

## Features

- High Efficiency (Up to 92%)
- Active Power Factor Correction (0.99 Typical)
- Constant Current Output
- Lightning Protection
- All-Round Protection: OVP, SCP, OTP
- Waterproof (IP67)
- Comply With UL8750 & EN61347 Safety Regulations



## Description

The PLEC-075SxxxST Series operate from a 90 ~ 305 Vac input range. These units will provide up to a 5A of output current and a maximum output voltage of 214 V for 75 W maximum output power. They are designed to be highly efficient and highly reliable. Features include over voltage protection, short circuit protection and over temperature protection.

## Models

Output Current (1)	Input Voltage	Max. Output Voltage	Max. Output Power	Typical Efficiency (2)	Power Factor		Model Number
					110Vac	220Vac	
350 mA	90 ~ 305 Vac	214 Vdc	75 W	92%	0.99	0.96	PLEC-075S035ST
450 mA	90 ~ 305 Vac	166 Vdc	75 W	92%	0.99	0.96	PLEC-075S045ST
700 mA	90 ~ 305 Vac	108 Vdc	75 W	91%	0.99	0.96	PLEC-075S070ST
1050 mA	90 ~ 305 Vac	72 Vdc	75 W	90%	0.99	0.96	PLEC-075S105ST
1400 mA	90 ~ 305 Vac	54 Vdc	75 W	90%	0.99	0.96	PLEC-075S140ST
2100 mA	90 ~ 305 Vac	36 Vdc	75 W	89%	0.99	0.96	PLEC-075S210ST
2800 mA	90 ~ 305 Vac	27 Vdc	75 W	89%	0.99	0.96	PLEC-075S280ST
3750 mA	90 ~ 305 Vac	20 Vdc	75 W	88%	0.99	0.96	PLEC-075S375ST
5000 mA	90 ~ 305 Vac	15 Vdc	75 W	88%	0.99	0.96	PLEC-075S500ST

**Notes:** (1) Output current is adjustable at the factory from 50% to 100%.

(2) Measured at full load and 220 Vac input.

## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90 V	-	305 V	
Input Frequency	47 Hz	-	63 Hz	
Input AC Current	-	-	0.9 A	Measured at full load and 100 Vac input.
	-	-	0.45 A	Measured at full load and 220 Vac input.

Specifications are subject to changes without notice.

**Output Specifications**

Parameter	Min.	Typ.	Max.	Notes
Output Current Range				
$I_o = 350 \text{ mA}$	332 mA	350 mA	368 mA	
$I_o = 450 \text{ mA}$	428 mA	450 mA	472 mA	
$I_o = 700 \text{ mA}$	665 mA	700 mA	735 mA	
$I_o = 1050 \text{ mA}$	1000mA	1050mA	1100mA	
$I_o = 1400 \text{ mA}$	1330mA	1400mA	1470mA	
$I_o = 2100 \text{ mA}$	1995mA	2100mA	2205mA	
$I_o = 2800 \text{ mA}$	2660mA	2800mA	2940mA	
$I_o = 3750 \text{ mA}$	3565mA	3750mA	3935mA	
$I_o = 5000 \text{ mA}$	4750mA	5000mA	5250mA	
Output Voltage Range				
$I_o = 350 \text{ mA}$	107V	-	214V	
$I_o = 450 \text{ mA}$	83 V	-	166 V	
$I_o = 700 \text{ mA}$	54 V	-	108 V	
$I_o = 1050 \text{ mA}$	36 V	-	72 V	
$I_o = 1400 \text{ mA}$	27 V	-	54 V	
$I_o = 2100 \text{ mA}$	18 V	-	36 V	
$I_o = 2800 \text{ mA}$	13 V	-	27 V	
$I_o = 3750 \text{ mA}$	10 V	-	20 V	
$I_o = 5000 \text{ mA}$	7.5 V	-	15 V	
Ripple and Noise (pk-pk)	-	-	2% $V_o$	Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.
Line Regulation	-	-	1%	
Load Regulation	-	-	3%	
Turn-on Delay Time	-	-	3 S	
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				
$I_o = 350 \text{ mA}$	-	250 V	-	Latch mode. The power supply shall return to normal operation only after the power is turn-on again.
$I_o = 450 \text{ mA}$	-	200 V	-	
$I_o = 700 \text{ mA}$	-	130 V	-	
$I_o = 1050 \text{ mA}$	-	85 V	-	
$I_o = 1400 \text{ mA}$	-	65 V	-	
$I_o = 2000 \text{ mA}$	-	48 V	-	
$I_o = 2800 \text{ mA}$	-	35 V	-	
$I_o = 3750 \text{ mA}$	-	26 V	-	
$I_o = 5000 \text{ mA}$	-	20 V	-	
Over Temperature Protection	-	110 °C	-	Maximum temperature of components inside the case.
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.			

