

Datasheet

Xitanium High Efficient Track Drivers

Xitanium 42W 0.7-1.05A 40V HE 3CW 230V 9290 039 22006 Xitanium 42W 0.7-1.05A 40V HE 3CB 230V 9290 039 22106 Xitanium 42W 0.7-1.05A 40V HE 3CG 230V 9290 039 22206

Combination of high performance and reliability

The development of Xitanium track drivers is now in a new phase with improved efficiency. The new portfolio boasts up to 7% increase in efficiency compared to standard track driver portfolio. We have also further optimized the performance of the new range enabling minimum efficiency loss at different points through the operating curve. Also with the flexibility provided by the increased number of dipswitches, Xitanium Track High Efficient range helps unlock the extraordinary potential of light, facilitating innovation and inspiring the next generation of luminaire design for our OEM customers.

Features

- High efficiency
- Compact size
- Optimized current choice
- Long lifetime
- Low output current ripple, low input current THD
- Suitable for 3-phase track systems

Benefits

- Driver design based on Philips experience and knowledge of conventional fluorescent and HID technologies
- Various power ratings matching common lumen packages/applications
- Increased flexibility thanks to 3 dipswitches for output current setting

Application

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

Logistical data

Specification item	Value
Product name	Xitanium 42W 0.7-1.05A 40V HE 3CW 230V
EOC	872110304343600
Logistic code 12NC	9290 039 22006
EAN1 (GTIN)	8721103043436
EAN3 (box)	8721103043443
Pieces per box	40
Weight	107.5 gram

Specification item	Value
Product name	Xitanium 42W 0.7-1.05A 40V HE 3CB 230V
EOC	872110304345000
Logistic code 12NC	9290 039 22106
EAN1 (GTIN)	8721103043450
EAN3 (box)	8721103043467
Pieces per box	40
Weight	107.5 gram
Specification item	Value
Product name	Xitanium 42W 0.7-1.05A 40V HE 3CG 230V
EOC	872110304347400
Logistic code 12NC	9290 039 22206
EAN1 (GTIN)	8721103043474
EAN3 (box)	8721103043481
Pieces per box	40
Weight	107.5 gram

Electrical input data

Specification item	Value	Unit	Condition
Rated input voltage range	220240	V _{ac}	Performance range
Rated input voltage	230	V _{ac}	
Rated input frequency	5060	Hz	Performance range
Rated input current	0.199	A	@ full output power @ rated input voltage
Rated input power	45.7	w	@ rated output power @ rated input voltage
Power factor performance range	≥ 0.9 C		@ rated output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	92.0	%	@ rated output power @ rated input voltage @max. Uout
Input voltage AC	198264	V _{ac}	Operational range
Input frequency AC	4566	Hz	Operational range
Isolation input to output	reinforced/SELV		

Electrical output data

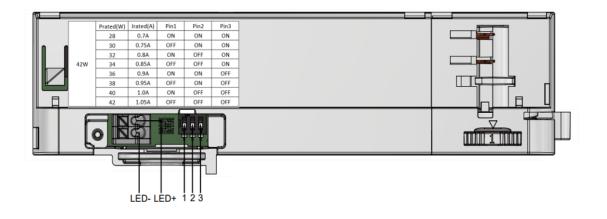
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	2540	V _{dc}	
Output voltage max.	60	V	Maximum output voltage (rms)
Output current	700 1050	mA	Select output current via the dipswitches with steps of 50 mA
Output current tolerance ±	7.5	%	
Output current ripple LF	≤ 3	%	Ripple = peak / average, < 3kHz
Output current ripple HF	≤ 15	%	
Output P _{st} ^{LM}	≤ 1.0		In entire operating window
Output SVM	≤ 0.4		In entire operating window
Output power	17.542.0	w	
Rated output power	42.0	W	

Control interfaces

Specification item	Value	Unit	Condition
Control method	Fixed		Set by dipswitch

Wiring and Connections

Specification item	Value	Unit	Туре
Output wire cross-section	0.51.5 / 2016	mm ² / AWG	solid wire/stranded wire
Output wire strip length	8.59.5	mm	
Maximum cable length	0.3	m	Total length of wiring including LED module, one way

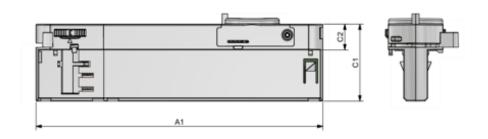


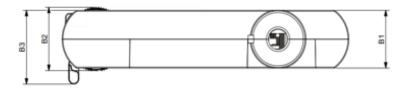
Isolation

Insulation per IEC61347-1	Input	Output
Input	-	reinforced/SELV
Output	reinforced/SELV	-

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	162	mm	
Width (B1)	31	mm	
Width (B2)	33	mm	
Width (B3)	39.6	mm	
Height (C1)	44.4	mm	
Height (C2)	13.9	mm	
Weight	107.5	gram	
Housing color	White, Black, Gray		

