



DATASHEET

interlight driver 42W
IL-X4D42



FEATURES

Single current LED drivers for essential lighting applications.

LED panel drivers are designed to fulfill the market need for panel lighting with reliable performance. The new generation LED panel drivers offer basic specifications with specific current and voltage settings which are easy to use for high volume applications.

Features

- 50,000 hours lifetime @Tc-life
- SELV output for simpler approval process and easy design-in
- Fast Time to Market
- Low ripple output current (4%) Application

Benefits

- Various Vout/Iout mix for high volume applications
- Comfort for eyes and assurance of camera-friendly performance
- Easy to design-in with single output current
- Independent-version housing design for stand-alone installations

Application

- Panel application for office and public areas
- For luminaires of protection class II



Logistical data

Specification item	Value
Product name	IL-X4D42 42W 1.05A 40V 230V G2
Logistic code 12NC	9290 048 48101

Electrical input data

Specification item	Value	Unit	Condition
Rated input voltage range	220...240	Vac	Performance range
Rated input voltage	230	Vac	
Rated input frequency	50...60	Hz	Performance range
Rated input current	0.21	A	@ rated output power @ rated input voltage
Rated input power	46.5	W	@ rated output power @ rated input voltage
Power factor	0.98		@maximum output power @ rated input voltage
Total harmonic distortion	20	%	@ rated output power @ rated input voltage
Efficiency	89.5	%	@ maximum output power @ rated input voltage
Input voltage AC	198...264	Vac	Operational range
Input frequency AC	45...66	Hz	Operational range
Isolation input to output	Reinforced		

Electrical output data

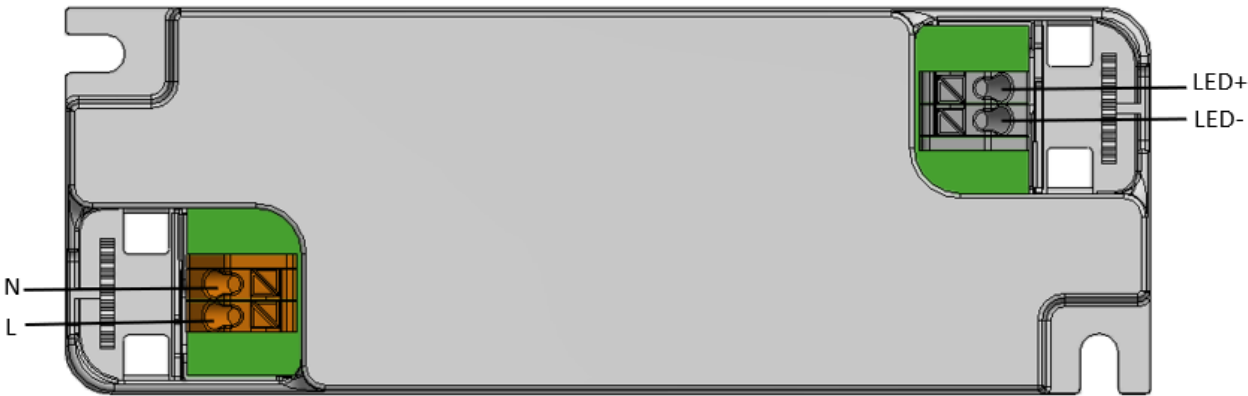
Specification item	Value	Unit	Condition
Regulation method	Constant Current		
Output voltage	30...40	Vdc	
Output voltage max.	60	V	Maximum output voltage (rms)
Output current	1050	mA	
Output current tolerance $\pm$	5	%	@full load
Output current ripple LF $\leq$	4	%	Ripple = peak to average, < 3kHz
Output current ripple HF $\leq$	15	%	
Output Pst Im	≤ 0.1		In entire operating window
Output SVM	≤ 0.1		In entire operating window
Output power	31.5...42.0	W	

