

Datasheet

Xitanium track adaptor drivers (3C)

Xitanium 42W/a 0.15-1.05A 42V MC 3CB
9290 028 51206



Affordable and reliable LED Drivers

Affordable LED driver range offering Philips reliability. The Xitanium track driver range is compatible with COB and mid-power LEDs from any LED manufacturer.

Benefits

- Driver design based on Philips experience and knowledge of conventional fluorescent and HID technologies
- Various power ratings matching common lumen packages/applications
- Track adaptor housing design for compact track luminaire designs

Application

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

Features

- Compact size
- Specific, optimized dual-output current choice
- Long lifetime
- Low output current ripple, low input current THD
- Suitable for 3-phase track systems
- Available in white, black and grey housing color

Logistical data

Specification item	Value
Product name	Xitanium 42W/a 0.15-1.05A 42V MC 3CB
EOC	871951429402800
Logistic code 12NC	9290 028 51206
EAN1 (GTIN)	8719514294028
EAN3 (box)	8719514294035
Pieces per box	40
Weight	160 gram

Specification item	Value
Product name	Xitanium 42W/a 0.15-1.05A 42V MC 3CW
EOC	871951429400400
Logistic code 12NC	9290 028 47406
EAN1 (GTIN)	8719514294004
EAN3 (box)	8719514294011
Pieces per box	40

Specification item	Value
Product name	Xitanium 42W/a 0.15-1.05A 42V MC 3CG
EOC	871951429404200
Logistic code 12NC	9290 028 51306
EAN1 (GTIN)	8719514294042
EAN3 (box)	8719514294059
Pieces per box	40

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	0.22	A	@ full output power @ rated input voltage
Max. input current	0.25	A	@ rated output power @ minimum performance input voltage
Rated input power	50.0	W	@ rated output power @ rated input voltage
Power factor performance range	≥ 0.90 C		@ full output power @ rated input voltage@ rated output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	87.0	%	@ rated output power @ rated input voltage @ max. U _{out}
Input voltage AC	198...264	V _{ac}	Safety operational range
Input frequency AC	45...66	Hz	Safety operational range
Standby Power (no load)	0.42	W	
Isolation input to output	SELV		

Electrical output data

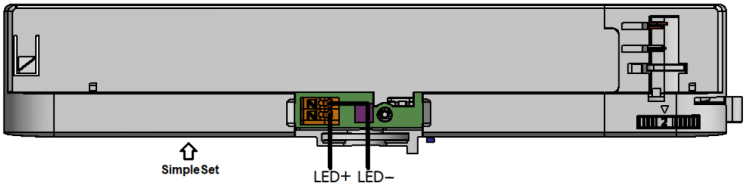
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	10...48	V _{dc}	
Output voltage max.	60	V	Maximum output voltage (rms)
Output current	150...1050	mA	
Output current min programmable	150	mA	
Output current tolerance ±	5	%	@full load
Output current ripple LF	≤ 4	%	Ripple = peak / average, < 3kHz
Output P _{st} ^{LM}	≤ 1.0		Within entire operation window
Output SVM	≤ 0.6		Within entire operation window
Output power	10.0...42.0	W	

Control interfaces

Specification item	Value	Unit	Condition
Control method	Wireless BLE, Wireless Zigbee		Set output current via SimpleSet (AOC). See driver design-in guide at www.philips.com/oem for more details reg. controllability.

Wiring and Connections

Specification item	Value	Unit	Type
Output wire cross-section	0.5...1.5 / 20...16	mm ² / AWG	solid / stranded wire
Output wire strip length	7.5...8.5	mm	
Maximum cable length	0.3	m	CISPR15: between driver and LED module

