PHILIPS

Xitanium

LED driver



Datasheet

Xitanium track adaptor drivers 1C G3

Xi 42W/a 0.7-1.05A 40V DS 1CW 230V
Xi 42W/a 0.7-1.05A 40V DS 1CB 230V
Xi 42W/a 0.7-1.05A 40V DS 1CG 230V

Affordable and reliable LED Drivers

Philips Xitanium LED Point drivers are designed to operate with LED COB solutions used in built-in applications such as track light. Xitanium drivers have common features such as low ripple output current, adjustable output current by dip switch and 50,000 hours lifetime. They are specifically designed to ensure great EMI performance, high robustness and safe usage.

Features

- Class I application
- Low Ripple less than 3%
- 1 Circuit 3 Wire track system
- 4 output currents by Dip switch
- 50,000 hours lifetime

Benefits

- Great EMI performance for easy design-in
- Simplify track light luminaire design
- Compatible with most popular tracks
- Selectable output current enables flexibility
- Peace of mind with proven reliability

Application

- Track lighting

April 2026

Logistical data

Specification item	Value
Product name	Xi 42W/a 0.7-1.05A 40V DS 1CW 230V
Logistic code 12NC	9290 048 77501
Pieces per box	80

Specification item	Value
Product name	Xi 42W/a 0.7-1.05A 40V DS 1CB 230V
Logistic code 12NC	9290 048 77801
Pieces per box	80

Specification item	Value
Product name	Xi 42W/a 0.7-1.05A 40V DS 1CG 230V
Logistic code 12NC	9290 048 78101
Pieces per box	80

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	0.21	A	@max output power@rated input voltage
Rated input power	47.1	W	@max output power@rated input voltage
Power factor	0.90		@max output power@rated input voltage
Total harmonic distortion	20	%	@max output power@rated input voltage
Efficiency	90.0	%	@max output power@rated input voltage
Input voltage AC	198…264	V_{ac}	Operational range
Input frequency AC	47.5…63	Hz	Operational range
Isolation input to output	SELV		

Electrical output data

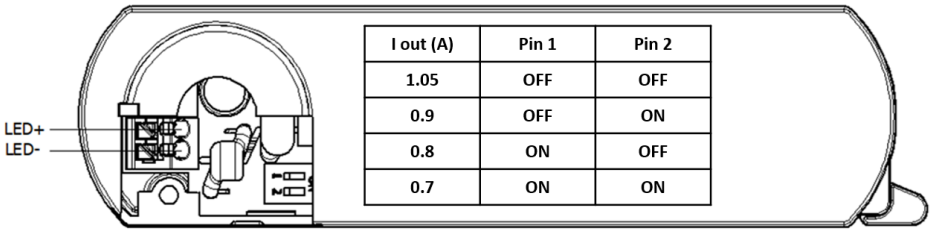
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	30…40	V_{dc}	
Output voltage max.	60	V	Maximum output voltage (rms)
Output current	700 / 800 / 900 / 1050	mA	
Output current tolerance ±	8	%	@full load
Output current ripple LF	≤ 3	%	Ripple = peak / average, < 3kHz
Output current ripple HF	≤ 15	%	
Output P_{st}^{LM}	≤ 0.1		In entire operating window
Output SVM	≤ 0.3		In entire operating window
Output power	21.0…42.0	W	
Rated output power	42.0	W	

Control interfaces

Specification item	Value	Unit	Condition
Control method	Fixed		

Wiring and Connections

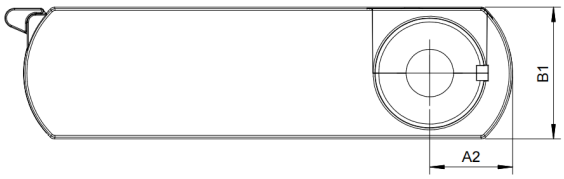
Specification item	Value	Unit	Type
Output wire cross-section	0.2...1.5 / 24...16	mm^2 / AWG	250 connector, solid wire.
Output wire strip length	8...9	mm	
Maximum cable length	0.3	m	Total length of wiring including LED module, one way

