

## Features

- High Efficiency (Up to 86%)
- Active Power Factor Correction (Typical 0.95)
- Constant Output Voltage
- Waterproof (IP66)
- All-Round Protection: OVP, SCP, OCP
- Comply With UL8750 & EN61347 Safety Regulations
- Comply With ANSI/IEEE C62.41, Class A Operation



## Description

The EUV-026SxxxPS Series operate 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	Output Current Range	Max. Output Power	Typical Efficiency (1)	Power Factor		Model Number (2)
					110Vac	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) Measured at full load and 220 Vac input.

(2) A suffix -xxxx may be added to denote variations or modifications to the base product, where x can be any alphanumeric character or blank.

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

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

## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90 V	-	305 V	
Input Frequency	47 Hz	-	63 Hz	
Leakage Current	-	-	0.75 mA	At 277Vac 60Hz input
Input AC Current	-	-	0.4 A	Measured at full load and 100 Vac input.
	-	-	0.2 A	Measured at full load and 220 Vac input.
Inrush Current	-	-	60 A	At 230Vac input 25°C Cold Start. Duration=100µs

## Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Voltage Tolerance	-5%		5%	

Specifications are subject to changes without notice.

## Output Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
No Load Output Voltage Vo = 24 V Vo = 36 V Vo = 48 V			28V 40V 52V	
Ripple and Noise 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 uF ceramic capacitor and a 10 uF electrolytic capacitor.
Line Regulation	-	-	2%	
Load Regulation	-	-	3%	
Turn-on Delay Time	-	0.6 s	1.0 s	Measured at 110Vac input.
	-	0.3 s	0.5 s	Measured at 220Vac input.
Output Overshoot / Undershoot	-	-	10 %	When power on or off.

**Note:** All specifications are typical at 25 °C unless otherwise stated.

## 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	1.10 Io	1.40 Io	1.70 Io	Hiccup mode. The power supply shall be self-recovery when the fault condition is removed.
Short Circuit Protection	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.			

## General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency Vo = 24 V Vo = 36 V Vo = 48 V	82% 83% 84%	83% 84% 85%	- - -	Measured at full load and 110 Vac input.
Efficiency Vo = 24 V Vo = 36 V Vo = 48 V	83% 84% 85%	84% 85% 86%	- - -	Measured at full load and 220 Vac input.
No Load Power Dissipation			5 W	
MTBF	130,000 hours			Measured at 110Vac input, 80%Load and 25°C ambient temperature (MIL-HDBK-217F)
Life Time	50,000 hours			Measured at 110Vac input, 80%Load, Case temperature=60°C @ Tc point, See the life vs. Tc curve for the details

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## General Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Dimensions Inches (L × W × H) Millimeters (L × W × H)	3.07 × 3.15 × 1.06 78 × 80 × 27			
Net Weight	-	200 g	-	

**Note:** All specifications are typical at 25 °C unless otherwise stated.

## Environmental Specifications

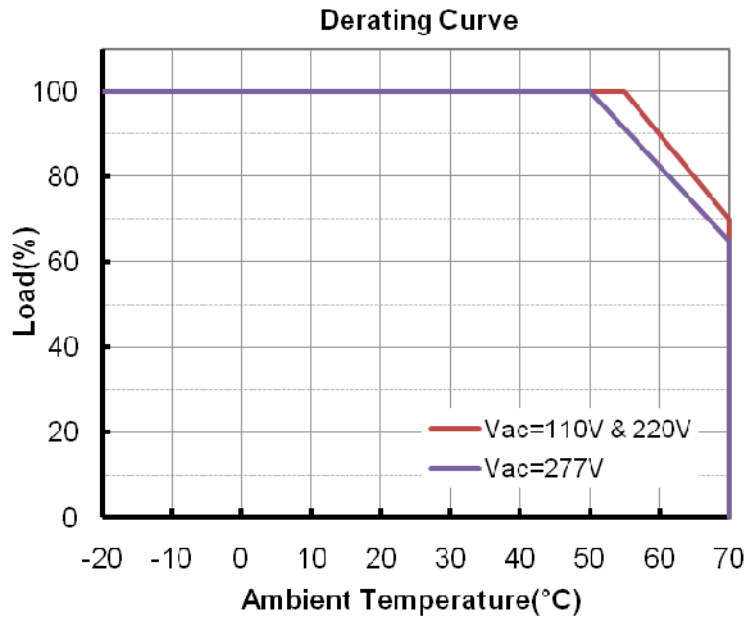
Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-20 °C	-	+70 °C	Humidity: 10% RH to 100% RH; See Derating Curve for details
Storage Temperature	-40 °C	-	+85 °C	Humidity: 5% RH to 100% RH

