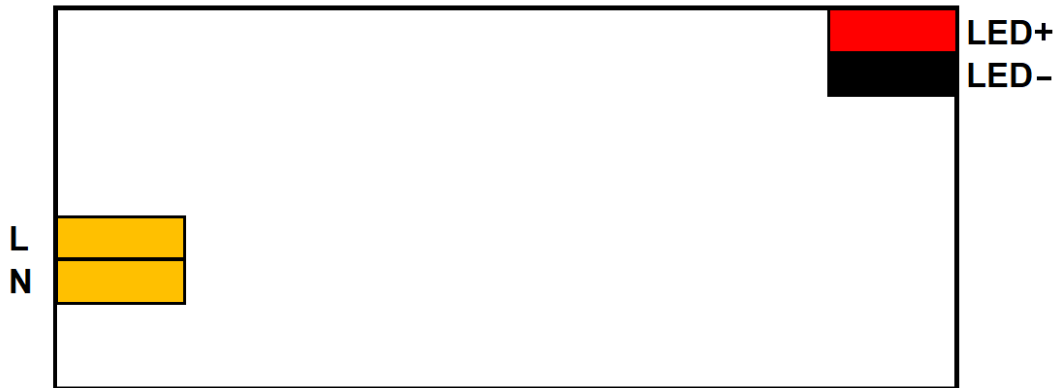
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	31...46	V _{dc}	-10% operational tolerance on the minimum output voltage
Output voltage max.	60	V	Maximum output voltage (rms)
Output current	0.65	A	
Output current tolerance ±	8	%	
Output current ripple LF	≤ 4	%	Ripple = peak / average, < 3kHz
Output P _{st} ^{LM}	≤ 0.05		
Output SVM	≤ 0.07		
Output power	19.5...30	W	

Electrical data controls input

Specification item	Value	Unit	Condition
Control method	Fixed		

Wiring and Connections

Specification item	Value	Unit	Type
Input wire cross-section	0.5...1.5	mm ² / AWG	solid / stranded wire
Input wire strip length	8.5...9.5	mm	
Input wire cross-section	0.75...1.5	mm ² / AWG	solid / stranded wire
Input wire strip length	8.5...9.5	mm	
Output wire cross-section	0.5...1.5	mm ² / AWG	solid / stranded wire
Output wire strip length	8.5...9.5	mm	
Output wire cross-section	0.75...1.5	mm ² / AWG	solid / stranded wire
Output wire strip length	8.5...9.5	mm	
Maximum cable length	0.6	m	Total length of wiring including LED module, one way

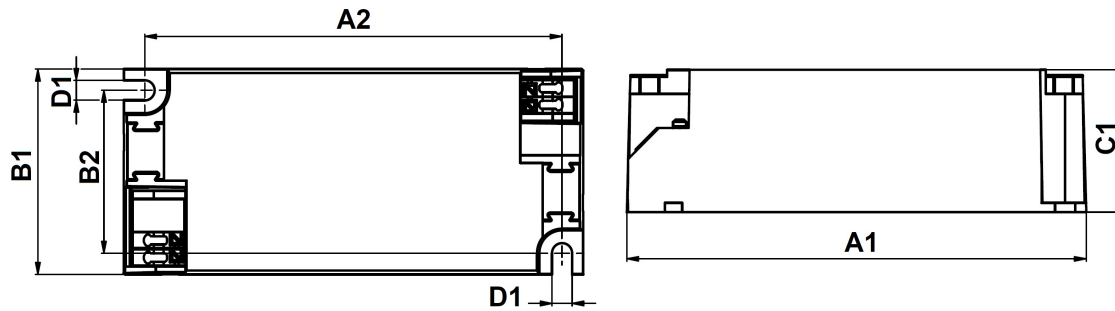


Insulation

Insulation per IEC61347-1	Input	Output
Input		SELV
Output	SELV	

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	97.2	mm	
Mounting hole distance (A2)	88.5	mm	
Width (B1)	43	mm	
Width (B2)	34	mm	
Height (C1)	30	mm	
Mounting hole diameter (D1)	4.2	mm	
Weight	80	gram	



