Xitanium

Datasheet

Xitanium non-isolated Fixed Output

Xitanium 60W 0.08-0.35A 300V 16 230V
9290 015 57706

Xitanium non-isolated Fixed Output drivers stand on three pillars: quality of light, reliability and flexibility

By using Xitanium LED drivers in your luminaires, you can be sure to offer your customers high quality of light without visual flicker and stroboscopic effects.

The reliability of your complete lighting system is enhanced as our drivers offer specific features that protect the connected LED module, including reduced ripple current.

Finally, application-oriented operating windows offer the flexibility required to provide the stable lumen output and light quality levels that lighting specifiers and architects demand.

Benefits

- High quality of light
- High reliability
- Future-proof flexibility

Application

- Offices
- Industry
- Retail: supermarkets, shopping malls

Features

- High efficiency
- Wide operating windows - output current can be adjusted via SimpleSet (NFC) or LEDset (resistor)
- Low output ripple current

Logistical data

Specification item	Value
Product name	Xitanium 60W 0.08-0.35A 300V 16 230V
EOC	871869670595700
Logistic code 12NC	9290 015 57706
EAN1 (GTIN)	8718696705957
EAN3 (box)	8718696705964
Pieces per box	24
Weight	164 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	0.3	A	@ max output power @ rated input voltage
Rated input power	66.0	W	@ max output power @ rated input voltage
Power factor performance range	≥ 0.90 C		@ rated output power @ rated input voltage@ rated output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	92.2	%	@ max. output power @ rated input voltage @ max. Uout
Rated input voltage DC	186...250	V_{dc}	Performance range
Rated input current DC	≤ 0.3	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
Isolation input to output	No		

Electrical output data

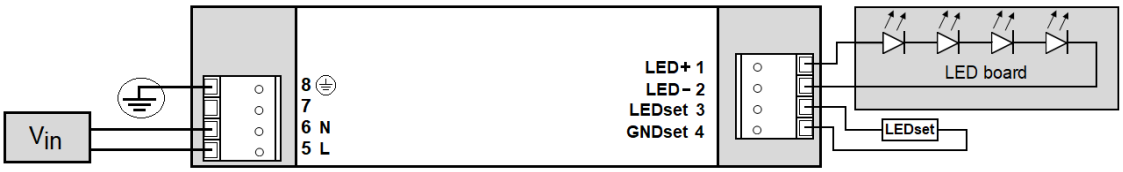
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	100...300	V_{dc}	
Output voltage max.	330	V	Maximum output voltage (rms)
Output current	80...350	mA	
Output current tolerance ±	5	%	@full load
Output current ripple LF	≤ 4	%	Ripple = peak / average, < 3kHz
Output current ripple HF	≤ 4	%	
Output P_{st}^{LM}	≤ 0.1		
Output SVM	≤ 0.3		
Output power	8.0...60.0	W	
Minimum performance output power	17	W	Power factor > 0.9 and THD < 20%

Control interfaces

Specification item	Value	Unit	Condition
Control method	Fixed		

Wiring and Connections

Specification item	Value	Unit	Type
Input wire cross-section	0.5...1.5 / 20...16	mm² / AWG	WAGO744, solid wire
Input wire strip length	8...9	mm	
Output wire cross-section	0.5...1.5 / 20...16	mm² / AWG	WAGO744, solid wire
Output 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.

