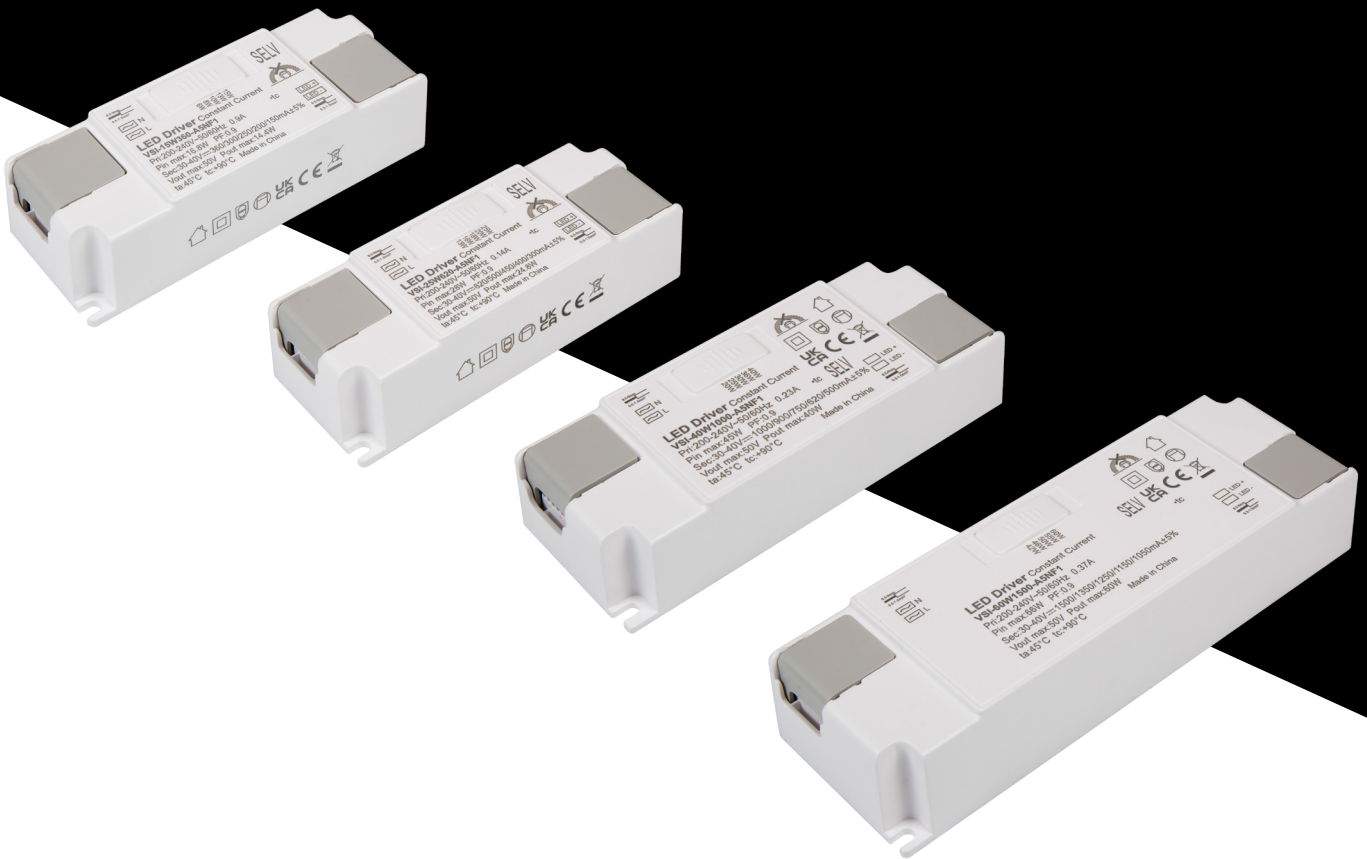


SPECIFICATION

LED Driver

VSI-A5NF1 Series



INTRODUCTION

The V series led driver provides the best compromise between an attractive price and qualified performance. With a focus on application-related functions, the LED Driver range offers good quality and performance that ensures reliable operation of LED module.