Control interfaces

Specification item	Value	Unit	Condition
Control method	Fixed		

Wiring and connections

Specification item	Value	Unit	Type
Input wire cross-section	0.75...1.5 / 18...16	mm2 / AWG	Type 250, solid / stranded wire. Applicable cable outer jacket diameter 3mm to 8mm
Input wire strip length	8.5...9.5	mm	
Output wire cross-section	0.2...1.5 / 24...16	mm2 / AWG	
Output wire strip length	8.5...9.5	mm	Total length of wiring including LED module, one way
Maximum cable length	0.6	m	

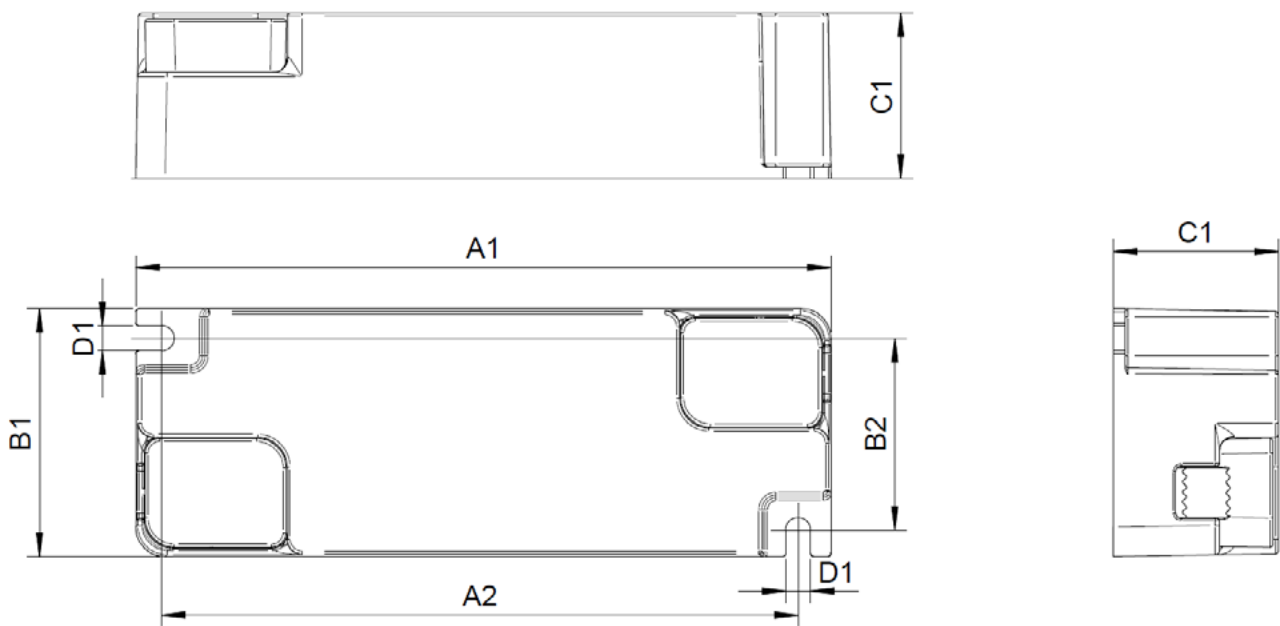


Isolation

Insulation per IEC61347-1	Input	Output	Housing
Input	-	Reinforced	Reinforced
Output	Reinforced	-	Reinforced
Housing	Reinforced	Reinforced	-

Dimensions and weight

Specification item	Value	Unit	Tolerance (mm)
Length (A1)	118	mm	± 0.5
Mounting hole distance (A2)	108	mm	± 0.5
Width (B1)	42	mm	± 0.5
Width (B2)	32.5	mm	± 0.5
Height (C1)	28	mm	± 0.5
Mounting hole diameter (D1)	4.2	mm	± 0.3
Weight	75	gram	
Housing color	grey		



