



A graphic element consisting of a white rectangular area with a folded top-right corner, positioned above a solid blue rectangular area. The text "LED DRIVER" is centered in the white area, and "VH Series" is centered in the blue area.

LED DRIVER

VH Series

SS-100VH Series LED Driver

O/P Characteristics(SS-100VH-56B):

Parameter	Min.	Typ.	Max.	Remark
O/P Voltage Range	28V		56V	Power derated @ 28-36V
Rated O/P Voltage	36V		56V	$P_o=V_o \cdot I_o=96W$, Full load
Rated O/P Current	1.71A		2.66A	2.66A for 36V, 1.71A for 56V
	0.35A		2.66A	
No Load Voltage			60V	
Efficiency @ 120Vac	88.0%	89.0%		O/P 56V/1.71A
Efficiency @ 220Vac	89.5%	90.5%		O/P 56V/1.71A
Efficiency @ 277Vac	89.5%	90.5%		O/P 56V/1.71A
O/P Current Tolerance	-5%		+5%	
O/P Current Ripple(PK-AV)		5%	10%	
Start-up Current Overshoot			10%	Full load
Start-up Time			0.5S	120Vac, Full load
			0.5S	220Vac, Full load
Line Regulation	-2%		+2%	Full load
Load Regulation	-2%		+2%	
Temperature Coefficient	-0.03% /		+0.03% /	Tc:0 -90

SS-100

er

0...cs:

	Min.	Typ.	Max.	Remark
--	------	------	------	--------



SS-100VH Series LED Driver

Safety Test Items:

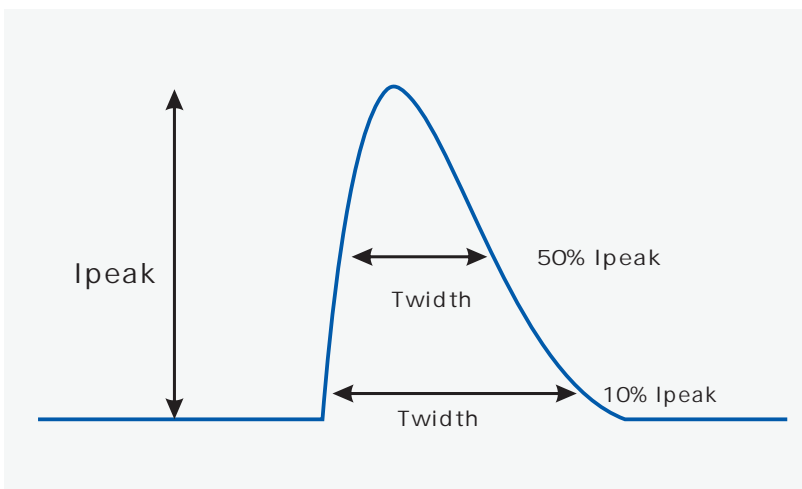
Safety Test Items	Technical Indicators			Remark
Insulation Requirements	UL Insulation Requirements	ENEC Insulation Requirements	CCC Insulation Requirements	
Input-Output	1600Vac	3000Vac	3750Vac	Reinforced insulation
Input-Case	1600Vac	1500Vac	1875Vac	Basic insulation
Input-Dim	1600Vac	3000Vac	3750Vac	Reinforced insulation
Output-Dim	1600Vac	1000Vac	1000Vac	Basic insulation
Output-Case	500Vac	1000Vac	1000Vac	Basic insulation
Dim-Case	500Vac	250Vac	500Vac	Basic insulation
Insulation Resistance	10M			Input-Output, Test voltage: 500Vdc
Ground Resistance	0.1			25A/1min
Leakage Current	0.75mA			277Vac

NOTE:

1. SOSEN warrants the LED Driver itself complies with EMC standard. However, LED Driver's EMC should be re-checked when integrated into lighting systems due to unexpected interference of components.
2. Please short (ACL and ACN), (V+ and V-), (Dim+ and Dim-) when Hi-pot test.
3. The CCC withstand voltage test needs to disconnect the built-in lightning protection tube. According to the IEC 60598-1:14 standard section 10.2, the "built-in lightning protection tube" can be marked on the nameplate to disconnect the discharge tube on testing.