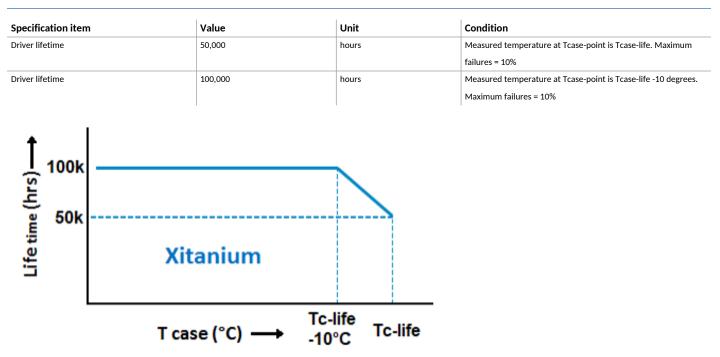




Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-20+35	°C	Higher ambient temperature allowed as long as Tcase-max is not
			exceeded
Tcase-max	80	°C	Maximum temperature measured at Tcase-point
Tcase-life	80	°C	Measured at T _{case} -point
Maximum housing temperature	130	°C	In case of a failure, inherent by design
Relative humidity	1090	%	Non-condensing

Lifetime



Maximum failures = 10%

Temperature [°C]	Lifetime	Unit	Condition
80	50000	hr	Temperature measured @Tc point
75	>50000	hr	
70	100000	hr	

Storage temperature and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-25+85	°C	
Relative humidity	595	%	Non-condensing

Programmable features

Specification item	Available	Default setting	Condition
Set Adjustable Output Current (AOC)	DipSwitch	1050 mA	Set the output current via the dipswitches, see wiring diagram for
			an overview

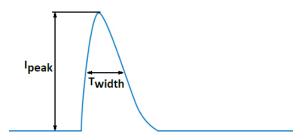
Non-programmable features

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	1	per IEC60598

Inrush current

Specification item	Value	Unit	Condition
Inrush current	20.1	A	Input voltage 230V
Inrush peak width	141	μs	Input voltage 230 V, measured at 50% height
Drivers / MCB 16A type B @230V AC	≤ 46	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 Touch Current (ins. Class II)	0.7	mA peak	Acc. IEC61347-1. LED module contribution not included

Surge immunity

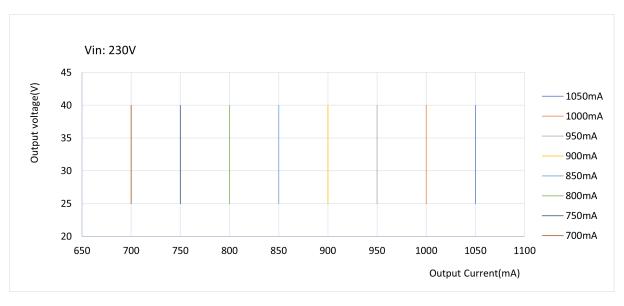
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

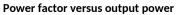
Application Info (Approbation)

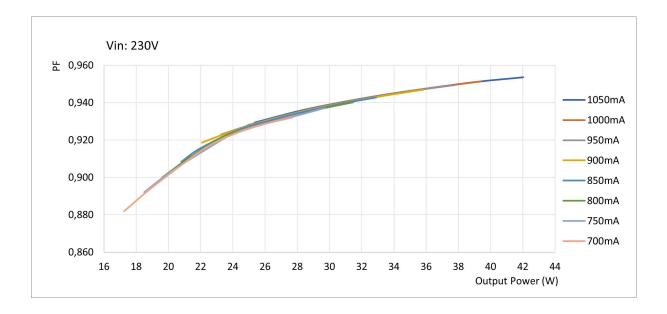
Specification item	Value
Approval marks and Certifications	CB / CE / CQC / EAC / ENEC / RCM / SELV / UKCA
Ingress Protection classification (IP)	20
Application	Indoor Point
Mounting Type	Track mounting

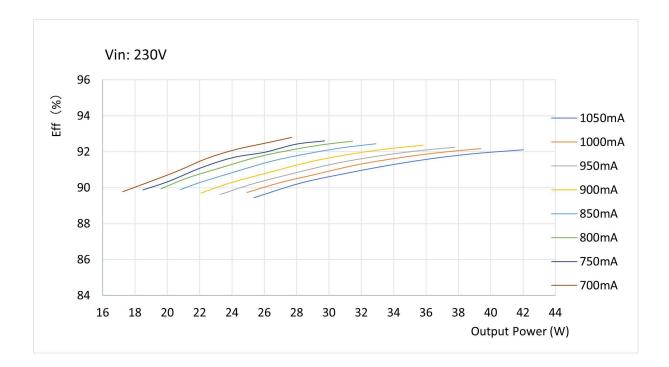
Graphs

Operating window

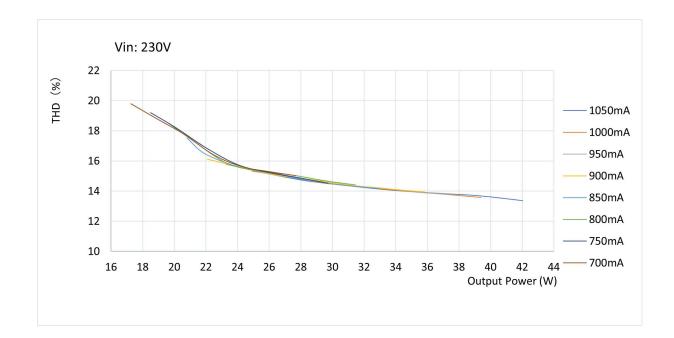








THD versus output power



Notes

The adapter is compatible with Global Trac Pro, Stucchi OneTrack, Powergear 3 Circuit tracks.



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