

Triac Dimming LED Driver

MINI-30-700T



Features



- Super compact design for built-in use
- Dimmable constant current driver
- Analogue flicker-free
- Dimmable with leading edge or trailing edge dimmer
- Smooth dimming compatible with most dimmer
- Dimming range from 1...100%
- Primary and secondary sides come with leads
- Protections: opencircuit, shortcircuit, overload, overtemperature
- Seal with glue, the operating temperature up to 60°C
- SELV equivalent
- DC input compatible (dimming disable)
- Suitable for class I&II luminaires



Selection Guide

Model No.	Nominal Voltage (V)	Nominal Current (A)	Power Factor (λ)	THD Full load (%)	Max. Output (W)	Output Current (mA)	Output Voltage (V)	No Load Voltage (V)	Efficiency Full Load (%)
MINI-30-700T	220-240	0.18	0.95	25	30	700	21-42	60	83

Input Parameters

Parameter	Condition	Min.	Typ.	Max.																				
Input Voltage Range	AC Input	198VAC	--	264VAC																				
	DC Input	176VAC	--	280VAC																				
Rated Input Frequency	AC Input	--	50/60Hz	--																				
No-load Power Consumption		--	--	N/A																				
Standby Power Consumption		--	--	N/A																				
Inrush Current	Cold Start@230V	5A/100us																						
Max.units Per Circuit Breaker	<table border="1"> <thead> <tr> <th>Circuit Breaker</th> <th colspan="4">Circuit Breaker Current</th> </tr> <tr> <th>Typ.</th> <th>10A</th> <th>13A</th> <th>16A</th> <th>20A</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>55</td> <td>72</td> <td>88</td> <td>111</td> </tr> <tr> <td>C</td> <td>55</td> <td>72</td> <td>88</td> <td>111</td> </tr> </tbody> </table>				Circuit Breaker	Circuit Breaker Current				Typ.	10A	13A	16A	20A	B	55	72	88	111	C	55	72	88	111
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Output Parameters

Parameter	Condition	Min.	Typ.	Max.
Output Accuracy	Full Load@230V	--	±5%	--
Ripple & Noise	Low Frequency < 120Hz, Full Load@230VAC	--	--	180mA
Pst LM		--	--	1
SVM		--	--	0.4
Galvanic Isolation	SELV			

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Short-Circuit Protection (SCP)	Auto-Recovery If Fault Is Removed
Over-Voltage Protection (OVP)	Auto-Recovery If Fault Is Removed
Over-Current Protection (OCP)	Auto-Recovery If Fault Is Removed

General Parameters

Parameter	Condition	Value
Ambient Temperature Range t_a		-20...+60°C
Maximum Case Temperature t_c	Measured on t_c point indicated of the product label	90°C
Max. Case Temp. In Fault Condition		110°C
Storage Temperature Range		-20...+70°C
Relative Humidity	Non Condensing	5..85%
Withstand Voltage	I/P-O/P	3.75kVAC, I leakage < 5mA, 60s
Surge Transient Protection	L-N, L/N-PE	1kV, 2kV
Environmental Rating		Indoor
IP Rating		IP20
Mains Switching Cycles		> 100,000
Expected Lifetime	$t_{cmax}=83^\circ\text{C}$, 0.2%/1000h failure rate	50,000h

Dimming Parameters

Dimmable	Yes
Dimming control	Leading/Trailing edge
Dimming range	1-100%

Physical Parameters

Housing Material	PC
Type of connection	Cable
Dimensions (LxWxH)	85x43x23mm
Mounting hole spacing	79mm
Weight	125g±8g

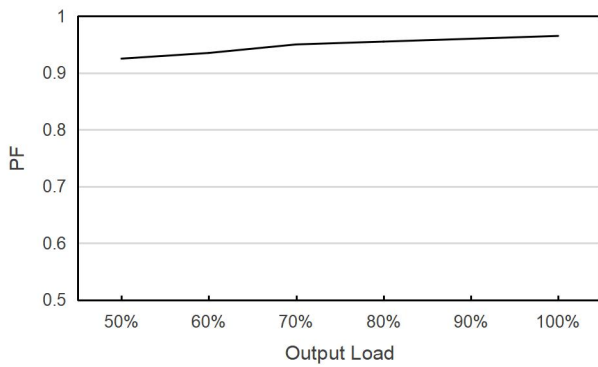
Standards

Safety Standards	EN 61347-1, EN 61347-2-13
Performance	EN 62384
EMC Standards	EN55015, EN61000-3-2, EN61000-3-3, EN 61547

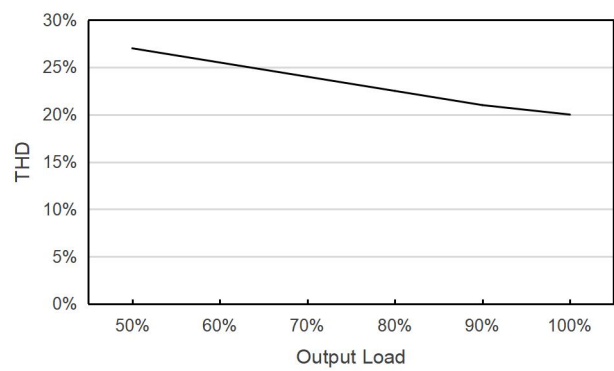
*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.

