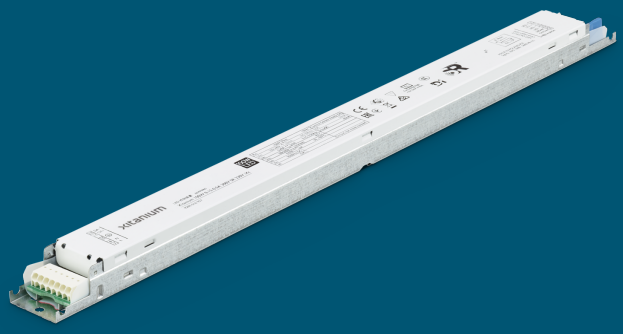
Xitanium

Datasheet

Xitanium non-iso DALI dimmable & programmable Coded Light



Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V
9290 016 27406

Enabling future-proof LED technology

Xitanium Coded Light drivers enable indoor positioning and are part of the YellowDot program. The YellowDot program is a luminaire certification program that allows any manufacturer to test and certify that their LED luminaires are interoperable with our indoor positioning technology.

This smart technology allows shoppers and store staff to receive directions to products or location-based notifications. It also collects location-based data analytics to measure marketing impact and assess store operations. To a retailer, this level of customer engagement is invaluable. The Coded Light drivers are based on the latest generation of Xitanium drivers.

Benefits

- YellowDot ready
- High quality of light
- High reliability
- Future-proof flexibility
- Fast and easy wireless programming with SimpleSet
- Flicker and noise free dimming due to amplitude modulation dimming (AM)

Features

- Coded Light to enable indoor positioning
- High efficiency
- Wide operating windows - output current can be adjusted via the Philips MultiOne software, SimpleSet (NFC) or LEDset (resistor)
- Reduced ripple current and thermal de-rating for increased reliability

Application

- Offices
- Retail: supermarkets, shopping malls
- Indoor industry applications (iXt versions): warehouses, distribution centers, cold storage, manufacturing

Logistical data

Specification item	Value
Product name	Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V
EOC	871869682433700
Logistic code 12NC	9290 016 27406
EAN1 (GTIN)	8718696824337
EAN3 (box)	8718696824344
Pieces per box	24
Weight	284 gram

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	50...60	Hz	Performance range
Rated input current	0.72	A	@ rated output power @ rated input voltage
Rated input power	159.0	W	@ rated output power @ rated input voltage
Power factor performance range	≥ 0.90 C		@ rated output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	94.9	%	@ rated output power @ rated input voltage @ max. Uout
Rated input voltage DC	186...250	V_{dc}	Performance range
Rated input current DC	≤ 0.86	A_{dc}	Performance range
Input voltage AC	198...264	V_{ac}	Operational range
Input frequency AC	45...66	Hz	Operational range
Input voltage DC	168...275	V_{dc}	Operational range
Standby Power (no load)	0.32	W	
Isolation input to output	No		

Electrical output data

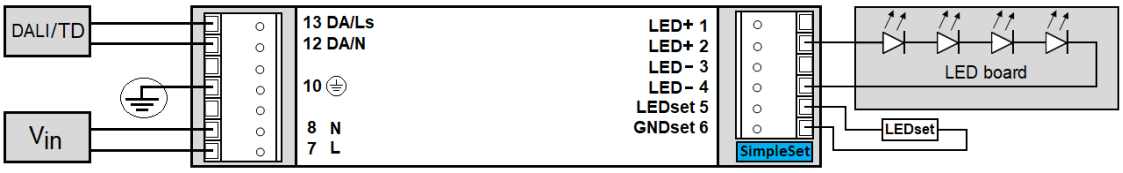
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	100...300	V_{dc}	
Output voltage max.	330	V	Maximum output voltage (rms)
Output current	200...700	mA	
Output current tolerance ±	5	%	@full load
Output current ripple LF	≤ 4	%	Ripple = peak / average, < 3kHz
Output current ripple HF	≤ 4	%	
Output P_{st}^{LM}	≤ 0.3		
Output SVM	≤ 0.3		
Output power	43.0...150.0	W	

Control interfaces

Specification item	Value	Unit	Condition
Control method	DALI		See design-in guide at www.philips.com/oem for more controllability details.
Dimming range	1...100	%	≥ 400mA 1% dimming; < 400mA min. current 4.0mA
Isolation controls input to output	Basic		acc. IEC61347-1

