LL1x26-CC



1x26 W Constant Current LED driver

- Open & short circuit protection
- Selectable constant current outputs: 300 mA and 350 mA
- Maximum 26.2 W load
- Suitable for Class I luminaires
- Load output is basic isolated from the mains
- Protected up to 4 kV power network fast transients



CE

Connections

Note:

• Not suitable for load side switching operation.

Mains Characteristics

Voltage range	198-264 VAC,	
	Min 176 VAC (max 1 hour)	
DC range	176 - 280 VDC,	
	starting voltage > 190 VDC	
Max mains current at full load 0.11 A - 0.14 A		
Frequency	0 / 50 - 60 Hz	
U-OUT _{max} (abnormal)	100 V	

Load Output (Basic (galvanic) isolation)

Output current (I-OUT)	300 mA or 350 mA
Max output power	26.25 W
Efficiency, at full load, typical	≥ 0.90

I-OUT	300 mA	350 mA
P-out (max)	22.5 W	26.25 W
U-OUT	20 - 75 V	20 - 75 V
λ	0.97	0.97
Efficiency (η) @ max	0.90	0.90

Connections and Mechanical Data

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Operating Conditions and Characteristics

Max. temperature at Tc point 80 °C			
Ambient temperature range	-20+50 °C		
Storage temperature range	-40+80 °C		
Maximum relative humidity	no condensation		
Life time	50 000 h, at Tc 80		
	70 000 h, at Tc 75		
	100 000 h, at Tc 70		
	(90 % survival rate)		

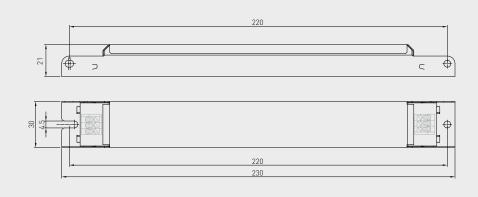
Conformity & standards

General and safety requirements	EN 61347-1	
Particular safety requirements for DC or AC supplied electronic control gear for LED modules	EN 61347-2-13	
Thermal protection class	EN61347, C5e	
Mains current harmonics	EN 61000-3-2	
Limits for Voltage Fluctuations and Flicker	EN 61000-3-3	
Radio Frequency Interference	EN 55015	
Immunity standard	EN 61547	
Performance requirements	EN 62384	
Compliant with relevant EU directives		
CE marked		

Note: See page 2 for dimensions and additional information



Dimensions



Quantity of drivers per miniature circuit breaker 16 A Type C

Based on I _{Cont}	Based on $I_{_{peak}}$	Typ.inrush current	1/2 value time	Calculated energy
(pcs.)	(pcs.)	I _{peak} (A)	Δt (µs)	l _{peak} ²∆t (A²s)
80	95	8	28	0.0012

Wiring & connectivity

LL1x26-CC LED driver is suited for in-built luminaire usage. In order to have safe and reliable LED driver operation, the LED luminaires will need to comply with the relevant standards and regulations (e.g. IEC/EN 60598-1). The LED luminaire shall be designed to adequately protect the LED driver from dust, moisture and pollution. The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets. Specifications of the LED drivers may never exceed the operating conditions as per the product datasheets.

Wiring considerations

Wire type and cross section

• Please refer to datasheets connections & mechanical data

Wiring insulation

• According to recommendations in EN 60598

Maximum wire lengths

Please refer to datasheets connections & mechanical data

Wire connections

Please refer to datasheets connections diagram

Miniature Circuit Breakers (MCB)

• Type-C MCB's with trip characteristics in according to EN 60898 are recommended.

LED driver earthing

- LED drivers are designed to support different luminaire classifications, like Class I or Class II fittings (no earth required). Please check the individual LED driver type for its exact safety class rating.
- For Helvar LED drivers to have a reliable operation and EMC performance, the luminaires are expected to have an earth connection.

Installation & operational considerations

Maximum Tc temperature

• Reliable operation and lifetime is only guaranteed if the maximum Tc point temperature is not exceeded under the conditions of use.

Installation site

- Ensure that the LED driver does not exceed temperature higher than specified on the product datasheets.
- The general preferred installation position of LED drivers for independent use is to have the top cover facing upwards.