Performance Curves:

Input Inrush Current

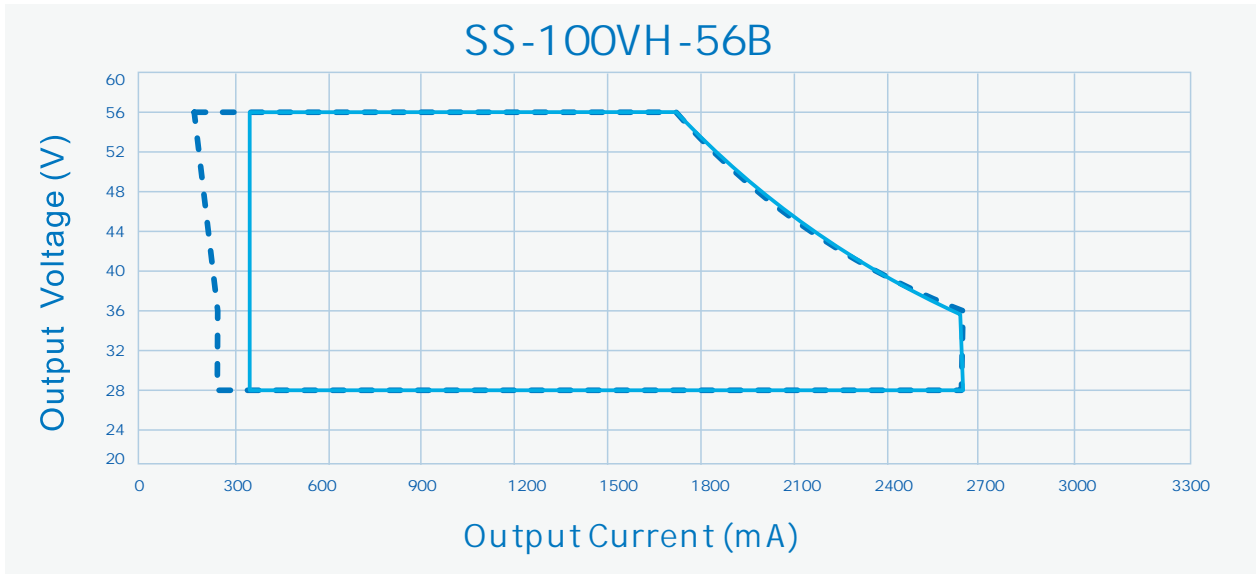


Vin	Ipeak	T(@ 10% of Ipeak)	T(@ 50% of Ipeak)
120Vac	125A	200uS	
220Vac	160A		100uS
277Vac	200A	95uS	

