

Triac Dimming LED Driver

MINI-21-500T



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-21-500T	220-240	0.13	0.95	25	21	500	21-42	60	82

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					
	Circuit Breaker	Circuit Breaker Current			
	Typ.	10A	13A	16A	20A
	B	100	130	160	200
	C	100	130	160	200

Output Parameters

Parameter	Condition	Min.	Typ.	Max.
Output Accuracy	Full Load@230V	--	±5%	--
Ripple & Noise	Low Frequency < 120Hz, Full Load@230VAC	--	--	150mA
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

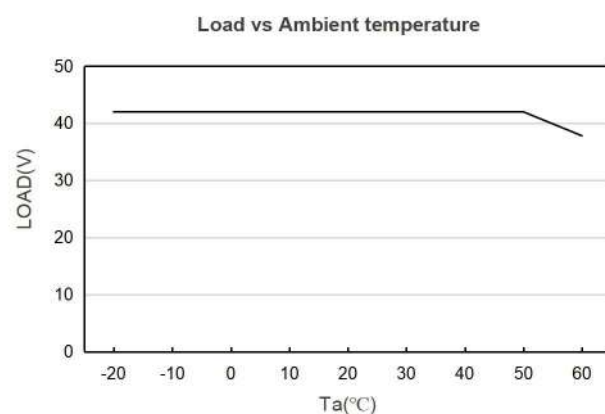
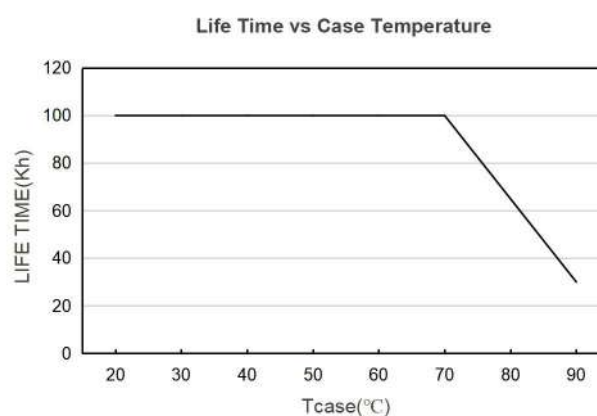
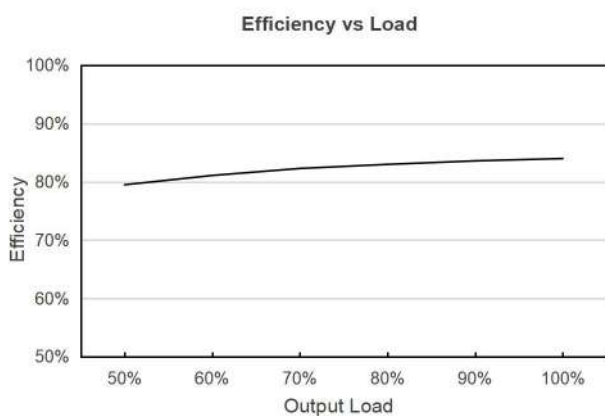
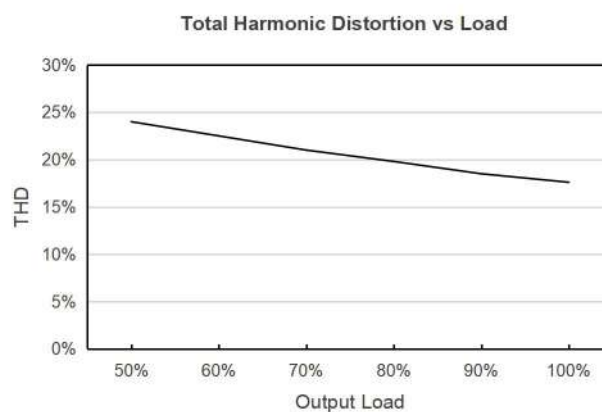
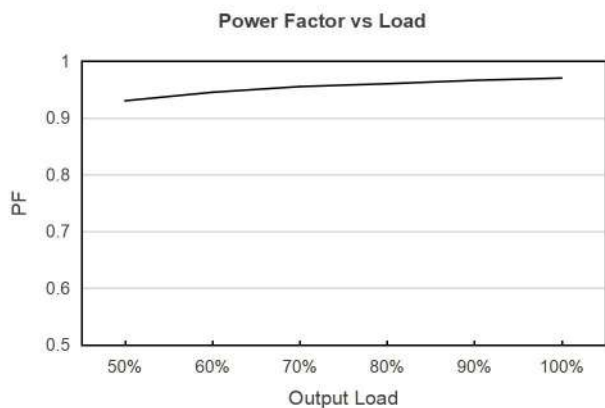
Housing Material	PC
Type of connection	Cable
Dimensions (LxWxH)	65x43x24mm
Mounting hole spacing	59mm
Weight	95g±8g

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



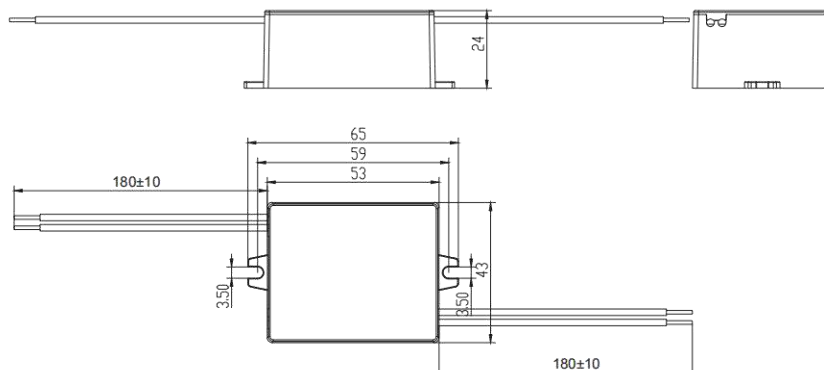
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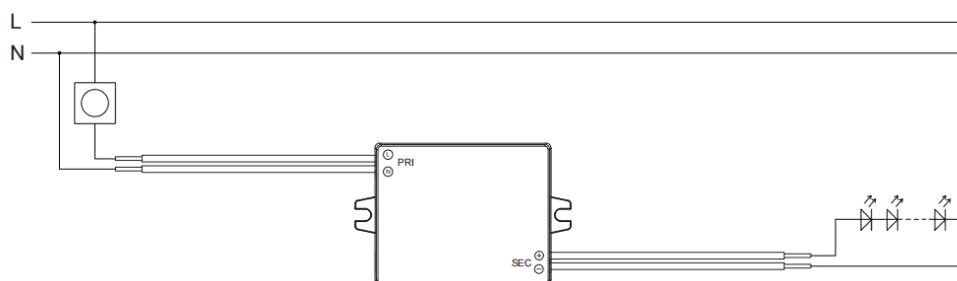


Appearance of Size

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.