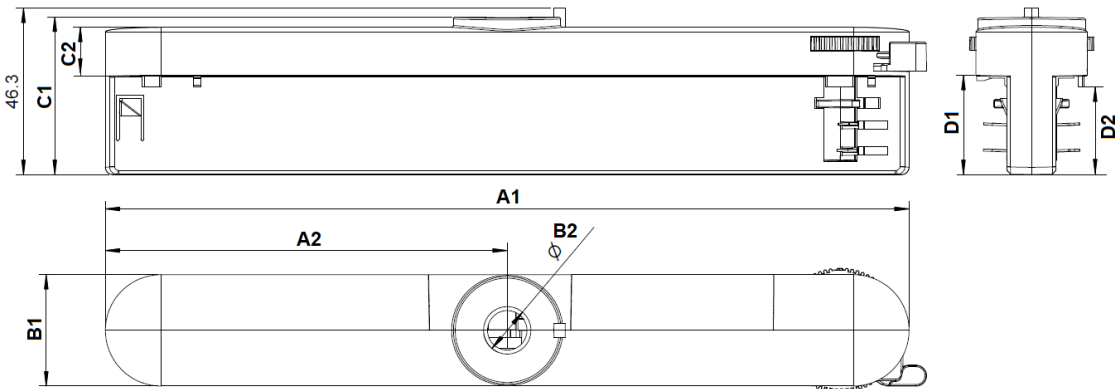


Isolation

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

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	224	mm	
Mounting hole distance (A2)	112	mm	
Width (B1)	31	mm	
Height (C1)	43.8	mm	
Height (C2)	13.7	mm	
Mounting hole diameter (D1)	27.3	mm	
Mounting hole diameter (D2)	24.4	mm	
Weight	160	gram	
Housing color	Black		

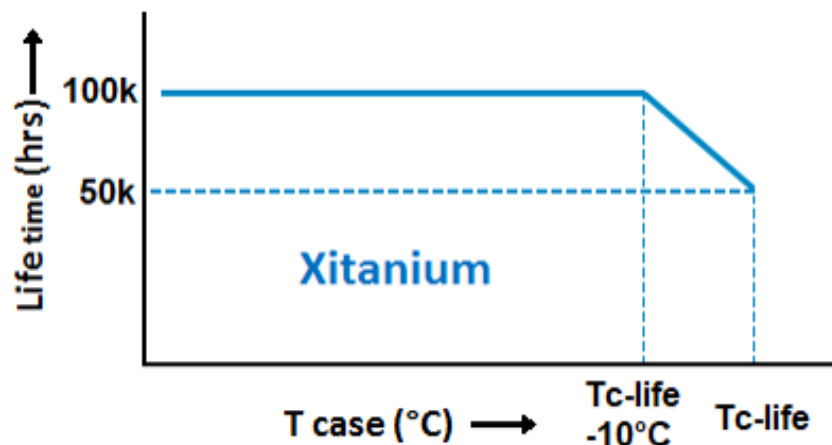


Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-20...+35	°C	Higher ambient temperature allowed as long as T _{case-max} is not exceeded
T _{case-max}	80	°C	Maximum temperature measured at T _{case-point}
T _{case-life}	80	°C	Measured at T _{case-point}
Maximum housing temperature	130	°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%
Driver lifetime Tcmax	0	hours	Measured temperature at Tcase-point is Tcase-life. Maximum failures = 10%



Maximum failures = 10%

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

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
Adjustable Light Output (ALO)	Yes	OFF	
Adjustable Light Output (ALO) min level	Yes		
Constant Light Output (CLO)	Yes	OFF	
Touch & Dim (TD)	No		
Corridor Mode	No		
OEM Write Protection (OWP)	Yes	OFF	
Luminaire Info (DALI part 251)	Yes		
Tx Power	Yes	8 dBm	

Non-programmable features

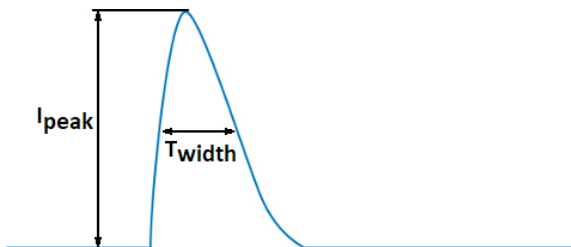
Specification item	Value	Condition
Open load protection	Yes	Automatic recovering
Short circuit protection	Yes	Automatic recovering
Over power protection	Yes	Automatic recovering
Hot wiring	No	