SS-100VH Series LED Driver

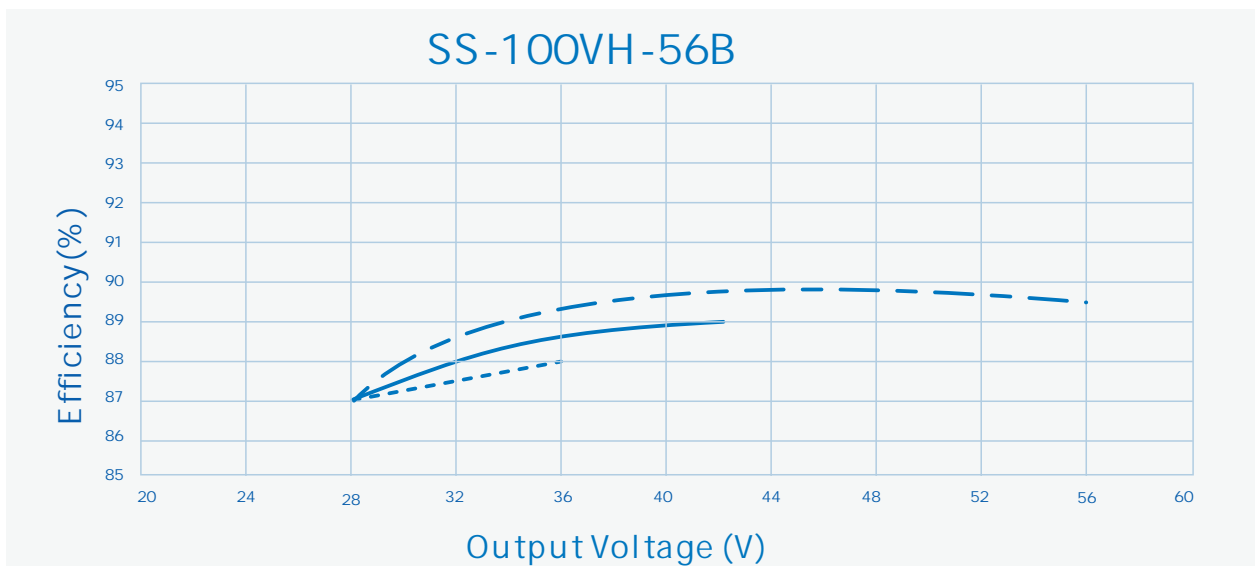
Performance Curves:

O/P Voltage Vs. O/P Current(Dim/AOC Window)



----- Dimming Window ————— AOC Window

Efficiency Vs. O/P Voltage (Vin=120Vac)



----- Io=2660mA ————— Io=2300mA - . - . Io=1710mA

SS-100VH Series LED Driver

Performance Curves:

SS-100VH Series LED Driver

Performance Curves:

Power Factor Vs. O/P Power

THD Vs. O/P Power

SS-100VH Series LED Driver

Performance Curves:

O/P power Vs. Input Voltage
(Ta Max.55 °C)

O/P power Vs. Case Temperature

O/P Power Vs. Input Voltage
See 003A V1.0

Life Time Vs. Case Temperature
See 003A V1.0



SS-100VH Series LED Driver

Constant Lumen Output

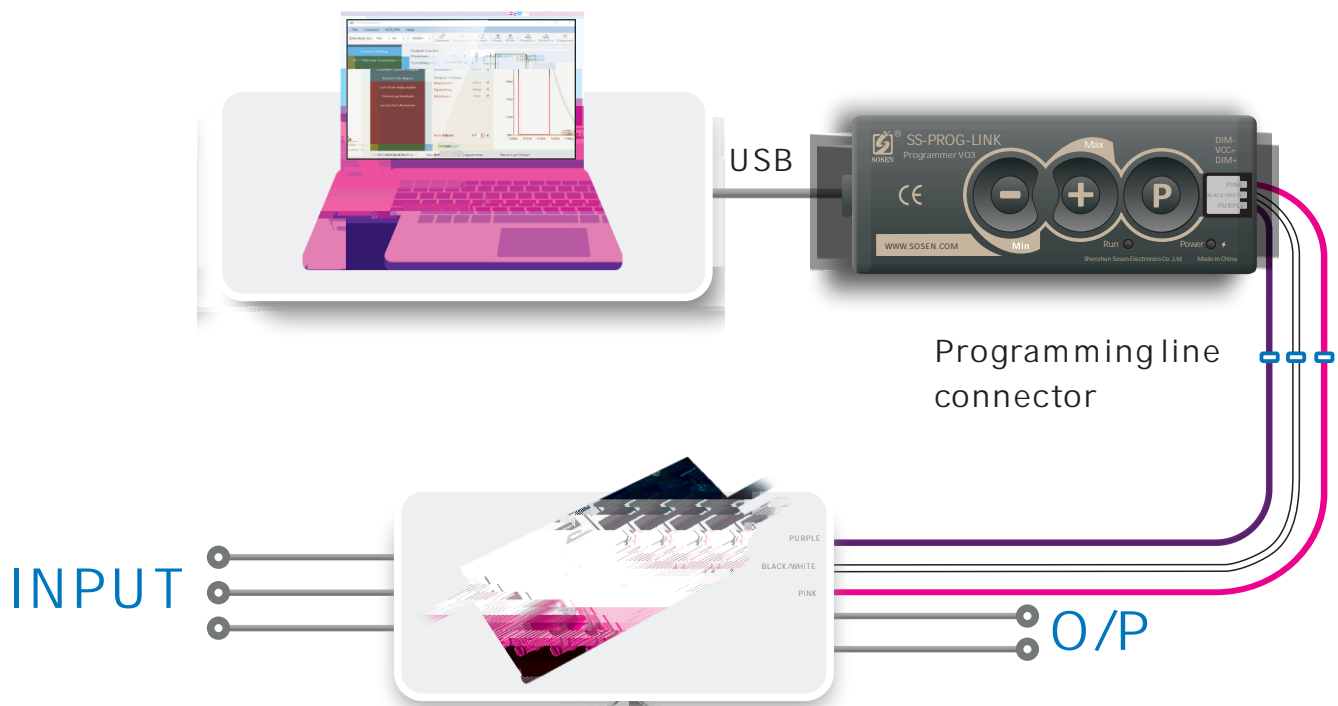
Constant Lumen Output are design to maintain fixture's stable output lumen by increasing driver's output current within driver's life span to counteract LED lumen degradation.