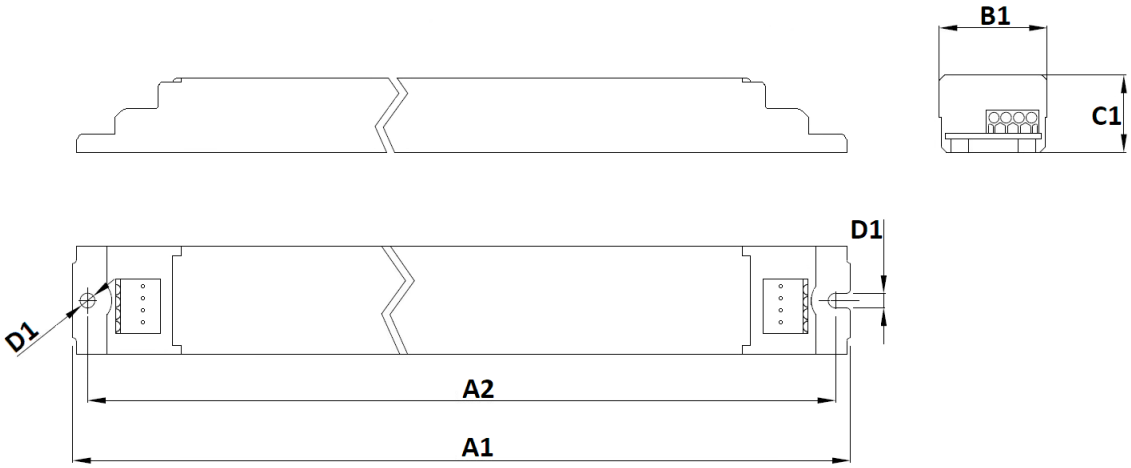


Isolation

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

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	280	mm	
Mounting hole distance (A2)	270	mm	
Width (B1)	30	mm	
Height (C1)	16	mm	
Mounting hole diameter (D1)	4.1	mm	
Weight	164	gram	

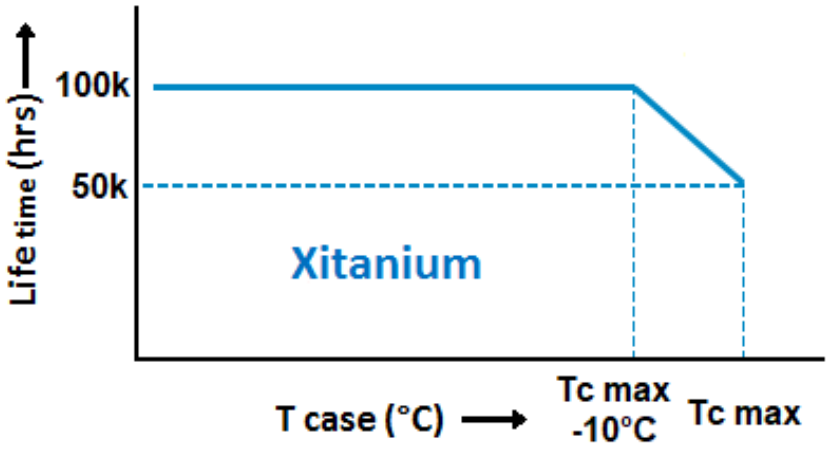


Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-25...+50	ºC	Higher ambient temperature allowed as long as Tcase-max is not exceeded
Tcase-max	75	ºC	Maximum temperature measured at T_{case}-point
Tcase-life	65	ºC	lifetime 100khrs; measured at T_c-point
Maximum housing temperature	110	ºC	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%
Driver lifetime Tcmax	0	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
75	50000	hr	
70	71000	hr	
65	100000	hr	Temperature measured @Tc point
60	>100000	hr	
55	>100000	hr	

Storage temperature and humidity

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

Programmable features

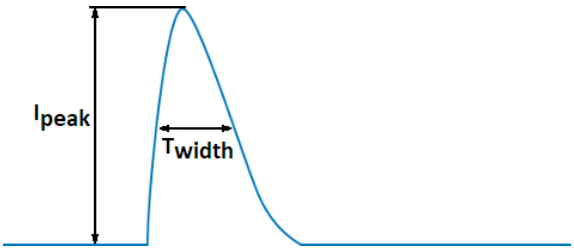
Specification item	Available	Default setting	Condition
Set Adjustable Output Current (AOC)	LEDset	80 mA	Set the output current via LEDset, do not leave open / short-circuit. See Design-In Guide for resistor value table.
Constant Light Output (CLO)	No		
Corridor Mode	No		
DC emergency (DCemDim)	No		

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
Energy metering (DALI part 252)	No	
Diagnostics via Signify tool	No	

Inrush current

Specification item	Value	Unit	Condition
Inrush current	18.1	A	Input voltage 230V
Inrush peak width	256	µs	Input voltage 230V, measured at 50% height
Drivers / MCB 16A type B @230V AC	≤ 26	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