Features

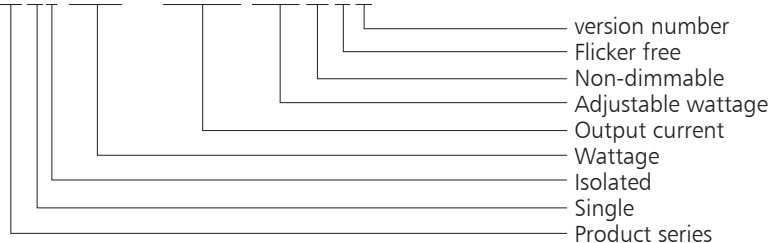
- Independent fixed output LED Driver
- Constant current
- Specific, optimized output current and voltage
- 6-60W Wattage adjustable
- Output current 150-1500mA
- Output power 6-60W
- Whole range are featured with flicker free performance
- Idea circuit design overcome luminarie flickering with voltage fluctuation.
- Nominal life-time up to 50,000 h
- For luminaires of protection class I and protection class II
- Temperature protection as per EN 61347-2-13 C5e
- Small, super compact dimensions
- IP rating IP20



TECHNICAL DATASHEET

Code Number Definition

VSI-XXWXXX-A5NF1

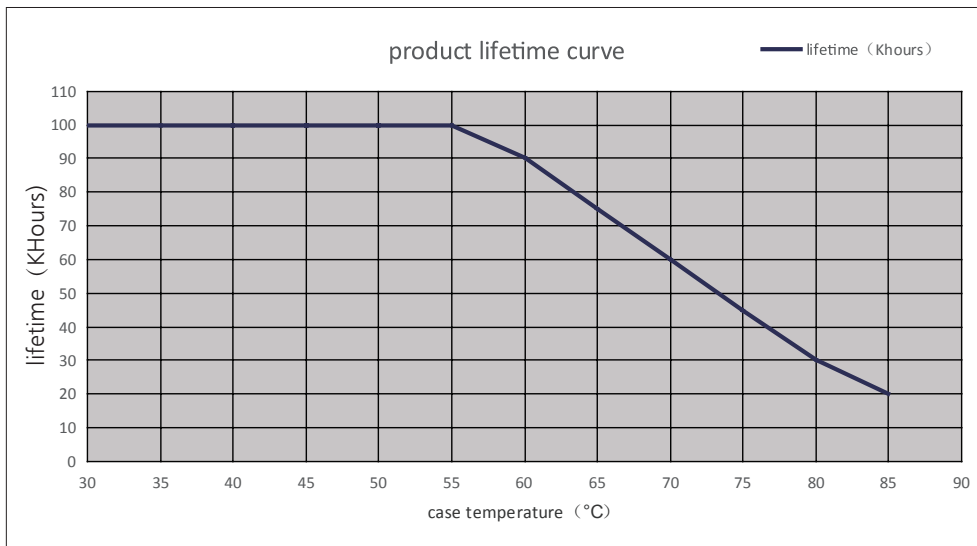


Driver Datasheet (Non-dimmable)