Wiring and Connections

Specification item	Value	Unit	Type
Input wire cross-section	0.5...1.5 / 20...16	mm^2 / AWG	WAGO744, solid wire
Input wire strip length	8...9	mm	
Output wire cross-section	0.5...1.5 / 20...16	mm^2 / AWG	WAGO744, solid wire
Output wire strip length	8...9	mm	
Control wire cross-section	0.5...1.5 / 20...16	mm^2 / AWG	WAGO744, solid wire
Control wire strip length	8...9	mm	
Maximum cable length	2	m	Total length of wiring including LED module, one way. For longer wiring please double check EMI behavior of luminaire

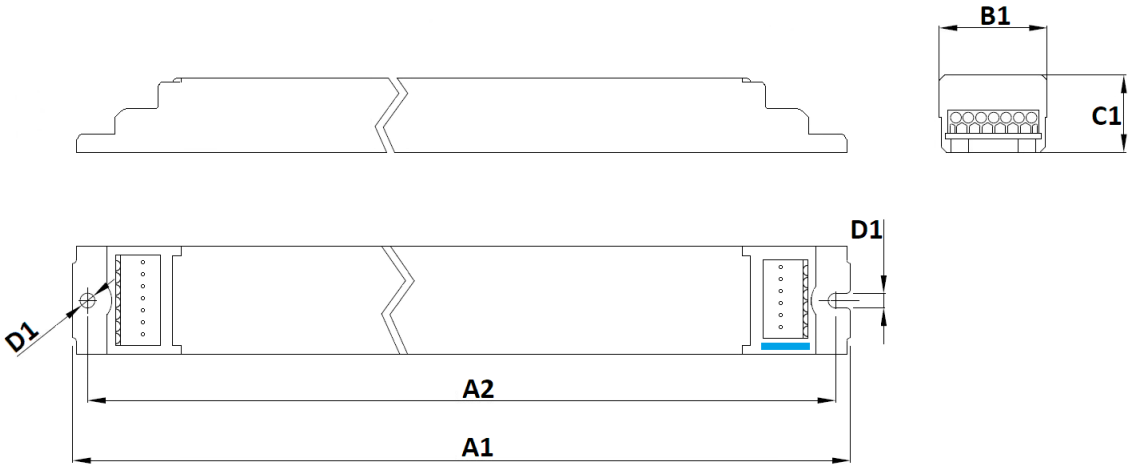


Isolation

Insulation per IEC61347-1	Input	Output+LEDset	DALI	Housing
Input	-	No	Basic	Basic
Output+LEDset	No	-	Basic	Basic
DALI	Basic	Basic	-	Basic
Housing	Basic	Basic	Basic	-

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	360	mm	
Mounting hole distance (A2)	350	mm	
Width (B1)	30	mm	
Height (C1)	21	mm	
Mounting hole diameter (D1)	4.1	mm	
Weight	284	gram	

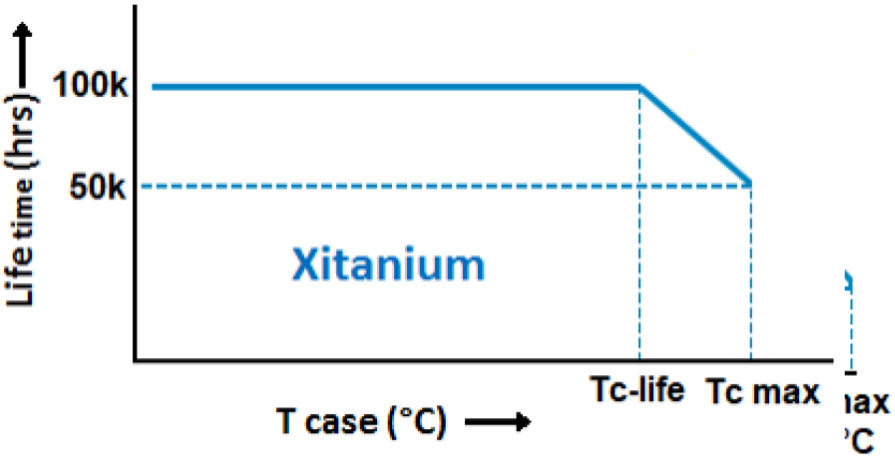


Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-30...+60	°C	Higher ambient temperature allowed as long as Tcase-max is not exceeded
Tcase-max	90	°C	lifetime 30khrs;
Tcase-life	75	°C	lifetime 100khrs; measured at T_c-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	100,000	hours	Measured temperature at Tcase-point is Tcase-life. Maximum failures = 10%
Mains switching cycles	> 100,000	switches	See Design-in guide for detailed explanation



