

1x70 W Constant Current LED driver

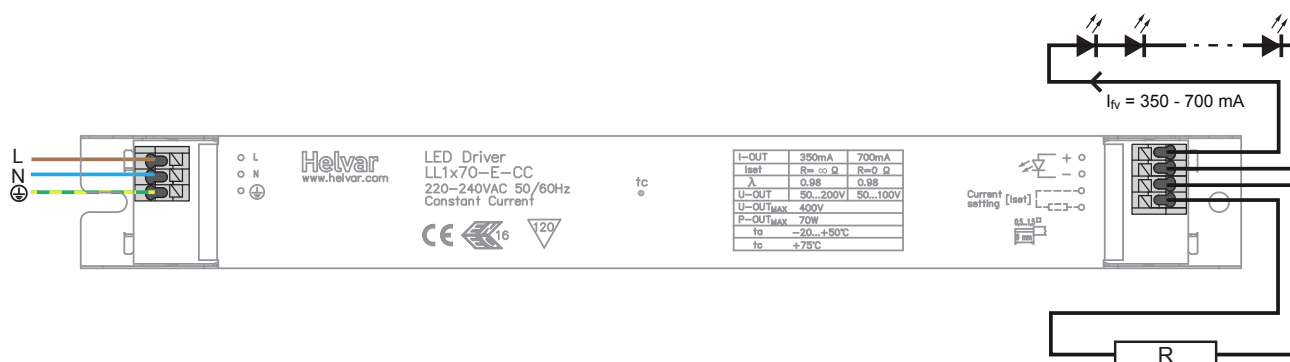


70 W 220-240 VAC 50-60 Hz

- Over load, open & short circuit protection
- Selectable constant current output: 350 (default) to 700 mA
- Maximum 70 W load
- Accept DC mains in case of central emergency battery
- High efficiency > 0.91
- Protected up to 4 kV power network fast transients
- Suitable for Class I luminaires



Connections



Note:

- Not suitable for load side switching operation.
- Driver output and current setting circuit are not isolated from mains

For current setting resistor values please refer to page 2

Mains Characteristics

Voltage range	198 - 264 VAC
DC range	176 - 280 VDC, starting voltage > 195 VDC
Max mains current at full load	0.32 - 0.41 A
Frequency	0 / 50 - 60 Hz
U-OUT _{max} (abnormal)	400 V

Load Output

Output current (I-OUT)	350 (default) to 700 mA
Max output power	70 W
Efficiency, at full load, typical	> 0.91

I-OUT	350 mA	700 mA
P-out (max)	70 W	70 W
U-OUT	50 - 200 V	50 - 100 V
λ	0.98	0.98
η @ max	0.91	0.89

Operating Conditions and Characteristics

Max.temperature at tc point	75 °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 max (90 % survival rate)

Connections and Mechanical Data

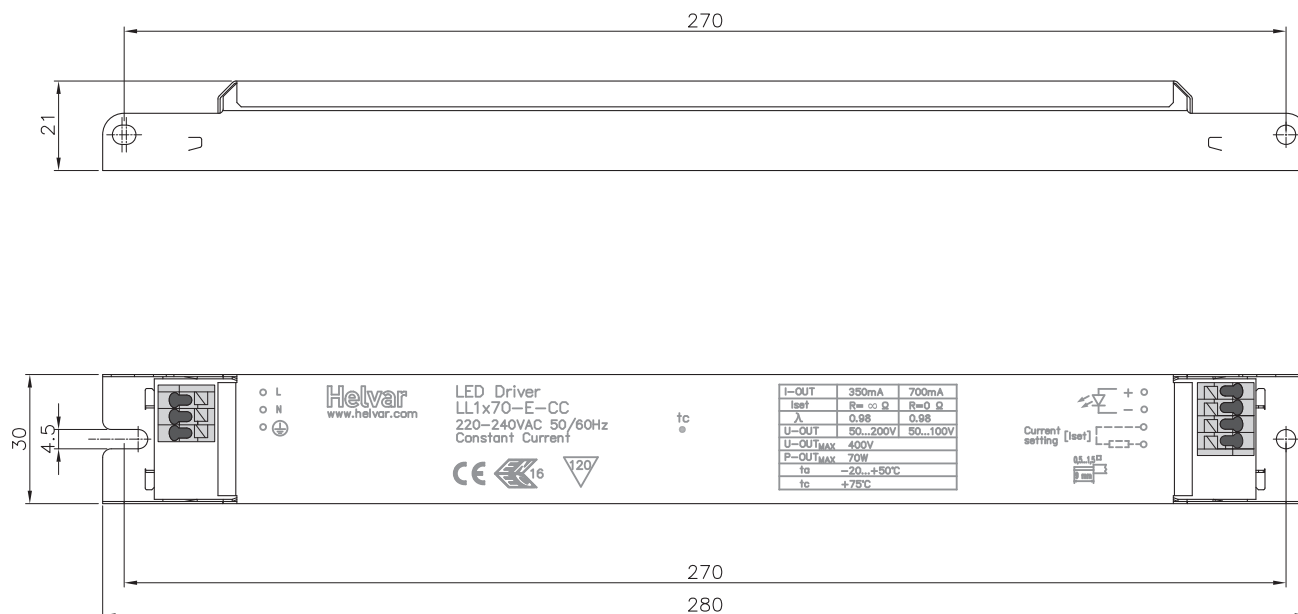
Wire size	0.5 - 1.5 mm ²
Wire type	solid core and fine-stranded
Maximum driver to LED wire length	5 m
Weight	227 g
IP rating	IP20

Conformity & Standards

General and safety requirements	EN 61347-1
Particular safety requirements for d.c. or a.c. supplied electronic controlgear for LED modules, acc. to	EN 61347-2-13
Thermal protection class	EN61347, C5e
Mains current harmonics, acc. to	EN 61000-3-2
Limits for Voltage Fluctuations and Flicker, acc to	EN 61000-3-3
Radio Frequency Interference, acc. to	EN 55015
Immunity standard, acc. to	EN 61547
Performance requirements, acc to	EN 62384

Compliant with relevant EU directives
ENEC & CE marked

Dimensions



Quantity of LED control gear for miniature circuit breakers (MCB's)

	Quantity of drivers per miniature circuit breaker 16 A Type C		Typical inrush current I _{peak} (A)	1/2 value time Δt (μs)	Calculated energy I _{peak} ² Δt (A ² s)
	Based on I _{Cont}	Based on I _{peak}			
LL1x70-E-CC	32	52	32	152,0	0,115800

Output current setting

- Driver output current is determined by value of the resistor R connected.
- It is recommended for the current setting resistor to be physically as close as possible to the driver and always inside the actual luminaire.

R	I _{out} (mA)
0 Ω	700
1k Ω	650
1k2 Ω	640
1k5 Ω	630
1k8 Ω	620
2k2 Ω	610
2k7 Ω	600
3k3 Ω	580
3k9 Ω	570
4k7 Ω	550
5k6 Ω	530
6k8 Ω	520
8k2 Ω	500
10k Ω	480
12k Ω	470
15k Ω	450
22k Ω	430
27k Ω	420
33k Ω	410
39k Ω	400
47k Ω	390
56k Ω	385
68k Ω	380
82k Ω	375
100k Ω	370
150k Ω	365
330k Ω	360
1M Ω	355
∞ Ω	350