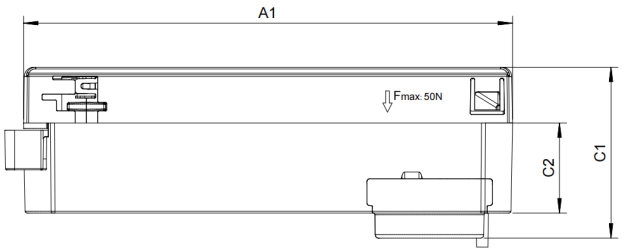


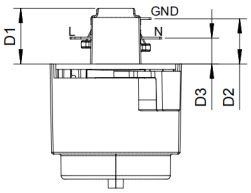
I out (A)	Pin 1	Pin 2
1.05	OFF	OFF
0.9	OFF	ON
0.8	ON	OFF
0.7	ON	ON

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	136	mm	
Mounting hole distance (A2)	23	mm	
Width (B1)	36.6	mm	
Height (C1)	47.5	mm	
Height (C2)	25	mm	
Distance (D1)	15.5	mm	
Distance (D2)	12.6	mm	
Distance (D3)	7.2	mm	
Weight	99	gram	





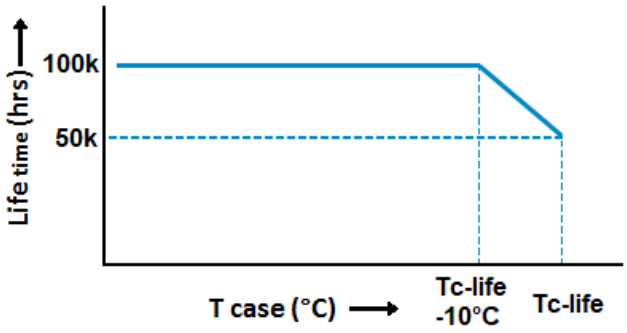


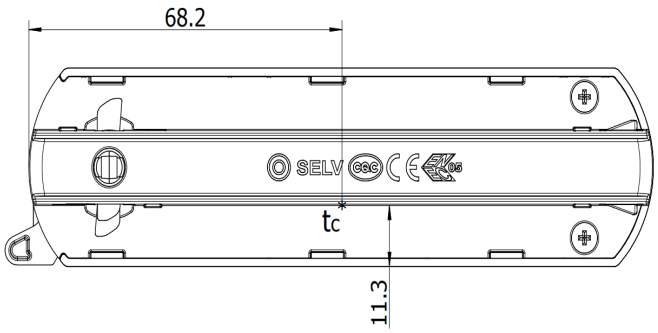
Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-20…+40	°C	
Tcase-max	90	°C	Maximum temperature measured at T_{case}-point
Tcase-life	90	°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%





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)	DipSwitch	1050 mA	
LED Module Temperature Protection (MTP)	No		
Driver Temperature Limit (DTL)	No		
Constant Light Output (CLO)	No		
Corridor Mode	No		
DC emergency (DCemDim)	No		

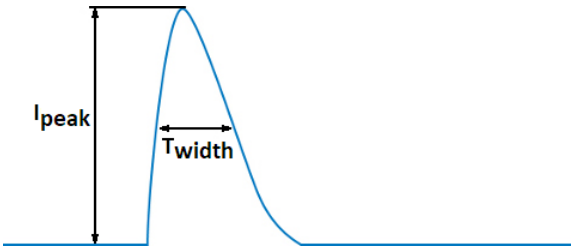
Non-programmable features

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

Inrush current

Specification item	Value	Unit	Condition
Inrush current	24.5	A	Input voltage 230V
Inrush peak width	135	µs	Input voltage 230V, measured at 50% height
Drivers / MCB 16A type B @230V AC	≤ 32	pcs	Input voltage 230V

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



Driver touch current / protective conductor current / earth leakage 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

