

## Model : SI-EPD006570WW

SELV Constant Current LED Driver 800 mA – 925 mA – 1050 mA







## Benefits

Three fixed selectable output currents Easy current selection Long lasting and high reliability Extra small compact housing

#### Applications

Downlights, Spotlights and other Indoor LED applications

### Approval marks



L	103 mm
L1	94 mm
В	67 mm
B1	58 mm
Н	29,5 mm

Housing material: plastic, white

## **Product Features**

- 3 output currents 800/925/1050 mA
- Fixed output (no dimming)
- SELV-equivalent, Uout: 17 34 V<sub>DC</sub>
- Output power from 14 W up to 36 W
- Mains voltage 220 240 V
- Suitable for class I and II luminaires

- Overload protection
- Overtemperature protection
- 50'000 h lifetime at  $t_c$  = 70 °C
- t<sub>c</sub> max = 80 °C
- Wide t<sub>a</sub> range -20 +55 °C
- 5 years guarantee

# **Electrical Specifications**

	Item	Value	Unit	Remarks
	Nominal voltage	220 – 240	V <sub>AC</sub>	
VPUT	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	V <sub>AC</sub>	
	DC voltage range	n/a	V	
	Maximum voltage	275	V	2hrs
	Nominal current	200	mA	230V @36W load, Refer to Table 1 for details
	Total Harmonic Distortion (THD)	< 20	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	> 0.95		Full load, 230 V, 50 Hz / see graphs
	Efficiency	> 87	%	Full load, 230 V, 50 Hz, typical / see graphs
=	No-load power	n/a	W	Load switching at output side is safe but not permitted
	Stand-by power	n/a	W	Unit is not dimmable/controllable
	Power loss	5.5	W	at 230V @ 1050mA, Refer to Table 1 for details
-	Protection class			Suitable for class I and class II luminaires
	Inrush current	<16	А	twidth = 100 us typical (measured at 50% lpeak)
	Max. units per circuit breaker	B16: 25: B10: 15		I max = 53 A Th = 230 µs
		,		
PUT	Nominal voltage range	17 – 34	V <sub>DC</sub>	Refer to Table 1 for details
	Maximum voltage	50	V <sub>DC</sub>	Open circuit
	Nominal current range	800 / 925 / 1050	mA	·
	Current accuracy	± 5	%	
5	Current ripple	± 30	%	Ripple / average @ 100 Hz
ō	Nominal power range	14 – 36	W	Partial Load. Refer to Table 1 for details
	Maximum power	36	W	Ta ≤ 55°C, Refer to Table 1 for details
	Galvanic isolation	SELV-equivalent		Output to mains - Touch current < 0.7 mA
(5	Dimming control	no		Not dimmable
ž	Dimming range	n/a	%	
Σ	Dimming technique	n/a		
<u> </u>	Frequency	n/a	Hz	
-	Galvanic isolation	n/a		
	Ambient temperature range ta	-20+55	°C	Refer to Table 1 for details
	Maximum case temperature $t_c$	80	°C	Measured on t <sub>c</sub> point indicated of the product label. Refer to Table 1 for details
Ę	Max, case temp, in fault condition	110	°C	
É	Storage temperature range	-25+75	°Č	Cool down before operating
Z	Relative humidity	5 85	%	Not condensing
8	Surge transient protection	1	kV	L/N acc. EN 61547
1	Environmental rating	Indoor		
N N N	IP rating	IP 20		
-	Mains switching cycles	> 100'000		
	Expected lifetime	35'000	hrs	t <sub>c</sub> = 80°C, 10% failure rate
		50'000		$t_c$ = 70°C, 10% failure rate Refer to Table 2 for details

### Protections

Over temperature Automatic, reversible Overload Automatic, reversible No load Yes Short-circuit Automatic, reversible

## Wiring Diagram

Terminal: Max. cable length - system: Geometry (l x b x h): Weight: Push in terminals 2 m 103 x 67 x 29.5 mm 165 g



Input overvoltage

Output overvoltage

Output under voltage

LED load protection

n/a

n/a

Maximum allowed input voltage 275V AC

Yes , Limitation of Output voltage < 50V

1 2 21 23 24 20-240 VAC -LED-MODULE 800mA 14W - 27W

Example with 800mA LED module

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





Table 1 - Rated output power and current sets					
lout (mA)	800	925	1050		
U min [V]	17	17	17		
U max [V]	34	34	34		
P min [W]	14	16	18		
P max [W]	27	31	36		
Ta [°C ]	55	55	55		
Tc [°C ]	80	80	80		
Line Current, nominal@230V mA	150	180	200		
Max Power Loss@230V [W]	4	4.7	5.5		
Input Power @230V [W]	31	35.7	41.5		

Table 2 - Expected lifetime				
Ta= 55°C , Tc [°C ] , All lout	70°C	80°C		
Lifetime	50'000h	35'000h		



Typical THD over load





Current selection by connecting to the right terminal



#### Standards

EN 61347-1	Product name	EAN10	EAN40	NAED	Pieces / box
EN 61347-2-13	SI-EPD006570WW	4052899210639	4052899210646	n/a	20
EN 55015					
EN 61547					
EN 61000-3-2					
EN 62384					