## Safety & EMC Compliance

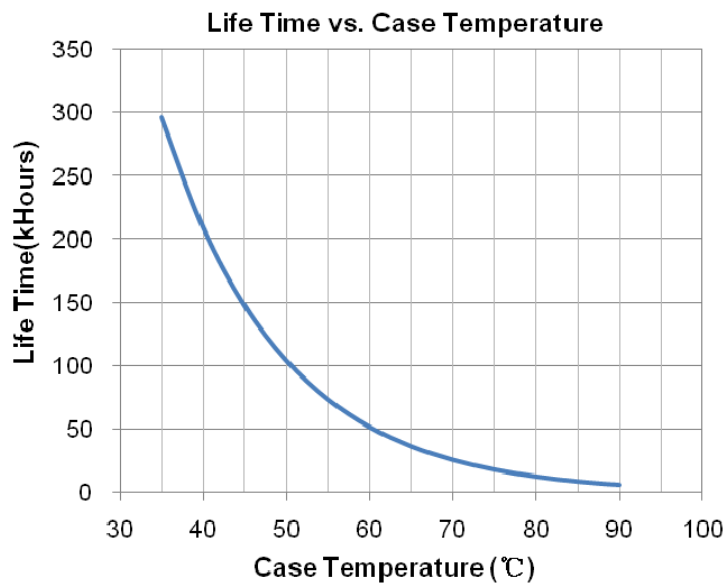
Safety Category	Standard
CUL	UL8750, UL935, UL1012, UL1310 Class 2, CSA-C22.2 No. 107.1, CSA C22.2 NO. 223-M91 Class 2
CE	EN 61347-1, EN61347-2-13
EMI Standards	Notes
EN 55015	Conducted emission Test & Radiated emission Test
EN 61000-3-2	Harmonic current emissions
EN 61000-3-3	Voltage fluctuations & flicker
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: Level 3, Criteria A
EN 61000-4-5	Surge Immunity Test: AC Power Line: Line to Line 2 kV, line to earth 4 kV
EN 61000-4-6	Conducted Radio Frequency Disturbances Test-CS
EN 61000-4-8	Power Frequency Magnetic Field Test
EN 61000-4-11	Voltage Dips
EN 61547	Electromagnetic Immunity Requirements Applies To Lighting Equipment
ENERGY STAR Standards	Notes
ANSI/IEEE C62.41-1991	Transient Protection, power supply shall comply with Class A operation. The line transient shall consist of seven strikes of a 100 kHz ring wave, 2.5 kV level, for both common mode and differential mode.

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## Derating Curve



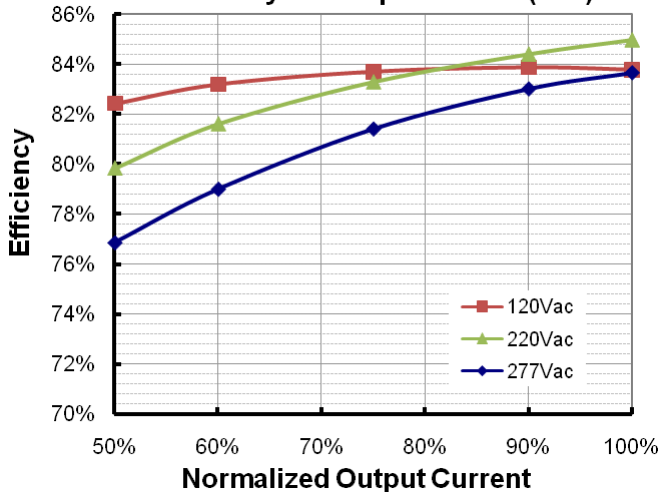
## Life Time vs. Case Temperature Curve



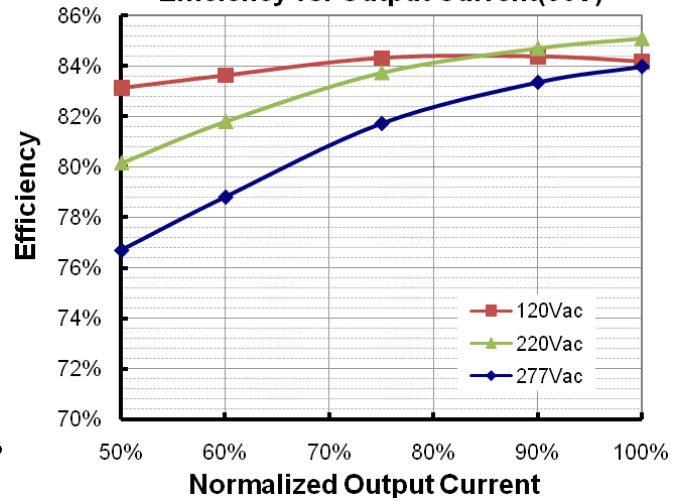
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## Efficiency vs. Load