Programming connection diagram:

Legacy Timer: Driver's O/P follows the pre-programmed timing curve after turn-on.

Auto-Adjust by Percentage: Driver's O/P will be adjusted by automatically changed dimming curve by the period percentage based on the latest 5 dimming curve.

Auto-Adjust by Mid-point: Driver's O/P will be adjusted by automatically changed dimming curve by mid-point based on the latest 5 dimming curve.

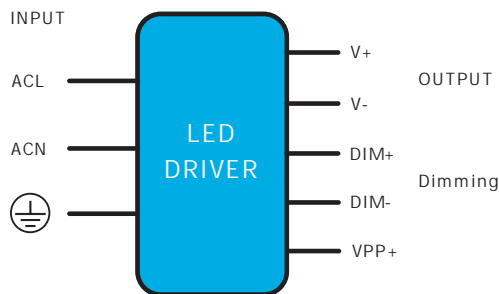


Note:

For details, please refer to the Sosen SS-PROG-LINK Programmer Manual.

SS-100VH Series LED Driver

Mechanical Characteristics



AC Input Cable(Exposed Length 450±10mm):

UL model: SJTW, 3*18AWG, O.D: 7.8mm, Black:L, White:N, Green: ⊕

Global model: SJOW, 3*17AWG, O.D: 8.0mm, Brown:L, Blue:N, Yellow/Green: ⊕

DC O/P Cable(Exposed Length 250±10mm):

UL model: SJTW, 2*18AW, O.D: 7.3mm, Red:V+ Black:V-

Global model: SJOW, 2*17AWG, O.D: 7.7mm, Brown:V+ Blue:V-

DIM Cable(Exposed Length 220±10mm):