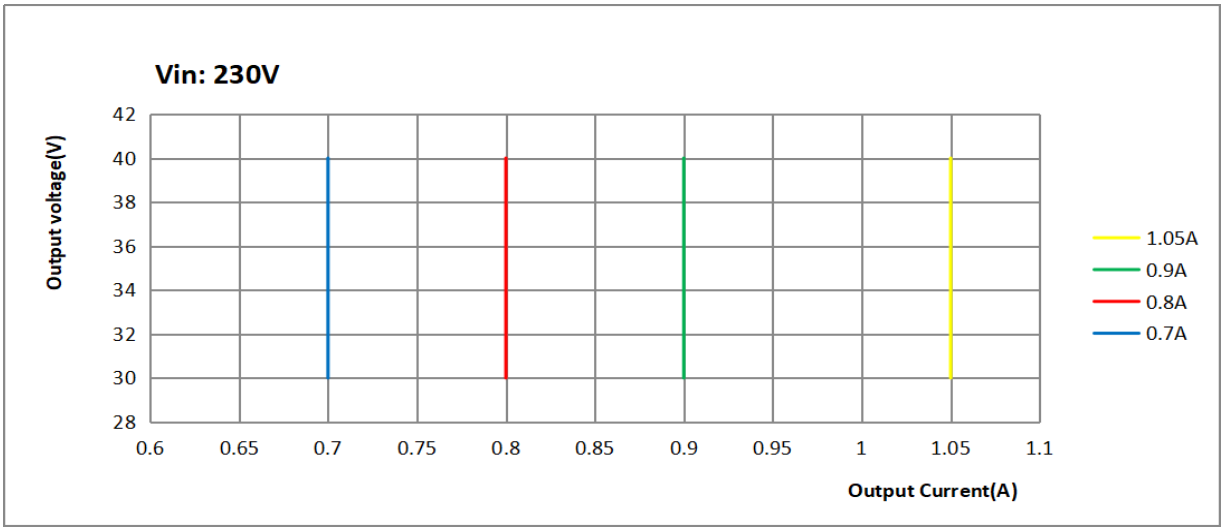
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

Application Info (Approbation)

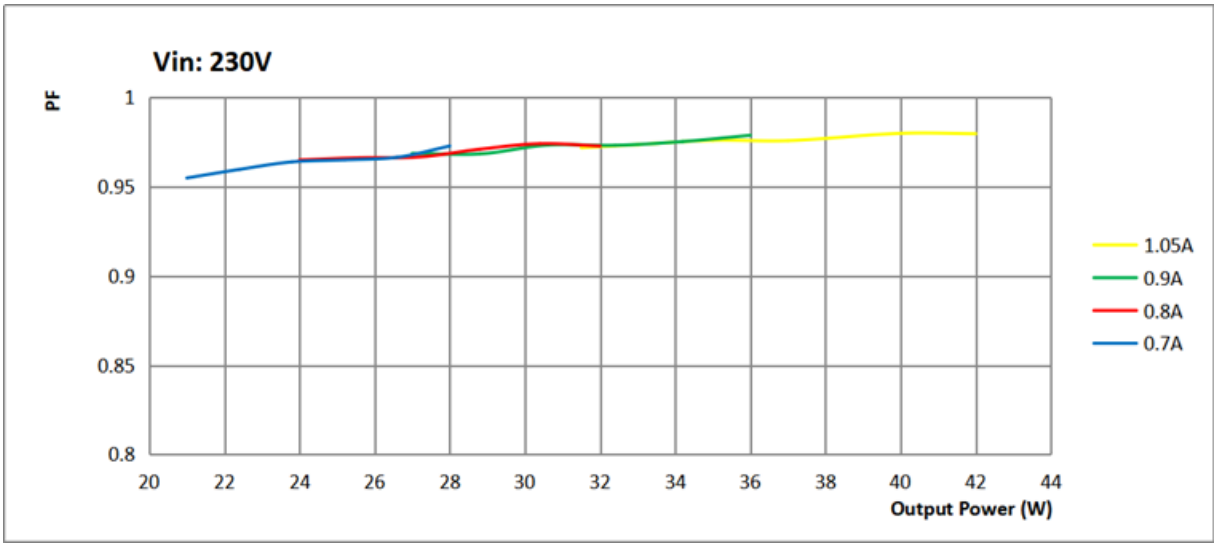
Specification item	Value
Approval marks and Certifications	CB / CQC / CE / ENEC
Ingress Protection classification (IP)	20
Application	Indoor Point
Mounting Type	Track mounting

