

Features

- High Efficiency (Up to 86%)
- Active Power Factor Correction (Typical 0.95)
- Constant Output Voltage
- IP66 and UL Dry/Damp Location
- All-Around Protection: OVP, SCP, OCP
- Class 2 & SELV Output



Description

The EUV-026SxxxPS Series operates from a 90 ~ 305 Vac input range. They are designed to be highly efficient and highly reliable. Features include over voltage protection, short circuit protection and over current protection.

Models

Output Voltage	Input Voltage Range(1)	Output Current Range	Max. Output Power	Typical Efficiency (2)	Power Factor		Model Number(5)
					120Vac	220Vac	
24 Vdc	90 ~ 305 Vac	0~1080mA	26 W	84%	0.96	0.95	EUV-026S024PS ⁽³⁾
36 Vdc	90 ~ 305 Vac	0~720 mA	26 W	85%	0.96	0.95	EUV-026S036PS ⁽³⁾
48 Vdc	90 ~ 305 Vac	0~540 mA	26 W	86%	0.96	0.95	EUV-026S048PS ⁽⁴⁾

Notes: (1) Certified input voltage range: UL, FCC 100-277Vac; otherwise 100-240Vac.

(2) Measured at 100% load and 220 Vac input.

(3) Class 2 output (USR & CNR).

(4) Class 2 output (USR), Non-Class 2 output (CNR).

(5) For built-in double insulation models add suffix -00K0.

Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90 Vac	-	305 Vac	
Input Frequency	47 Hz	-	63 Hz	
Leakage Current	-	-	0.75 MIU	UL 8750; 277Vac/60Hz
	-	-	0.70 mA	IEC 60598-1; 240Vac/60Hz
Input AC Current	-	-	0.4 A	Measured at 100% load and 100 Vac input.
	-	-	0.2 A	Measured at 100% load and 220 Vac input.
Inrush Current	-	-	40 A	At 220Vac input 25°C Cold Start. Duration=100 μs, 10%Ipk-10%Ipk.
Inrush Current(I ² t)	-	-	0.043 A ² s	

Input Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Power Factor	0.90	-	-	At 100Vac-277Vac, 50-60Hz, 75%load-100%load(19.5~26W)
THD	-	-	20%	

Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Voltage Tolerance	-5%Vo		5%Vo	
Output Voltage Ripple Vo = 24 V Vo = 36 V Vo = 48 V	- - -	- - -	3 V 4 V 4 V	Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 μ F ceramic capacitor and a 10 μ F electrolytic capacitor.
No Load Output Voltage Vo = 24 V Vo = 36 V Vo = 48 V	- - -	- - -	28 V 40 V 52 V	
Output Voltage Overshoot / Undershoot	-	-	10%Vo	At 100% load condition.
Line Regulation	-	-	$\pm 2\%$	Measured at 100% load.
Load Regulation	-	-	$\pm 3\%$	
Turn-on Delay Time	-	0.40 s	0.75 s	Measured at 120Vac input, 75%load-100% load
	-	0.30 s	0.50 s	Measured at 220Vac input, 75%load-100% load
Temperature coefficient	-	-	0.2%/°C	Case temperature = 0°C~Tc max

General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency at 120 Vac input: Vo = 24 V Vo = 36 V Vo = 48 V	82% 83% 84%	83% 84% 85%	- - -	Measured at 100% load and steady-state temperature in 25°C ambient.
Efficiency at 220 Vac input: Vo = 24 V Vo = 36 V Vo = 48 V	83% 84% 85%	84% 85% 86%	- - -	Measured at 100% load and steady-state temperature in 25°C ambient.
No Load Power Dissipation	-	-	5 W	
MTBF	200,000 hours	-	-	Measured at 120Vac input, 80%load and 25°C ambient temperature (MIL-HDBK-217F)
Lifetime	-	91,100 Hours	-	Measured at 120Vac input, 80%load and 60°C case temperature; See lifetime vs. Tc curve for the details.

General Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Operating Case Temperature for Safety Tc_s	-40°C	-	+90°C	
Operating Case Temperature for Warranty Tc_w	-40°C	-	+70°C	Humidity: 10% RH to 90% RH; No condensation
Storage Temperature	-40°C	-	+85°C	Humidity: 5% RH to 95% RH; No condensation
Dimensions Inches (L × W × H) Millimeters (L × W × H)	3.07 × 3.15 × 1.06 78 × 80 × 27			
Net Weight	-	220 g	-	

Safety & EMC Compliance

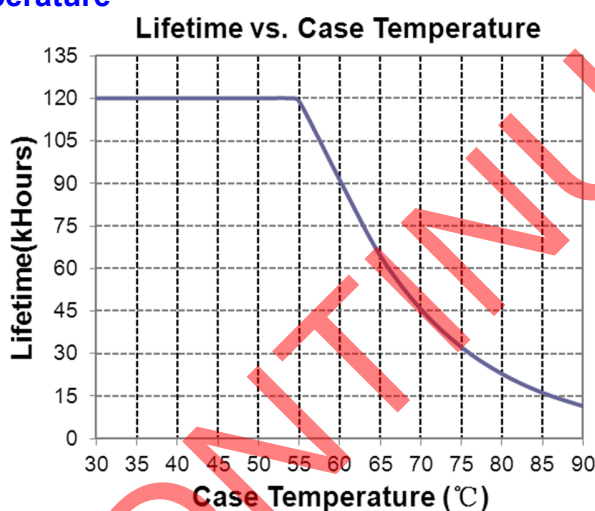
Safety Category	Standard
UL/CUL	UL 8750, UL 1310, CAN/CSA-C22.2 No. 250.13, CAN/CSA-C22.2 No. 223-M91
CE	EN 61347-1, EN 61347-2-13
BIS	IS 15885(Part2/Sec13)
KS	KS C 7655
EMI Standards	Notes
EN 55015/KS C 9815 ⁽¹⁾	Conducted emission Test & Radiated emission Test
EN 61000-3-2	Harmonic current emissions
EN 61000-3-3	Voltage fluctuations & flicker
FCC Part 15 ⁽¹⁾	ANSI C63.4 Class B This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: [1] this device may not cause harmful interference, and [2] this device must accept any interference received, including interference that may cause undesired operation.
EMS Standards	Notes
EN 61000-4-2	Electrostatic Discharge (ESD): 8 kV air discharge, 4 kV contact discharge
EN 61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
EN 61000-4-4	Electrical Fast Transient / Burst-EFT
EN 61000-4-5	Surge Immunity Test: AC Power Line: Differential Mode 2 kV
EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS

Safety & EMC Compliance (Continued)

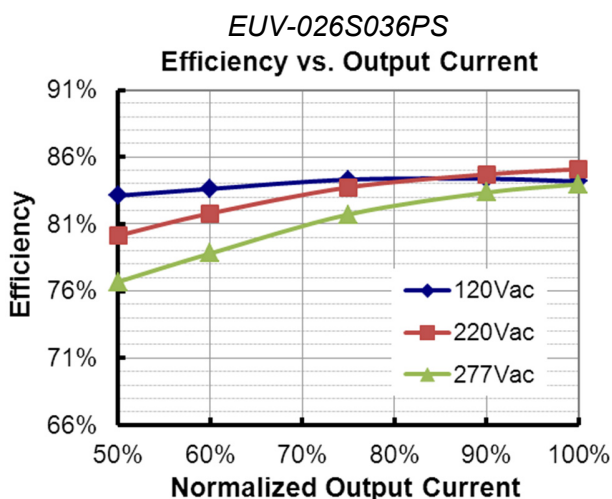
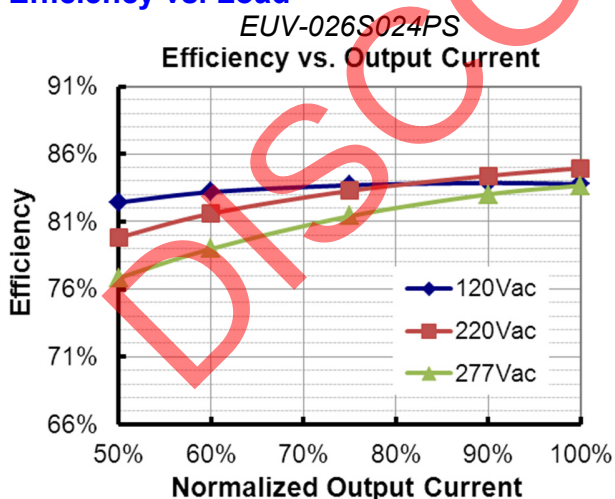
EMS Standards	Notes
EN 61000-4-8	Power Frequency Magnetic Field Test
EN 61000-4-11	Voltage Dips
EN 61547/KS C 9547	Electromagnetic Immunity Requirements Applies To Lighting Equipment