UL/EU model: STYLE 21996, 3*22AWG, O.D: 4.9mm Purple DIM+,

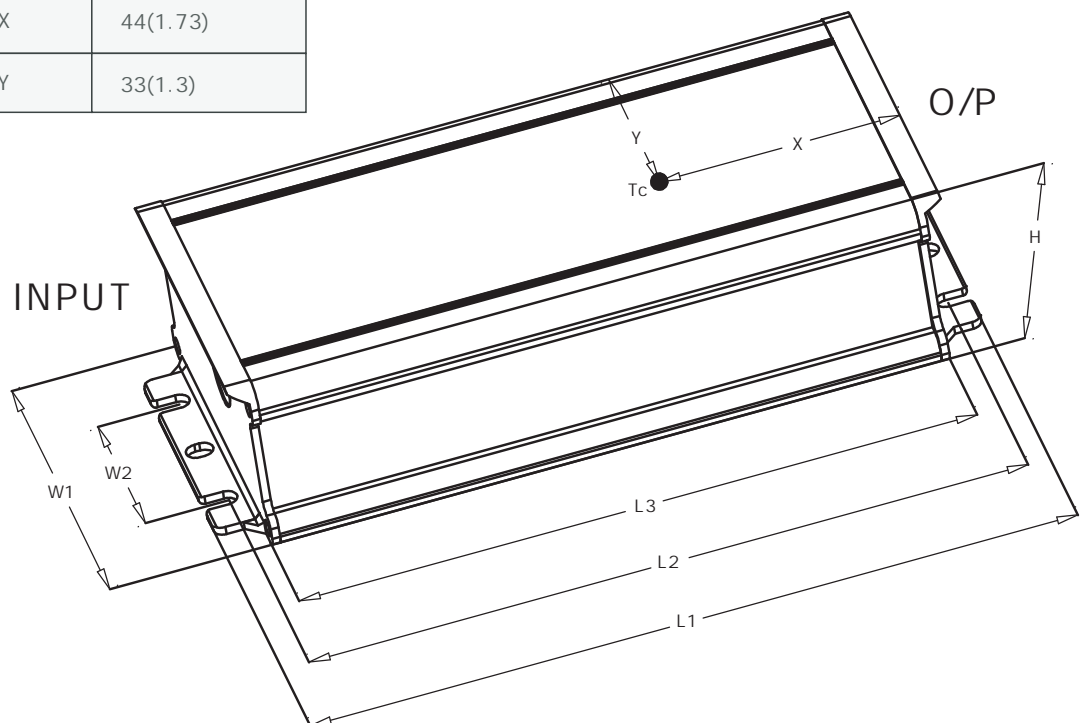
Pink: DIM-, Black/White: VPP+

Name Description	Standard Code	mm (In.)
Case Length	L3	128(5.04)
Case Width	W1	66(2.6)
Case Height	H	35(1.38)
Overall Length	L1	145(5.71)
Mounting Hole Length	L2	136(5.35)
Mounting Hole Width	W2	32(1.26)
TC Point Position	X	44(1.73)
TC Point Position	Y	33(1.3)

Note

1, Please follow the "LED Driver User Manual" obtained from SOSEN's official website for assembly.

2, AC Input Cable, DC O/P Cable, DIM/AUX Power/Programming Cable: Peeled length of cable: 43± 5mm, Tinned length of wire: 10± 2mm



SS-100VH Series LED Driver



cc f
A

Package

- Outside carton dimension: L× W× H =495mm× 385mm× 162mm;
- 14PCS/Carton;
- Net weight/Piece: 0.62kg;Gross weight/Carton: 10.2kg;
- Please refer to the product name, model number, manufacturer identification, QC PASS, manufacturing date on the package.

Transportation

Packaging is designed suitable for transportation by trucks, vessels and flights. The products should be avoided direct sunlight and rain, loaded/unloaded with caution.

Storage

The product storage meets the standard of the GB 3873—83.
Products should be rechecked if stored for over 1 year before assembly.

RoHS

Products comply with RoHS Directive (2011/65/EU) and amendment 2015/863/EU.

Revision History

Version	Description of Update	Updated Date	Remark
V00	Original release	2020/09/01	
V01	Update Certification	2020/12/23	
V02	Update DIM Cable Color	2021/09/02	
V03	Add Resistance Dimming Function	2022/03/10	
V04	Add SS-100VH-E143B model	2022/09/01	
V05	Delete SS-100VH-E143B model	2022/12/12	
V06	Add Page Number	2023/02/01	
V07	Updated working humidity	2024/12/20	