Logistical data

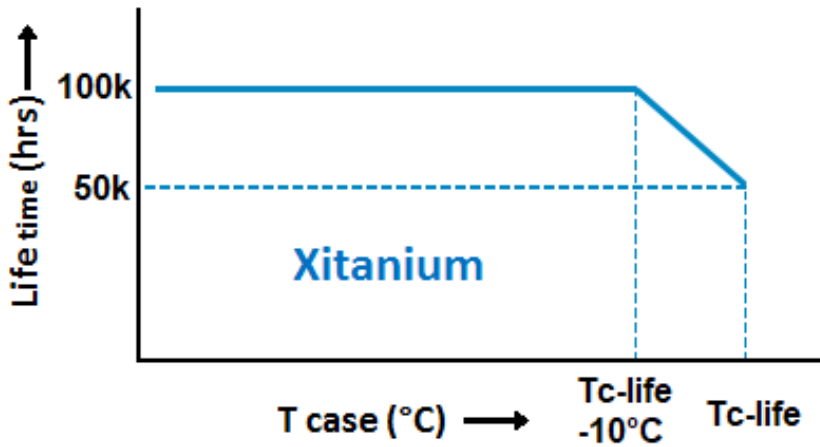
Specification item	Value
Product name	Xitanium 30W/m 0.65A 46V SC 230V
EOC	871869973057400
Logistic code 12NC	9290 021 39106
EAN1 (GTIN)	8718699730574
EAN3 (box)	8718699730581
Pieces per box	50
Strain Relief 12NCccc	929001461680 / For China use: 929001461880

Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-20...+50	°C	Higher ambient temperature allowed as long as Tcase-max is not exceeded
Tcase-max	75	°C	Maximum temperature measured at T _{case} -point
Tcase-life	75	°C	Measured at T _{case} -point
Maximum housing temperature	110	°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

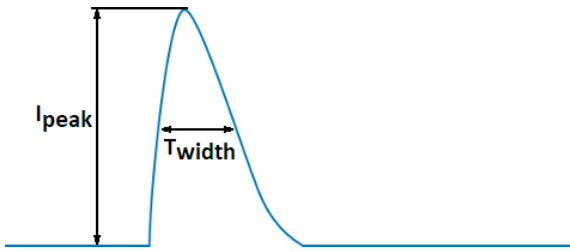
Specification item	Available	Default setting	Condition
Set Adjustable Output Current (AOC)	No	650 mA	Fixed output current
Adjustable Light Output (ALO)	No		
DC emergency (DCemDim)	No		

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 and II	per IEC60598

Inrush current

Specification item	Value	Unit	Condition
Inrush current	10.2	A	Input voltage 230V
Inrush peak width	250	μ s	Input voltage 230 V, measured at 50% height
Drivers / MCB 16A type B	≤ 52	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

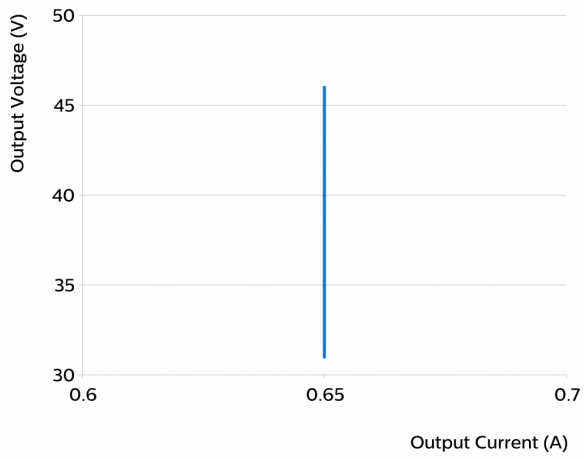
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

Application Info

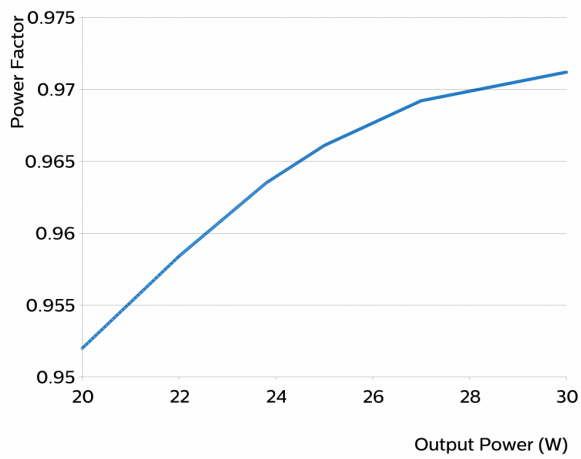
Specification item	Value
Approval marks	CCC / CE / EAC / ENEC / RCM / SELV / TISI / UA
Ingress Protection classification (IP)	20
Application	Indoor Point
Mounting Type	Built-in / Independent