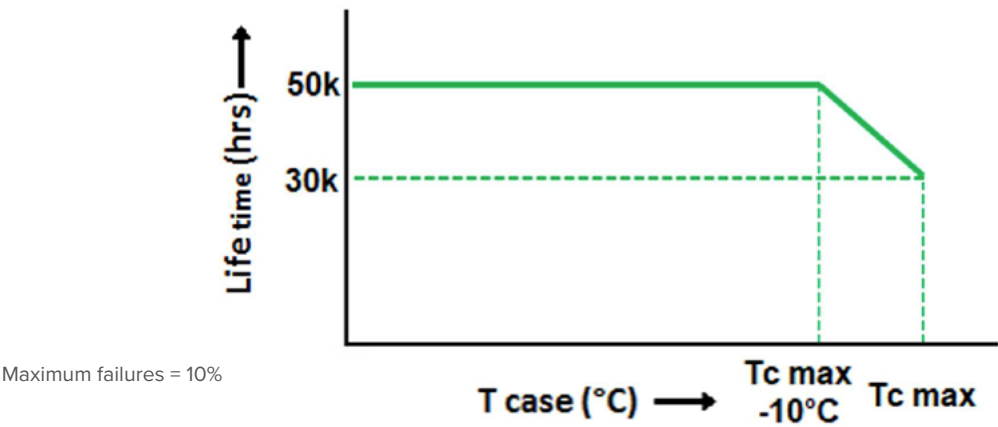
Operational temperatures and humidity

Specification item	Value	Unit	Condition
Ambient temperature	-20...+40	°C	
Tcase-max	75	°C	Maximum temperature measured at Tcase-point
Tcase-life	65	°C	Measured at Tcase-point
Max. 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	30,000	hours	Measured temperature at Tcase-point is Tcase-max. Max. failures = 10%
Driver lifetime	50,000	hours	Measured temperature at Tcase-point is Tcase-max -10 degrees. Max. 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 AOC (Adjustable Output Current)	No		

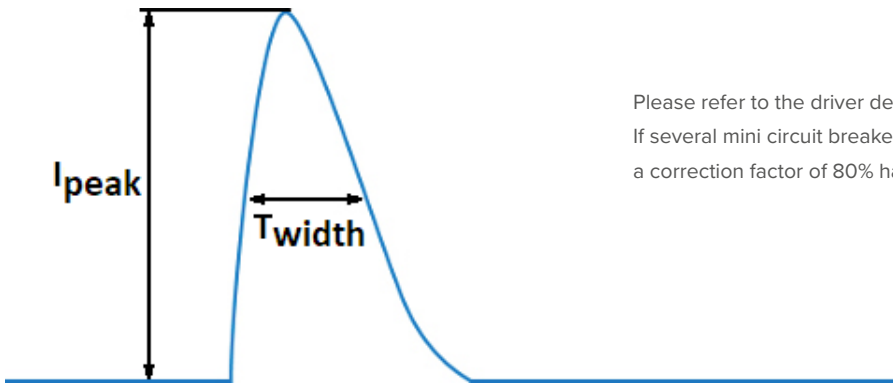
Non-programmable features

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	II	per IEC60598



Inrush current

Specification item	Value	Unit	Condition
Inrush current	29.88	A	Input voltage 230V
Inrush peak width	109	µs	Input voltage 230 V, measured at 50% height
Drivers / MCB			
16A type B @230V AC	≤ 36	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

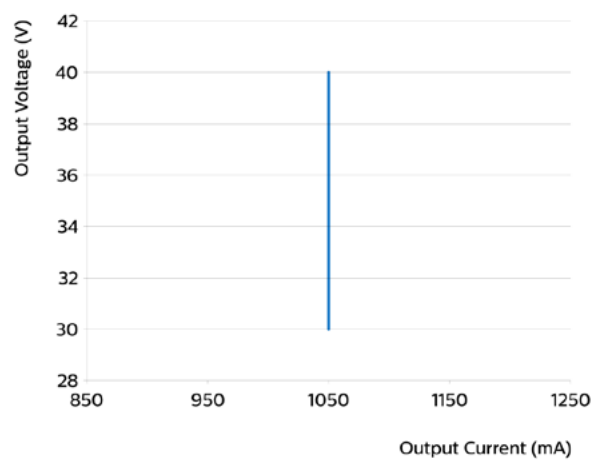
Specification item	Value	Unit	Condition
Mains surge immunity (diff. mode)	1	kV	Acc. IEC61000-4-5. 2 Ohm, 1.2/50us, 8/20us
Mains surge immunity (comm. mode)	2	kV	Acc. IEC61000-4-5. 12 Ohm, 1.2/50us, 8/20us