Product Characteristic Curve

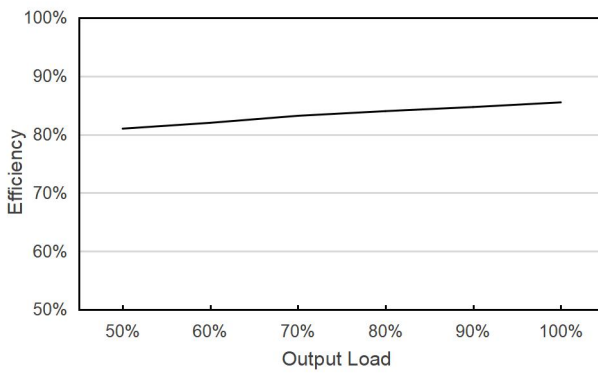
Power Factor vs Load



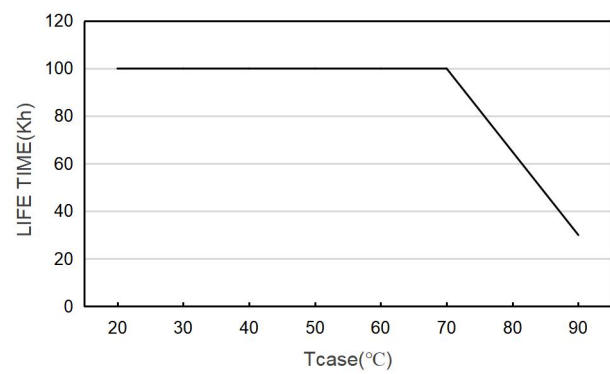
Total Harmonic Distortion vs Load



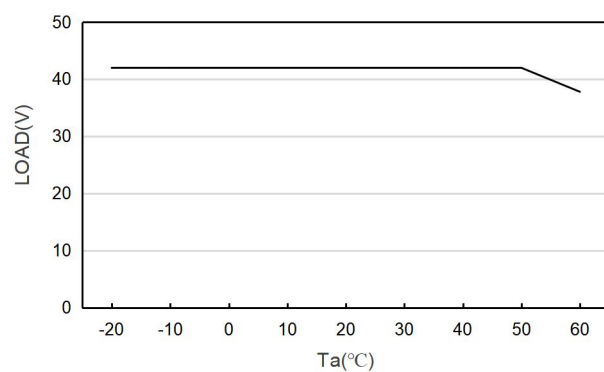
Efficiency vs Load



Life Time vs Case Temperature



Load vs Ambient temperature



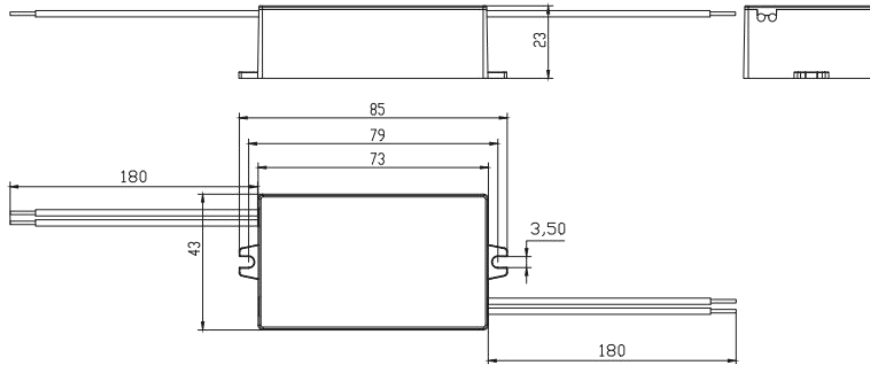
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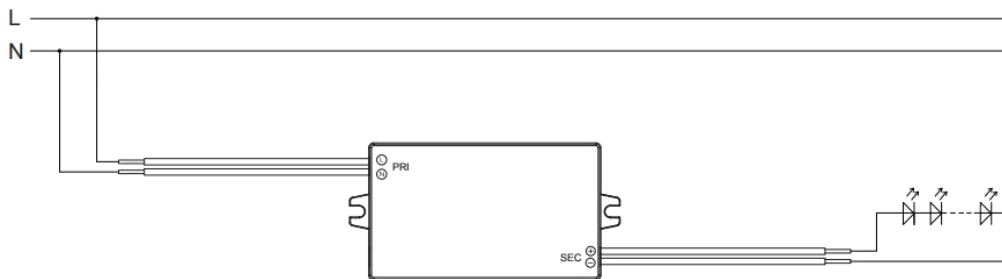


Appearance of Size

Dimension Drawing(mm)



Wiring Diagram



PRI

Wire: VDE 7022 0.5mm²

Length:180±10mm

SEC

Wire: VDE 7902 0.5mm²

Length:180±10mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.