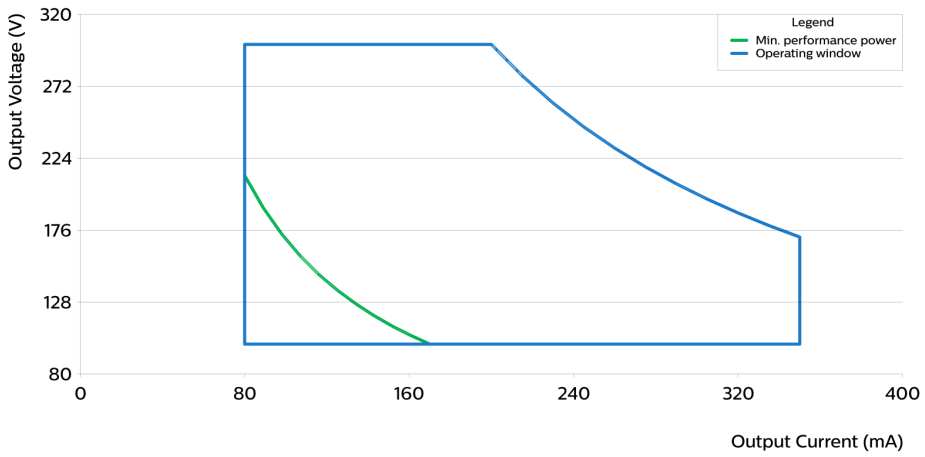
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

Application Info (Approbation)

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

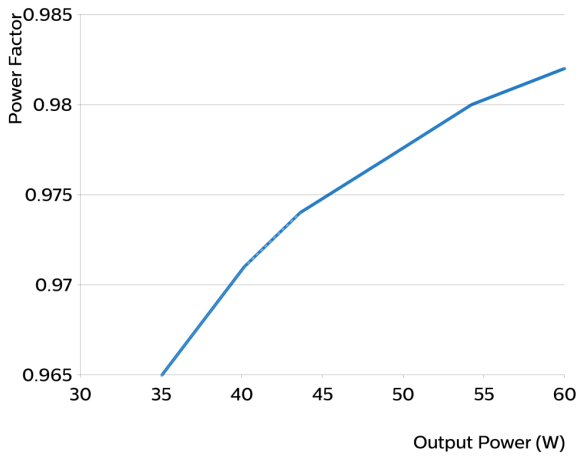
Graphs

Operating window

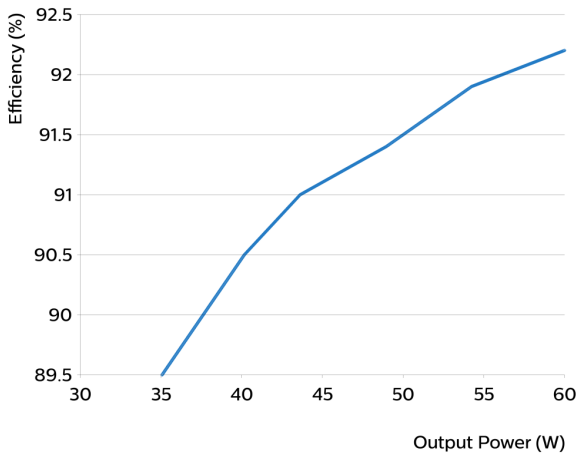


Type	Output current (mA)	Min. output voltage (V)	Max. output voltage (V)	Max. output power (W)
Xitanium 60W 0.08-0.35A 300V 16 230V	80	100	300	24
Xitanium 60W 0.08-0.35A 300V 16 230V	130	100	300	39
Xitanium 60W 0.08-0.35A 300V 16 230V	180	100	300	54
Xitanium 60W 0.08-0.35A 300V 16 230V	230	100	260	60
Xitanium 60W 0.08-0.35A 300V 16 230V	280	100	214	60
Xitanium 60W 0.08-0.35A 300V 16 230V	350	100	171	60

Power factor versus output power



Efficiency versus output power



THD versus output power