Application Info (Approbation)

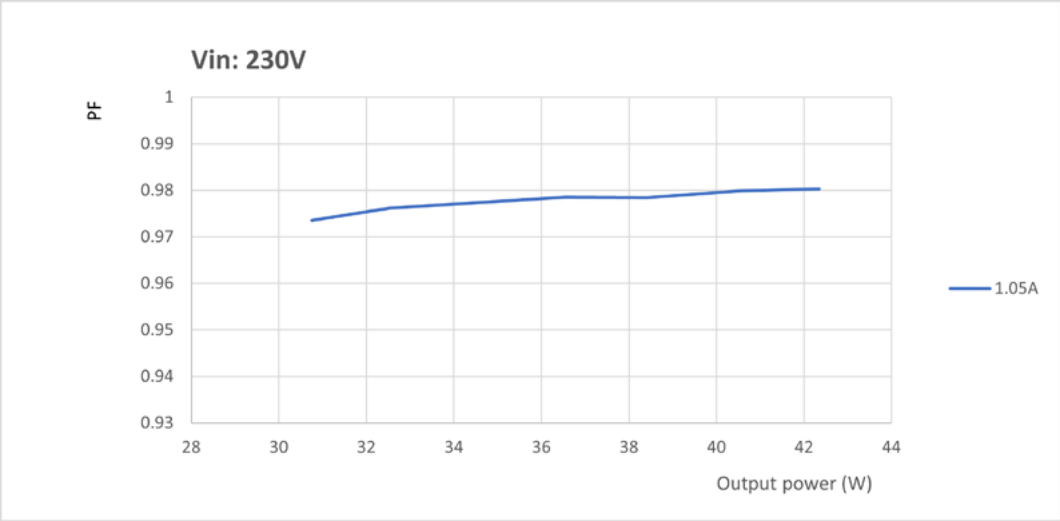
Specification item	Value
Approval marks and Certifications	CB / CE / ENEC / SELV
Ingress Protection classification (IP)	20
Noise and hum dB(A)	20
Application	Indoor Linear
Mounting Type	Independent