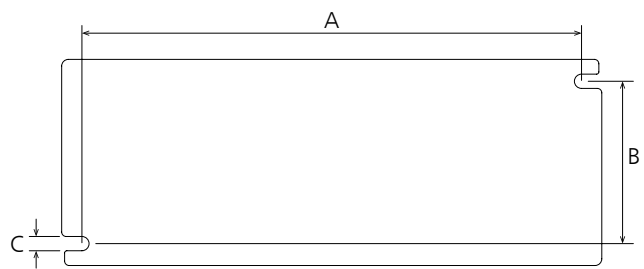
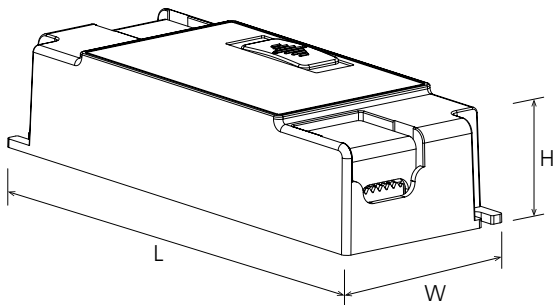
Code		VSI-XXWXXX-A5NF1				
Input	Input POWER	6/8/10/13/15W	13/16/18/20/25W	18/20/22/25/30W	20/25/30/36/40W	30/40/50/55/60W
	Input Voltage	200-264V				
	Rated Input Voltage(V)	220-240V				
	Frequency	50/60HZ				
	Input Current	≤0.09A	≤0.14A	≤0.17A	≤0.23A	≤0.34A
	Rated Input Current	≤0.075A	≤0.13A	≤0.15A	≤0.20A	≤0.3A
	Power Factor (typ)	0.9				
	Total harmonic distortion(THD)	<20% @230V				
	Efficiency (typ)	≥86%	≥87%	≥89%	≥89%	≥89%
	Inrush currentN (Typ.)	23A/36uS	22.2A/53uS	23.2A/224uS	23.2A/224uS	45A/380uS
	Max circuit breaker	Please refer to" Circuit breaker Specification"				
	Leakage current	<0.5mA/240V				
	No load wattage	<0.5w @230V				
	Output	Output Voltage range	30-40V			
Rated output current		150/200/250/300/360mA	300/400/450/500/620mA	450/500/550/600/750mA	500/620/750/900/1000mA	750/1000/1300/1400/1500mA
Line Regulation		±5%				
Open circuit voltage (max)		50V				
Setup time(note1)		<500ms @230V				
Flickering Index(IEEESD 1789)		1%(NO RISK)				
Protection	Short circuit protection	Constant current limiting, recovers automatically after fault condition is removed				
	Over voltage protection	Shut down o/p voltage				
	Over temperature protection	Shut down o/p voltage, recovers automatically after temperature goes down				
Environment	Ambient temperature range ta	-20...+45°C				
	Maximum case temperature tc	85°C (Measured on tc point indicated of the product label, tc not exceeded)				
	Operating temperature	-20...+45°C				
	Storage temperature/humidity	-25...+85 °C; 5-95% RH				
	Relative humidity	5...85%				
	Environmental rating	Indoor				
	IP rating	IP20				
Safety&EMC	Life time	> 50,000H @25°C				
	Safety standards	IEC/EN61347-1, IEC/EN61347-2-13, IEC/EN62384 independent,GB19510.14,GB19510.1 approved				
	Withstand voltage	I/P-O/P:3.75KVac,<5mA 60S; I/P-FG:1.6KVac,<5mA 60S				
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω				
	surge	IEC/EN61000-4-5(L-N:1.5KV)				
	EMC Emission	IEC/EN55015, IEC/EN61000-3-2				
Other	EMC Immunity	IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547				
	Dimension	103*39*28mm	103*39*28mm	121*46*28mm	121*46*28mm	153*51*30mm
	Weight	0.064Kg	0.073Kg	0.102Kg	0.102Kg	0.173Kg

Product Referenced Lifetime Curve

The curve below illustrates the driver's lifetime date when the LED driver's Max. case temperature reaches 40°C, 50°C, 60°C, 70°C, 80°C and 90°C.



DIMENSION



Dimension(mm)						
Code	L	W	H	A	B	C
VSI-15W360-A5NF1	103	39	28	97	31.1	3.2
VSI-25W620-A5NF1	103	39	28	97	31.1	3.2
VSI-30W750-A5NF1	121	46	28	112	36.4	3.2
VSI-40W1000-A5NF1	121	46	28	112	36.4	3.2
VSI-60W1500-A5NF1	153	51	31	146	43	3.2

CIRCUIT BREAKER SPECIFICATION

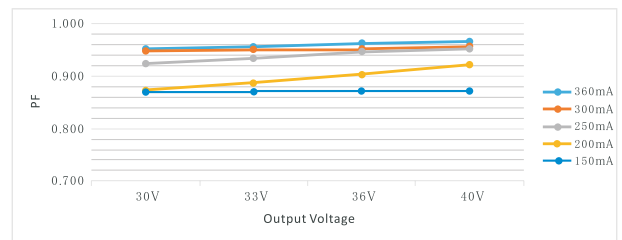
Circuit Breaker Specification								
Code	B10	B13	B16	B20	C10	C13	C16	C20
	10	13	16	20	10	13	16	20
VSI-15W360-A5NF1	74	96	119	148	74	96	119	148
VSI-25W620-A5NF1	48	62	76	95	48	62	76	95
VSI-30W750-A5NF1	39	51	63	78	39	51	63	78
VSI-40W1000-A5NF1	29	38	46	58	29	38	46	58
VSI-60W1500-A5NF1	20	25	31	39	20	25	31	39

DIP SWITCH TABLE

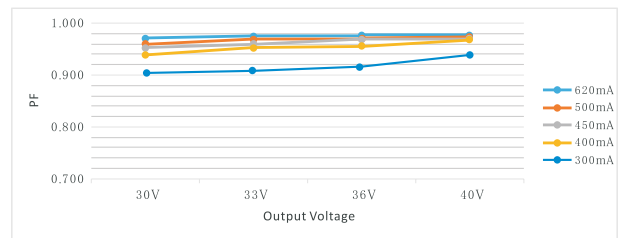
Code	Vout	Po Max	Io
VSI-15W360-A5NF1	30-40V	14.4W	360mA
	30-40V	12W	300mA
	30-40V	10W	250mA
	30-40V	8W	200mA
	30-40V	6W	150mA

