Triac Dimming LED Driver

SM-6T

Features

- Super mini-sized design for independent use
- Analogue flicker-free
- Dimmable constant current driver
- Dimming with trailing edge dimmer
- Smooth dimming compatible with most dimmer
- Dimming range 10...100%
- Configurable constant current output via dip-switch
- Primary and secondary sides come with leads
- Protections: opencircuit, shortcircuit, overload, overtemperature
- DC input compatible (176-250V DC)
- SELV equivalent
- Suitable for class II luminaires
- Protection class II

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 (%)
SM-6T	220-240	0.06	0.90C	25	4.4	200	11-22	33	72

Input Parameters

Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range	AC Input	198VAC	--	264VAC
	DC Input	176VDC	--	250VDC
Rated Input Frequency	AC Input	--	50/60Hz	--
No-load Power Consumption		--	--	N/A
Standby Power Consumption		--	--	N/A
Inrush Current	Cold Start@230V	5A/300us		

Max.units Per Circuit Breaker

Circuit Breaker	Circuit Breaker Current			
Typ.	10A	13A	16A	20A
B	35	46	56	70
C	74	96	118	148

Output Parameters

Parameter	Condition	Min.	Typ.	Max.
Output Accuracy	Full Load@230V,200mA	--	±8%	±10%
	Full Load@230V,250mA&300mA&350mA	--	±5%	±8%

Ripple & Noise	Low Frequency < 120Hz, Full Load@230VAC	--	--	10%
Pst LM		--	--	1
SVM		--	--	0.4
Galvanic Isolation	SELV			
Short-Circuit Protection (SCP)	Re-power on to Recover If Fault Is Removed			
Over-Voltage Protection (OVP)	Re-power on to Recover If Fault Is Removed			
Over-Current Protection (OCP)	Re-power on to Recover If Fault Is Removed			

General Parameters

Parameter	Condition	Value
Ambient Temperature Range t_a		-20...+50℃
Maximum Case Temperature t_c	Measured on t_c point indicated of the product label	80℃
Max.Case Temp.In Fault Condition		110℃
Storage Temperature Range		-20...+70℃
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}=80℃, 0.2%/1000h failure rate	50,000h

Dimming Parameters

Dimmable	Yes
Dimming control	Trailing edge
Dimming range	10-100%

Physical Parameters

Housing Material	PC
Type of connection	Cable
Dimensions (LxWxH)	100x20x18.5mm
Mounting hole spacing	N/A
Weight	55±5g

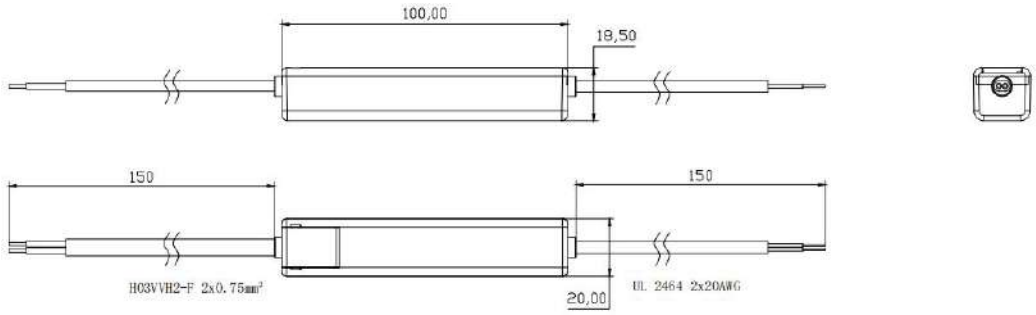
Standards

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

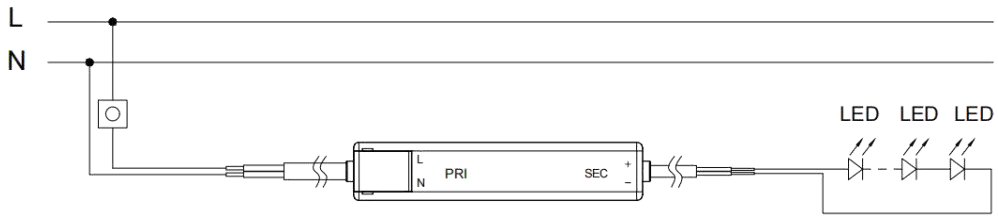
*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.

Appearance of Size

Dimension Drawing(mm)



Wiring Diagram



PRI

Wire: VDE H03VVH2-F 2x0.75mm²

Length: 150±10mm

SEC

Wire: UL 2464 2x20AWG

Length: 150±10mm

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