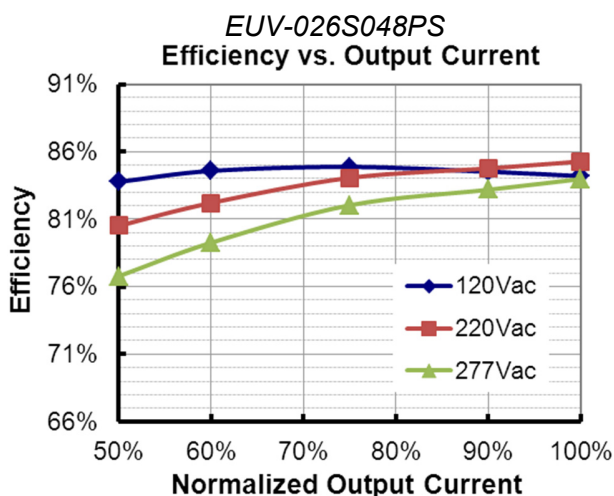
Note: (1) This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

Lifetime vs. Case Temperature

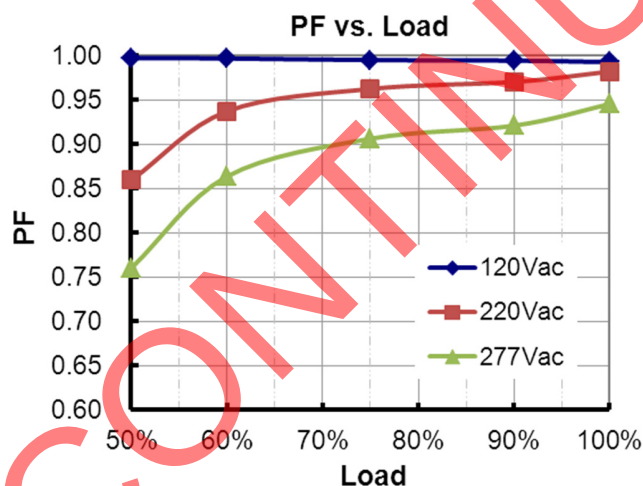


Efficiency vs. Load





Power Factor

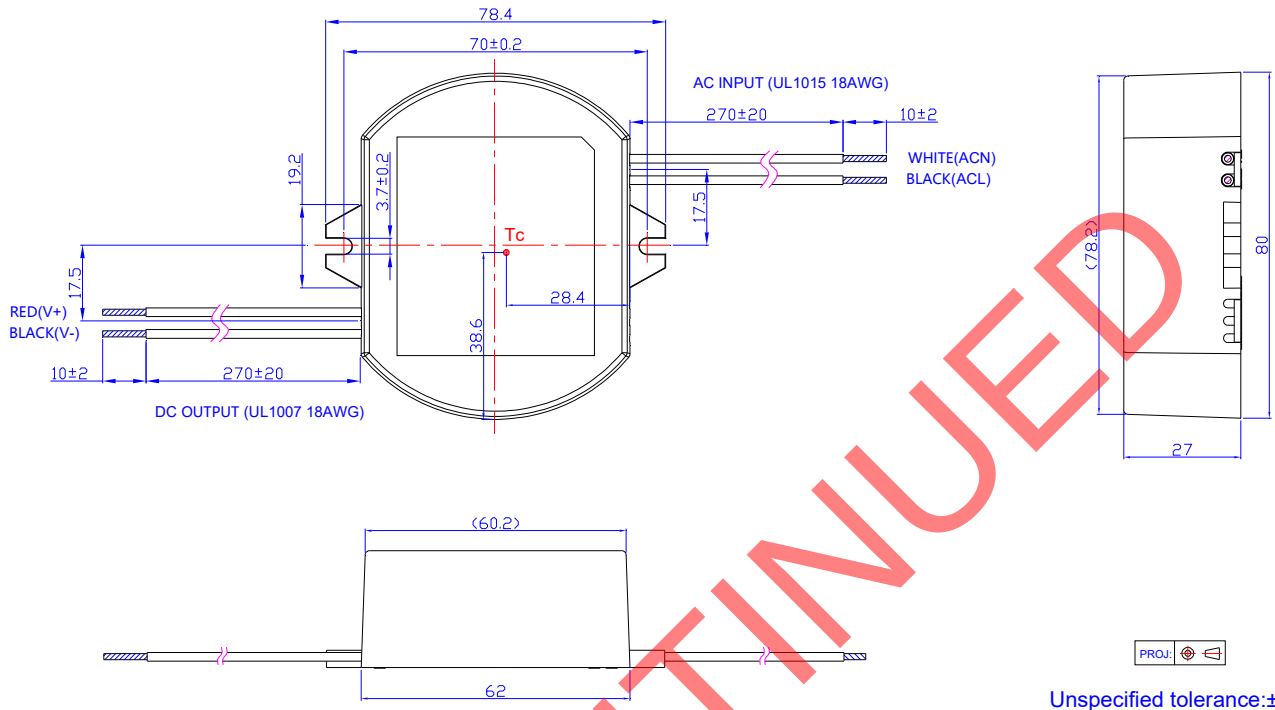


Protection Functions

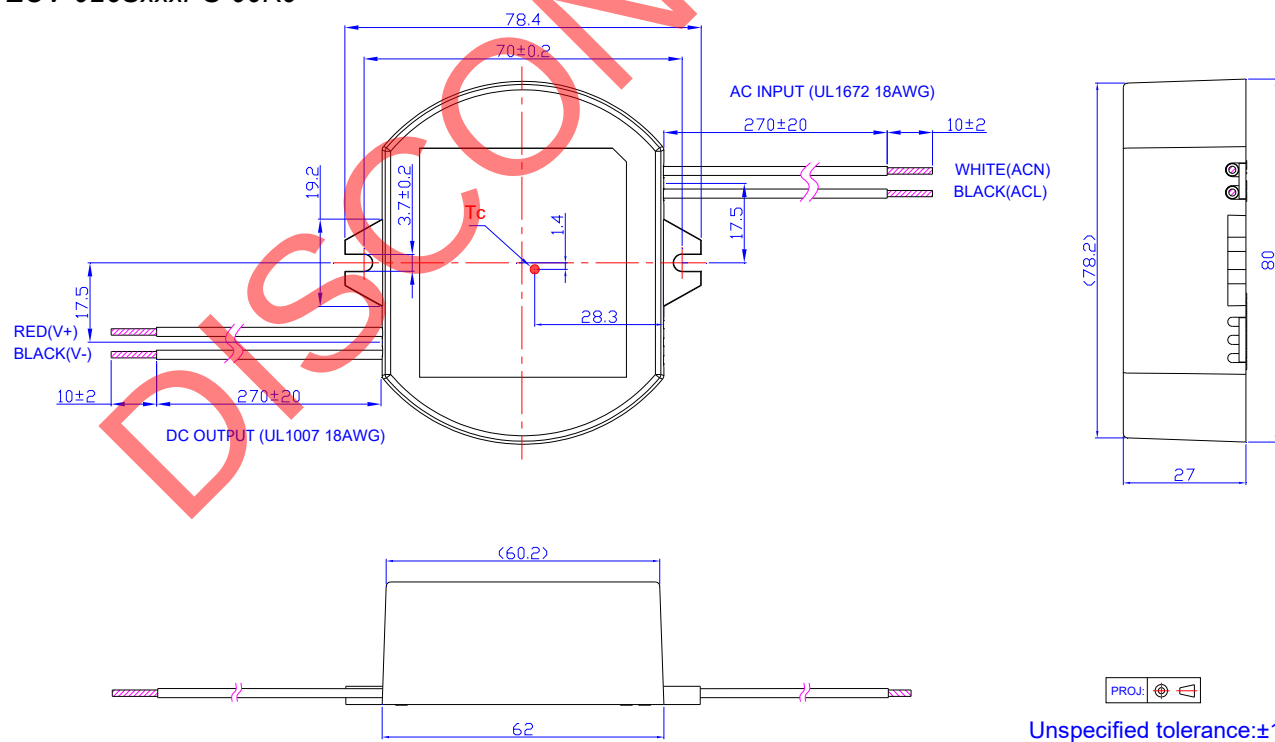
Parameter	Min.	Typ.	Max.	Notes
Over Voltage Protection	110%	120%	130%	Hiccup mode. The power supply shall be self-recovery when the fault condition is removed.
Over Current Protection	1.1Io	1.4Io	1.7Io	Hiccup mode. The power supply shall be self-recovery when the fault condition is removed.
Short Circuit Protection	Auto Recovery. No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.			