Graphs

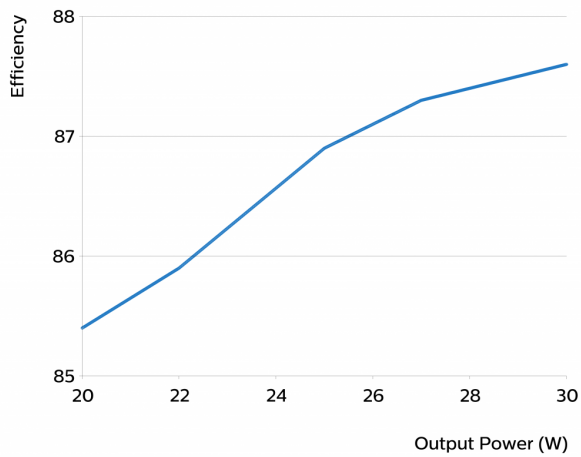
Operating window



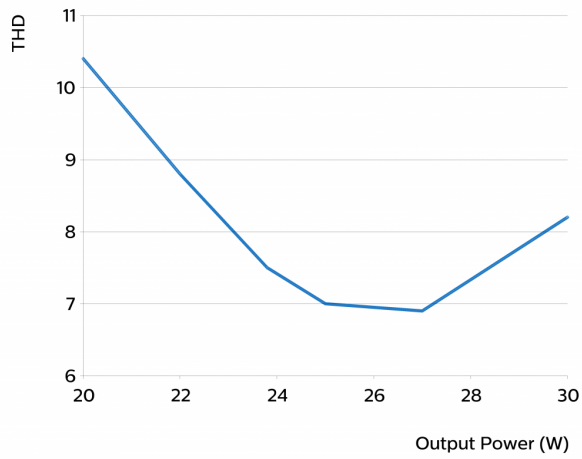
Power factor versus output power



Efficiency versus output power



THD versus output power



©2021 Signify Holding, IBRS 10461, 5600 VB, NL. All rights reserved.
UK importer address: Signify Commercial UK Limited, 3, Guildford Business Park, GU2 8XG.

The information provided herein is subject to change without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.

Date of release: August 25, 2021 v2

www.philips.com/oem

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [LED Power Supplies](#) category:

Click to view products by [Philips](#) manufacturer:

Other Similar products are found below :

[PIFC-K250F](#) [PITB-K222A](#) [AC-A60VD24H2.5](#) [ALD-514012PJ134](#) [PWD-60-1-70-P](#) [EUG-200S210DT](#) [ESS030W-1050-21](#) [BPOXL 4-12-035](#) [ESS010W-0180-42](#) [ESS010W-0350-24](#) [ESS010W-0200-42](#) [SLM140W-1.05-130-ZA](#) [ESS015W-0700-18](#) [HVG-240-48AB](#) [HVG-240-54AB](#) [OTE 25/220-240/700 PC](#) [DAL30W-0600-42-T](#) [HVG-320-48AB](#) [CNB30W-0600-42-CAS](#) [87500757](#) [I-SELECT 2 PLUG 2100MA BL](#) [LCU 48V 75W DC-STR FO](#) [LC 45 W 500-1400 MA FLEXC SC EXC](#) [I-SELECT 2 PLUG 2000MA BL](#) [LC 50/200-350/170 FLEXCC LP](#) [SNC3](#) [LCO 14/100-500/38 O4A NF C EXC3](#) [LC 28W 300-700MA 42 FLEXC NF SC EXC3](#) [LC 44/1050/42 FIXC SRL ADV2](#) [LCA 60W 900-1750MA ONE4ALL C PRE](#) [LC 8/180/44 FIXC SR SNC2](#) [LC 19/200-350/54 FLEXC LP SNC4](#) [BXDR-PS-75BS-E116D-01-A](#) [LC 30/500/54 FIXC SR SNC2](#) [LCA 60W 24V ONE4ALL SC PRE SP](#) [LC 60W 75-330MA 310V FLEXC NF H16 EXC4](#) [LC 8/180/42 FIXC PC SR SNC2](#) [LC 10/350/29 FIXC SR SNC2](#) [LC 25/500/43 FIXC SR SNC2](#) [LC 50/100-400/140 PO4A NF H16 PRE3](#) [LC 25/600/42 FIXC SRL ADV2](#) [LCO 24/200-1050/39 NF C ADV3](#) [ELEMENT 35/220...240/900 G3](#) [LC 25W 350-1050MA FLEXC SR EXC](#) [LC 60/700/86 FIXC SR SNC2](#) [LC 35W 24 ONE4ALL IP PRE](#) [BXDR-PS-25BS-E107D-01-A](#) [LC 17W 250-700MA FLEXC SR EXC](#) [LC 15W 350MA FIXC C SNC](#) [LC 14W 700MA FIXC PC SR SNC2](#) [LC 200W 24V SC SNC](#)