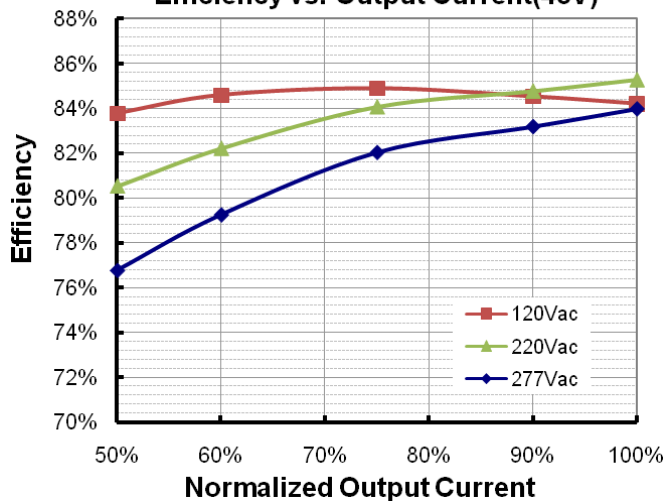
Efficiency vs. Output Current(24V)



Efficiency vs. Output Current(36V)

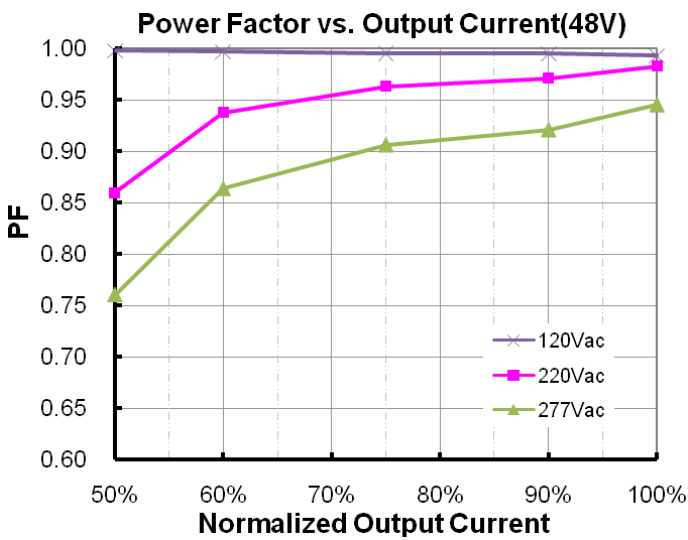
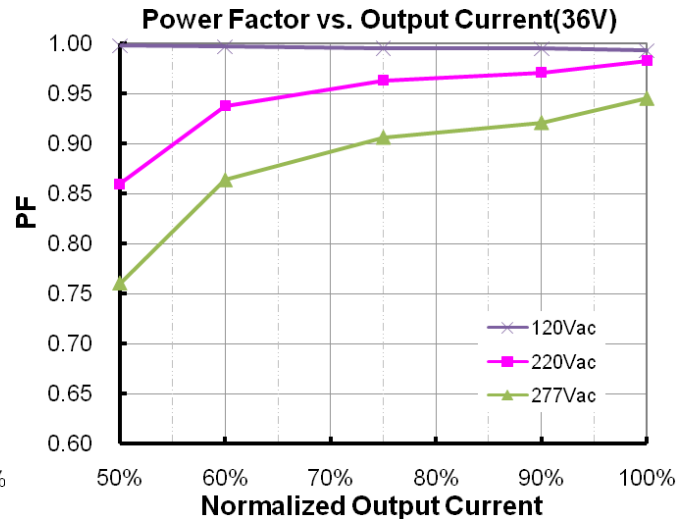
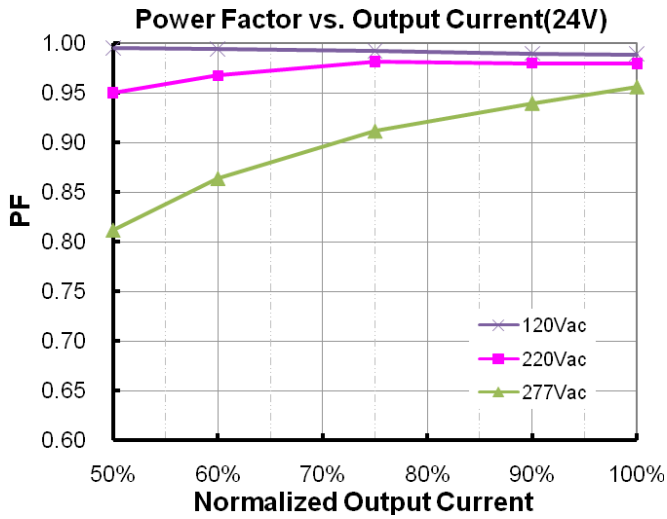