Graphs

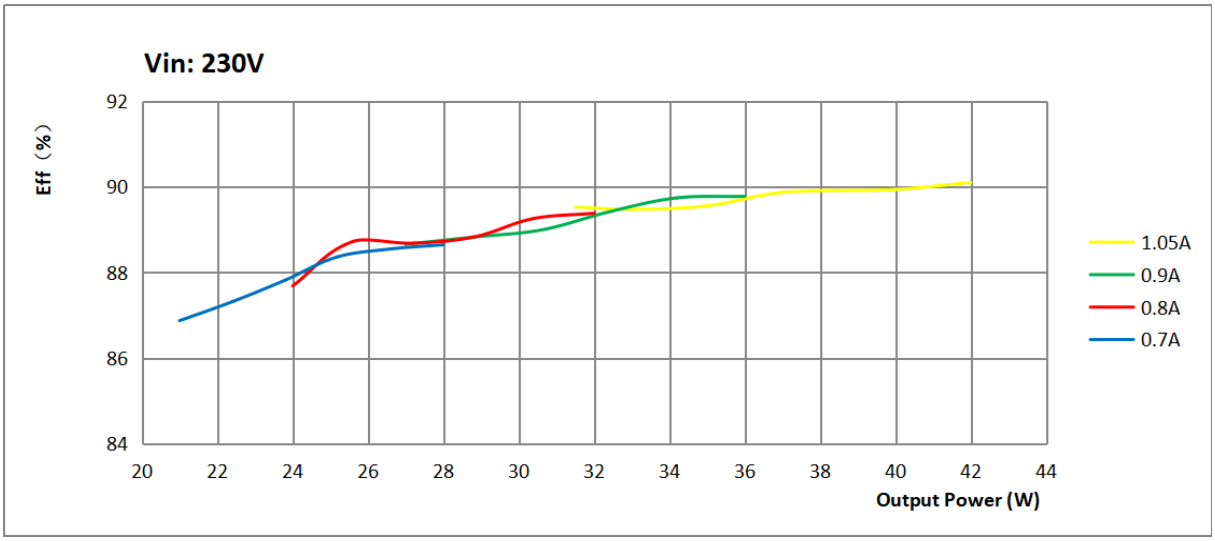
Operating window



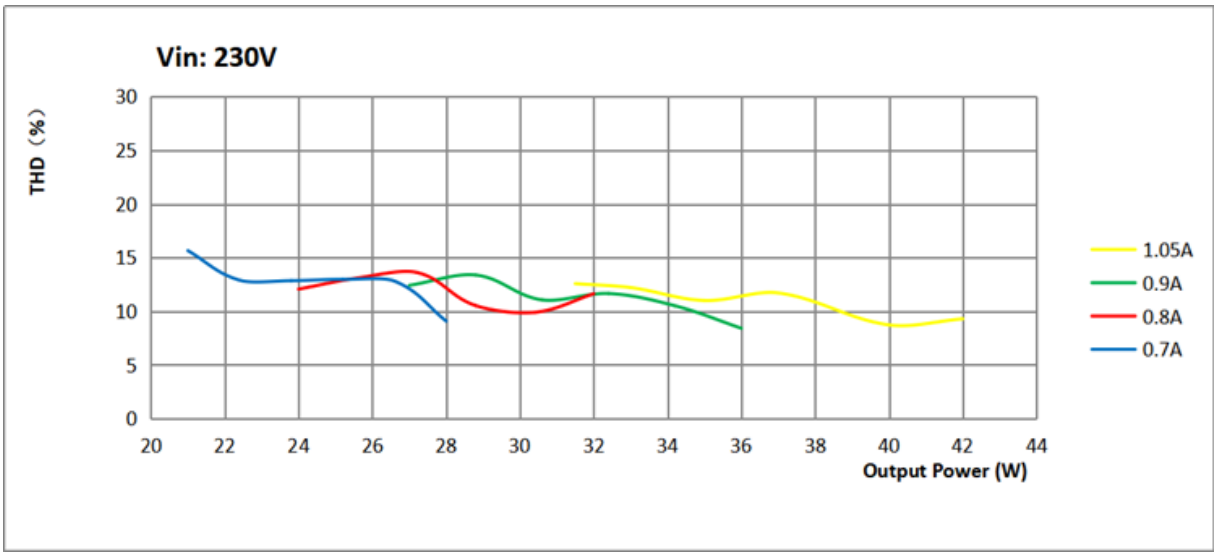
Power factor versus output power



Efficiency versus output power



THD versus output power



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