Maximum failures = 10%

Temperature [°C]	Lifetime	Unit	Condition
90	50000	hr	
82.5	71000	hr	
75	100000	hr	Temperature measured @Tc point
70	>100000	hr	
65	>100000	hr	

Storage temperature and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-40...+85	°C	
Relative humidity	5...95	%	Non-condensing

Programmable features

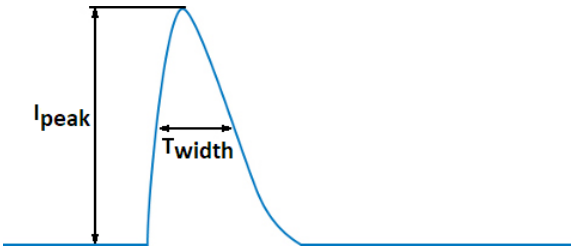
Specification item	Available	Default setting	Condition
Set Adjustable Output Current (AOC)	LEDset, Programmable, SimpleSet	200 mA	
NTC on LEDset	Yes	OFF	
Adjustable Light Output (ALO)	Yes	OFF	
Constant Light Output (CLO)	Yes	OFF	
Touch & Dim (TD)	Yes	ON	
Corridor Mode	Yes	ON	Default: T1=55s, T2=12s, T3=30min
Min Dim Level (%)	Yes	1 %	
DC emergency (DCemDim)	Yes	ON	Current output decreased to 15%
DALI control supported at DC operation	Yes	OFF	
Coded Light	Yes	ON	
OEM Write Protection (OWP)	Yes	OFF	

Non-programmable 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
Output Overvoltage Detection	Yes	
Energy metering (DALI part 252)	Yes	Accuracy 10%
Diagnostics via Signify tool	Yes	

Inrush current

Specification item	Value	Unit	Condition
Inrush current	5.1	A	Input voltage 230V
Inrush peak width	760	µs	Input voltage 230V, measured at 50% height
Drivers / MCB 16A type B @230V AC	≤ 12	pcs	Input voltage 230V



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

If several mini circuit breakers are used directly side-by-side (without distance pieces

a correction factor of 80% has to be applied to the rated current

Driver touch current / protective conductor current / earth leakage current

Specification item	Value	Unit	Condition
Typical Protective Conductor Current (ins. Class I)	0.5	mA rms	Acc. IEC60598-1. LED module contribution not included

Surge immunity

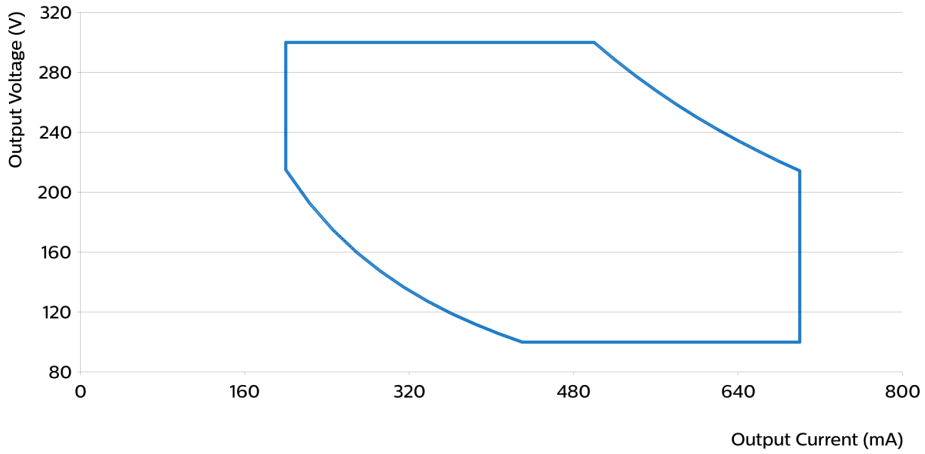
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	2	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	4	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us
Control surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Control surge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

Application Info (Approbation)