Efficiency vs. Output Current(48V)



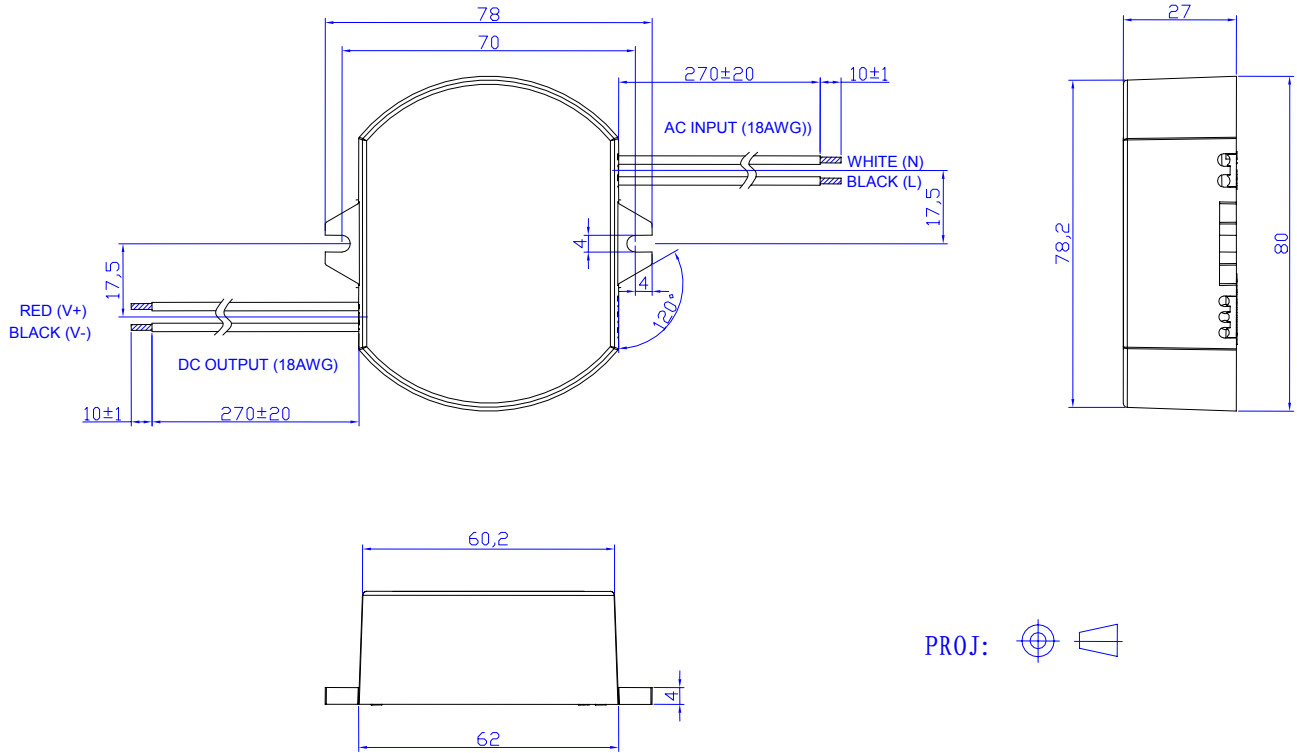
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## Power Factor Characteristics



Specifications are subject to changes without notice.

## Mechanical Outline



## RoHS Compliance

Our products comply with the European Directive 2002/95/EC, 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
2012-4-24	A	Datasheets Release	/	/
2012-5-25	B	EN 61000-4-5--- line to line 2 kV, line to earth 4 kV	/	Corrected
2012-06-06	C	Life time vs. Tc Curve	/	Added
		Notes of life time	/	Updated

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