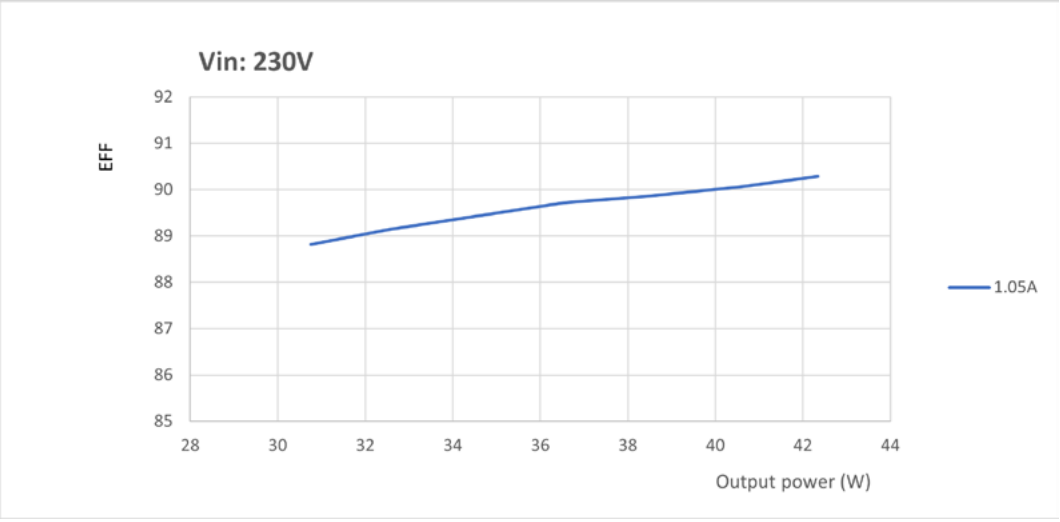
Operating window



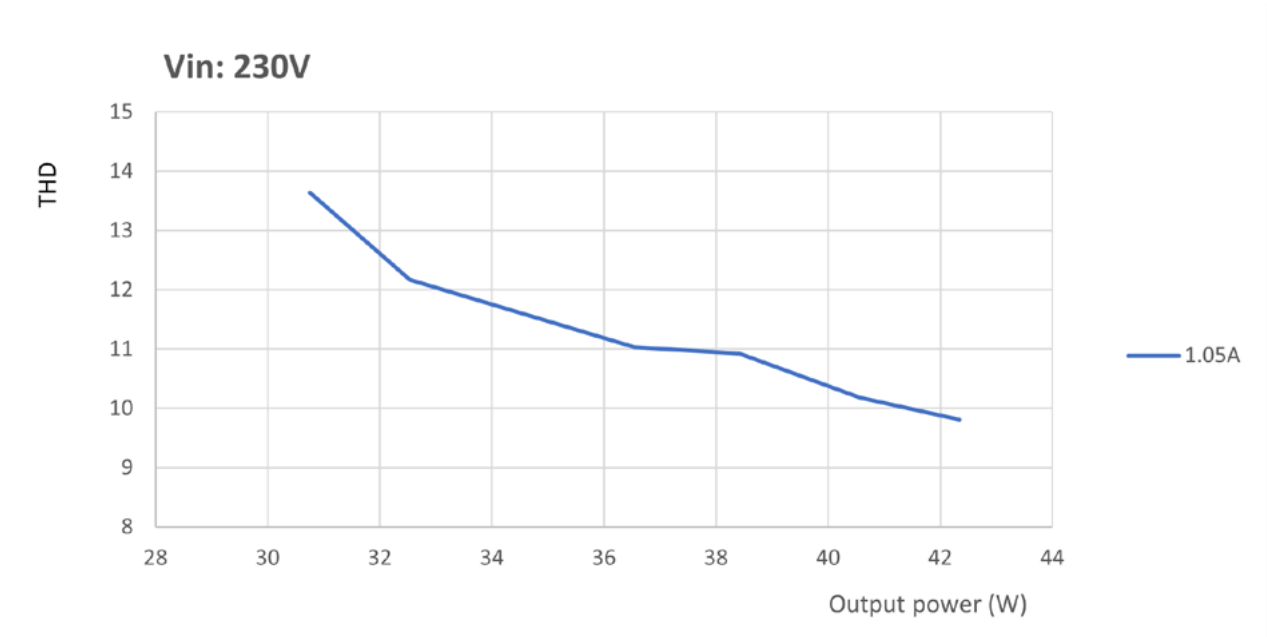
Power factor versus output power



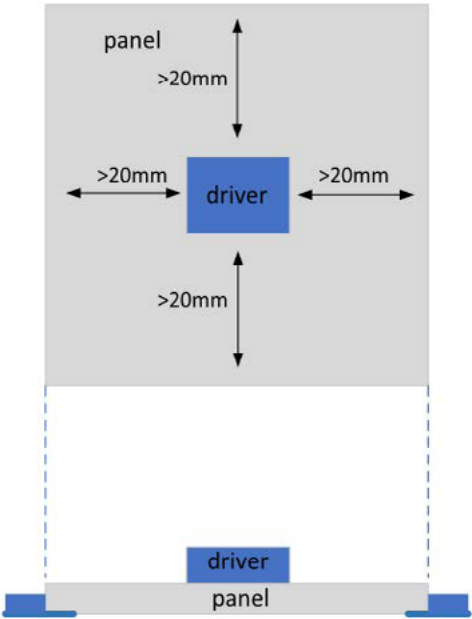
Efficiency versus output power



THD versus output power



Notes





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