Inrush current

Specification item	Value	Unit	Condition
Inrush current	8.07	A	Input voltage 230V
Inrush peak width	31	μs	Input voltage 230V, measured at 50% height
Drivers / MCB 16A type B @230V AC	≤ 24	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 piece) a correction factor of 80% has to be applied to the rated current



Surge immunity

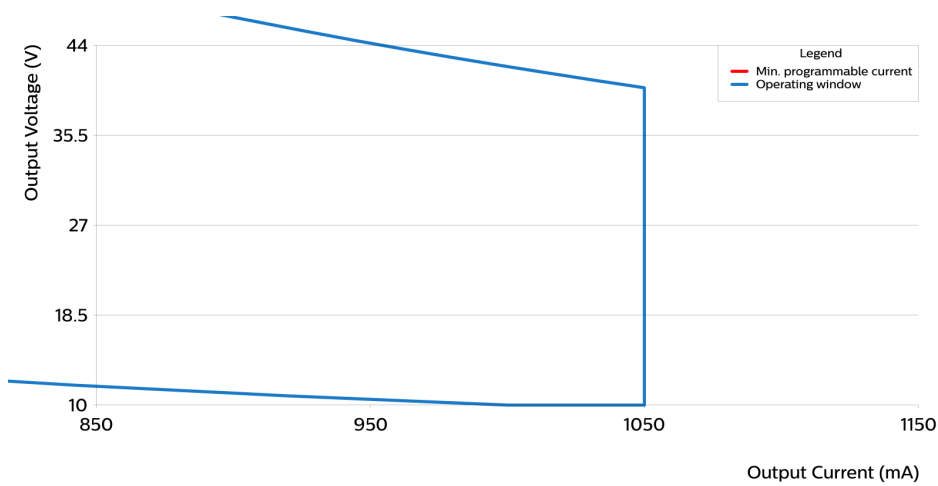
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

Application Info (Approbation)

Specification item	Value
Approval marks and Certifications	BLE alliance / CE / CQC / Double-insulated Built-In / ENEC / RCM / SELV / SRRC / UKCA / WEEE
Ingress Protection classification (IP)	20
Application	Indoor Point
Mounting Type	Track mounting

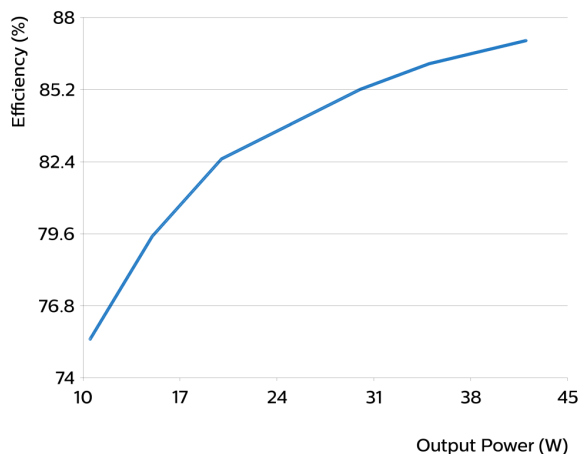
Graphs

Operating window



Type	Output current (mA)	Min. output voltage (V)	Max. output voltage (V)	Max. output power (W)
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	150	66	48	7.2
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	200	50	48	9.6
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	250	40	48	12
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	300	33	48	14.4
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	350	28	48	16.8
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	400	25	48	19.2
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	450	22	48	21.6
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	500	20	48	24
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	550	18	48	26.4
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	600	16	48	28.8
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	650	15	48	31.2
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	700	14	48	33.6
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	750	13	48	36
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	800	12	48	38.4
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	850	11	48	40.8
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	900	11	46	42
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	950	10	44	42
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	1000	10	42	42
Xitanium 42W/a 0.15-1.05A 42V MC 3CB	1050	10	40	42

Efficiency versus output power



Notes

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

For more information about the MasterConnect app see the End User Manual.

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CmBacktrace 1.3

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