POWER FACTOR CHARACTERISTIC

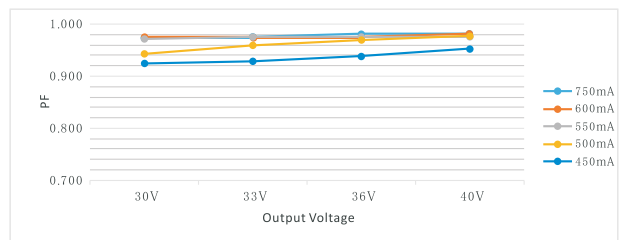
@AC230Vac Input



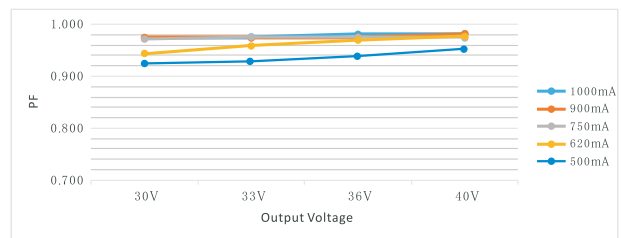
Code	Vout	Po Max	Io
VSI-25W620-A5NF1	30-40V	24.8W	620mA
	30-40V	20W	500mA
	30-40V	18W	450mA
	30-40V	16W	400mA
	30-40V	12W	300mA



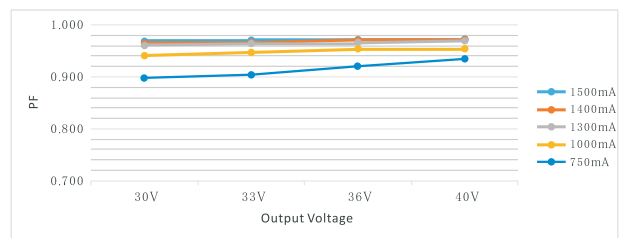
Code	Vout	Po Max	Io
VSI-30W750-A5NF1	30-40V	30W	750mA
	30-40V	25W	600mA
	30-40V	22W	550mA
	30-40V	20W	500mA
	30-40V	18W	450mA



Code	Vout	Po Max	Io
VSI-40W1000-A5NF1	30-40V	40W	1000mA
	30-40V	36W	900mA
	30-40V	30W	750mA
	30-40V	24.8W	620mA
	30-40V	20W	500mA



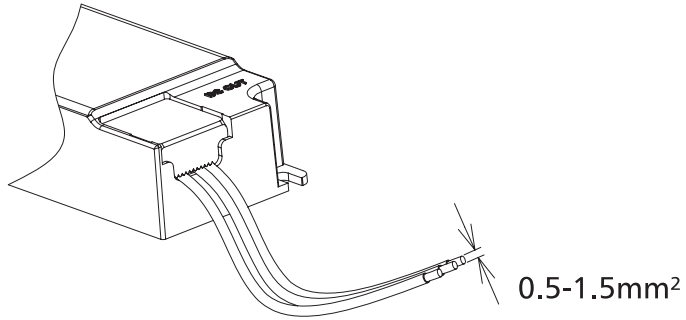
Code	Vout	Po Max	Io
VSI-60W1500-A5NF1	30-40V	60W	1500mA
	30-40V	56W	1400mA
	30-40V	52W	1300mA
	30-40V	40W	1000mA
	30-40V	30W	750mA



CIRCUIT DIAGRAM

No-load operation

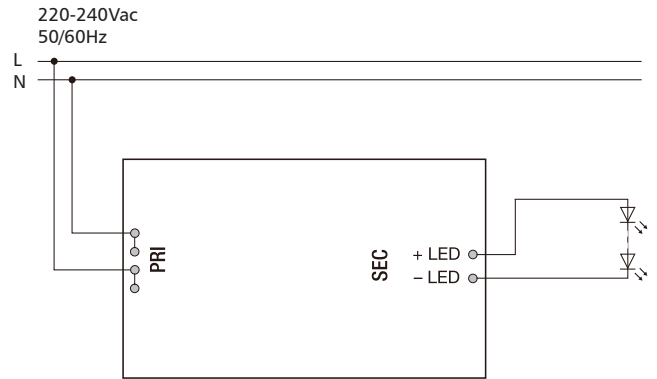
In case of open circuit, protection will be activated, there will be 50V output voltage.



Glow wire test

According to EN 61347-1 with increased temperature of 960°C passed.

NON-Dimmable circuit diagram



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Up to Shine, there is life 光之上，是生活