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### General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency	-	90%	-	For 700 mA output models, measured at full load and 110 Vac input
	-	91%	-	For 700 mA output models, measured at full load and 220 Vac input
MTBF	300,000 hours			At 110Vac input, full load and 25°C ambient temperature (MIL-HDBK-217F)
Life Time	100,000 hours			At 25°C ambient temperature
Dimensions				
Inches (L x W x H)	5.91 x 2.66 x 1.46			
Millimeters (L x W x H)	150 x 67.5 x 37			
Weight	-	750 g	-	

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

### Environmental Specifications

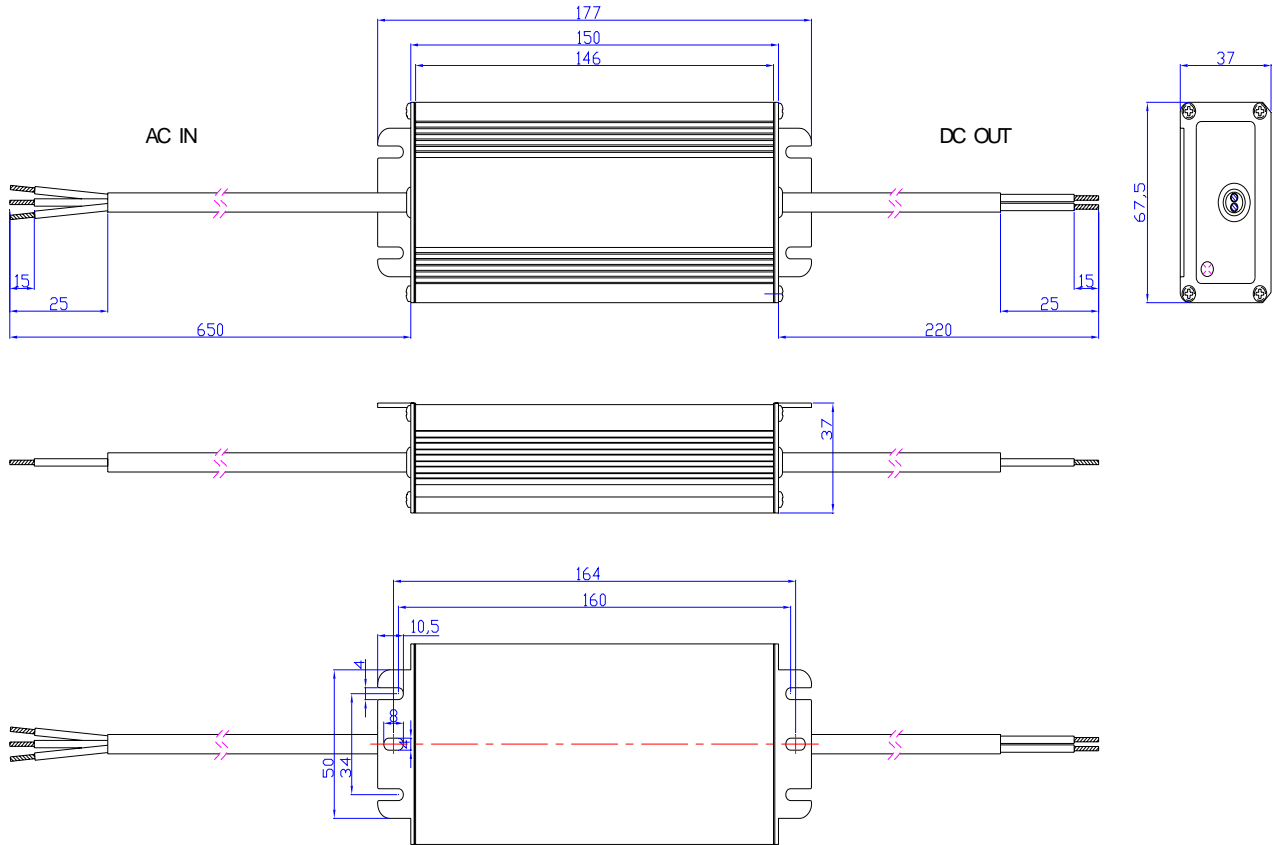
Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-25 °C	-	+70 °C	Humidity: 10% RH to 100% RH
Storage Temperature	-40 °C	-	+85 °C	Humidity: 5% RH to 100% RH

### Safety & EMC Compliance

Safety Category	Country	Standard
CUL	USA & Canada	UL8750 Compliance to UL1310 Class2, UL1012 UL953, CAN/CSA-C22.2 No. 0, CSA-C22.2 No. 107.1, CSA-C22.2 No. 250.0
CE	Europe	EN61347-1, EN61347-2-13
<b>EMI Standards</b>		<b>Notes</b>
EN 55015		Conducted emission Test & Radiated emission Test with 6 dB margin
<b>EMS Standards</b>		<b>Notes</b>
EN 61000-3-2		Harmonic current emissions
EN 61000-3-3		Voltage fluctuations & flicker
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: 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

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### 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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