Specification item	Value
Approval marks and Certifications	CCC / CE / EL / ENEC
Ingress Protection classification (IP)	20
Application	Indoor Linear
Mounting Type	Built-in

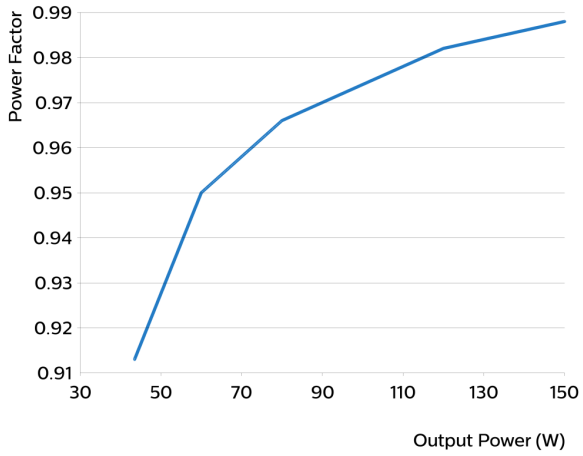
Graphs

Operating window

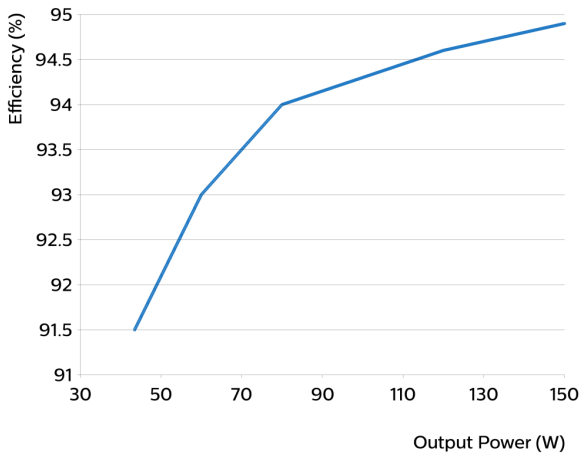


Type	Output current (mA)	Min. output voltage (V)	Max. output voltage (V)	Max. output power (W)
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	200	215	300	60
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	250	172	300	75
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	300	143	300	90
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	350	122	300	105
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	400	107	300	120
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	450	100	300	135
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	500	100	300	150
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	550	100	272	150
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	600	100	250	150
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	650	100	230	150
Xitanium 150W 0.2-0.7A 300V iXt TDCL 230V	700	100	214	150

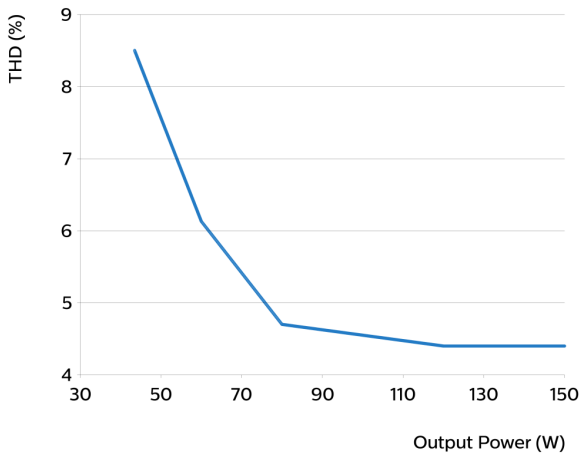
Power factor versus output power



Efficiency versus output power



THD versus output power



Notes

This product includes software licensed under terms that require Philips Lighting Holding B.V. to display the following notice:

ASF: Release ASF-3.32
The Atmel® Software Framework (ASF, www.atmel.com/asf) is a compilation of embedded software for Atmel flash MCUs: megaAVR®, AVR XMEGA®, AVR UC3 and SAM devices. It has been designed to help develop and glue together the different components of a software design. It can easily integrate into an operating system (OS) or run as a stand-alone product.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of Atmel may not be used to endorse or promote products derived from this software without specific prior written permission.
4. This software may only be redistributed and used in connection with an Atmel microcontroller product.
THIS SOFTWARE IS PROVIDED BY ATMEL "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES,
INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT ARE EXPRESSLY AND SPECIFICALLY DISCLAIMED. IN NO EVENT SHALL ATMEL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

© 2026 Signify Holding. All rights reserved. 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. All trademarks are owned by Signify Holding or their respective owners.