Mechanical Outline

EUV-026SxxxPS



EUV-026SxxxPS-00K0



RoHS Compliance

Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.

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Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2012-04-24	A	Datasheet Release	/	/
2012-05-25	B	EN 61000-4-5--- line to line 2 kV, line to earth 4 kV	/	Corrected
2012-06-06	C	Lifetime vs. Tc Curve	/	Added
		Notes of lifetime	/	Updated
2012-07-17	D	Max Case Temperature	/	Updated
2012-07-30	E	Min Operating Temperature	-20℃	-40℃
2012-08-20	F	Derating Curve	/	Updated
		Inrush Current	60A	40A
		Inrush Current(I2t)	/	Added
		Temperature Coefficient	/	Added
2012-11-26	G	Lifetime	Min 50,000hrs	Typical 91,100hrs
		Lifetime Curve	/	Updated
2013-07-01	H	Energy star	/	Deleted
2016-08-08	I	Turn-on Delay Time at 120Vac	Max.=1.0 s	Max.=0.75 s
		Operating Case Temperature for Warranty Tc_w	/	Added
		Net Weight	200 g	220 g
		Environmental Specifications	/	Deleted
		KS Certificate Regulation	/	Added
		Note of EMI Standard	/	Added
		Derating Curve	/	Deleted
2019-08-14	J	KCC Logo	/	Added
		Input Specifications(PF/THD)	50-60Hz	Added
		Safety &EMC Compliance	UL/CUL	Updated
		Safety &EMC Compliance	KS	Updated
		Safety &EMC Compliance	EN 55015 ⁽¹⁾	EN 55015/KN 15 ⁽¹⁾
		Safety &EMC Compliance	FCC	Updated
		Safety &EMC Compliance	EN 61000-4-4	Updated
		Safety &EMC Compliance	EN 61000-4-5	Updated
		RoHS Compliance	/	Updated
2021-03-26	K	Features	/	Updated
		EAC logo	/	Added

Revision History (Continued)

Change Date	Rev.	Description of Change		
		Item	From	To
2021-03-26	K	BIS logo	/	Added
		Double insulation logo	/	Added
		Models - Notes: (6) For double insulation models add suffix -00K0.	/	Added
		Humidity	/	Updated
		Safety & EMC Compliance - Safety Category - BIS & EAC	BIS	Added
		Mechanical Outline - EUV-026SxxxPS-00K0	/	Added
2024-10-18	L	EAC logo	/	Deleted
		Safety & EMC Compliance	/	Updated

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