

## Features

- Ultra High Efficiency (Up to 91%)
- Three Channels Output
- Active Power Factor Correction (0.99 Typical)
- Constant Current Output
- Lightning Protection
- All-Round Protection: SCP, OTP, OVP
- Waterproof (IP67)
- Comply With UL8750 & EN61347 Safety Regulations



## Description

The EUC-150T035ST operates from a 90 ~ 305 Vac input range. It will provide up to a (0.35\*3) A of output current and a maximum output voltage of 142 V for 150 W maximum output power. It is designed to be highly efficient and highly reliable. Features include lightning protection, short circuit protection, over voltage protection and over temperature protection.

## Models

Output Current (1)	Input Voltage	Output Voltage Range	Max. Output Power	Typical Efficiency (2)	Power Factor		Model Number (3)
					110Vac	220Vac	
350 mA	90 ~ 305 Vac	90~142 Vdc	150 W	91%	0.99	0.95	EUC-150T035ST ☆

**Note:** (1) The output current is adjustable at factory from 50% to 100%.

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

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

(4) ☆: Popular model.

## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90 V	-	305 V	
Input Frequency	47 Hz	-	63 Hz	
Leakage Current	-	-	1 mA	At 277Vac 60Hz input
Input AC Current	-	-	1.7 A	Measured at full load and 100 Vac input.
	-	-	0.8 A	Measured at full load and 220 Vac input.
Inrush Current	-	-	50 A	At 230 Vac input

## Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output channel	-	3	-	

Specifications are subject to changes without notice.

## Output Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Output Current Range single channel	332 mA	-	368 mA	
Ripple and Noise (pk-pk)	-	-	2% V <sub>o</sub>	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	-	0.6 s	1 s	Measured at 110Vac input.
	-	0.5 s	0.8 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 Temperature Protection	-	110 °C	-	Maximum temperature of components inside the case. Auto Recovery mode. The output shall be auto recovery when the temperature becomes normal.
Over Voltage Protection	-	180 V	200 V	Latch mode. The power supply shall return to normal operation only after the power is turn-on again.
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	88%	89%	-	Measured at full load, 110Vac input, 25°C ambient temperature, after the unit is thermally stabilized. It will be lower about 1%, if measured immediately after startup.
	90%	91%	-	Measured at full load, 220Vac input, 25°C ambient temperature, after the unit is thermally stabilized. It will be lower about 1%, if measured immediately after startup.
MTBF	230,000 hours			Measured at 220Vac input, 80%Load and 25°C ambient temperature (MIL-HDBK-217F)
Life Time	70,000 hours			Measured at 220Vac input, 80%Load and 45°C ambient temperature

Specifications are subject to changes without notice.

## General Specifications (Continued)

Parameter	Min.	Typ.	Max.	Notes
Dimensions Inches (L × W × H) Millimeters (L × W × H)		7.40 × 3.46 × 1.54 188 × 88 × 38		
Net Weight	-	1300 g	-	

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

## Environmental Specifications

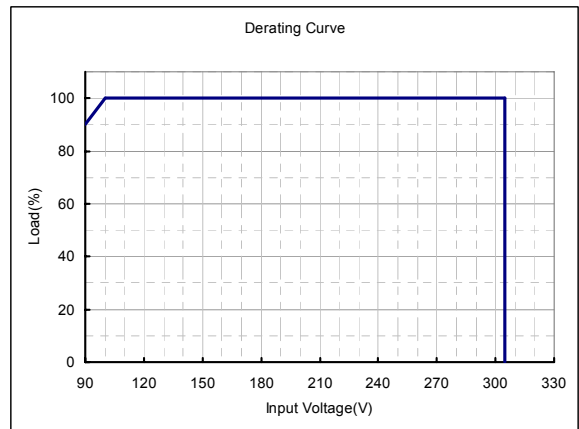
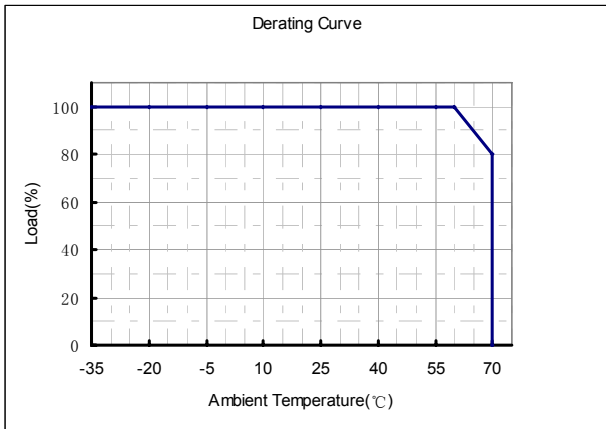
Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-35 °C	-	+70 °C	Humidity: 10% RH to 100% RH
Storage Temperature	-40 °C	-	+85 °C	Humidity: 5% RH to 100% RH

## Safety & EMC Compliance

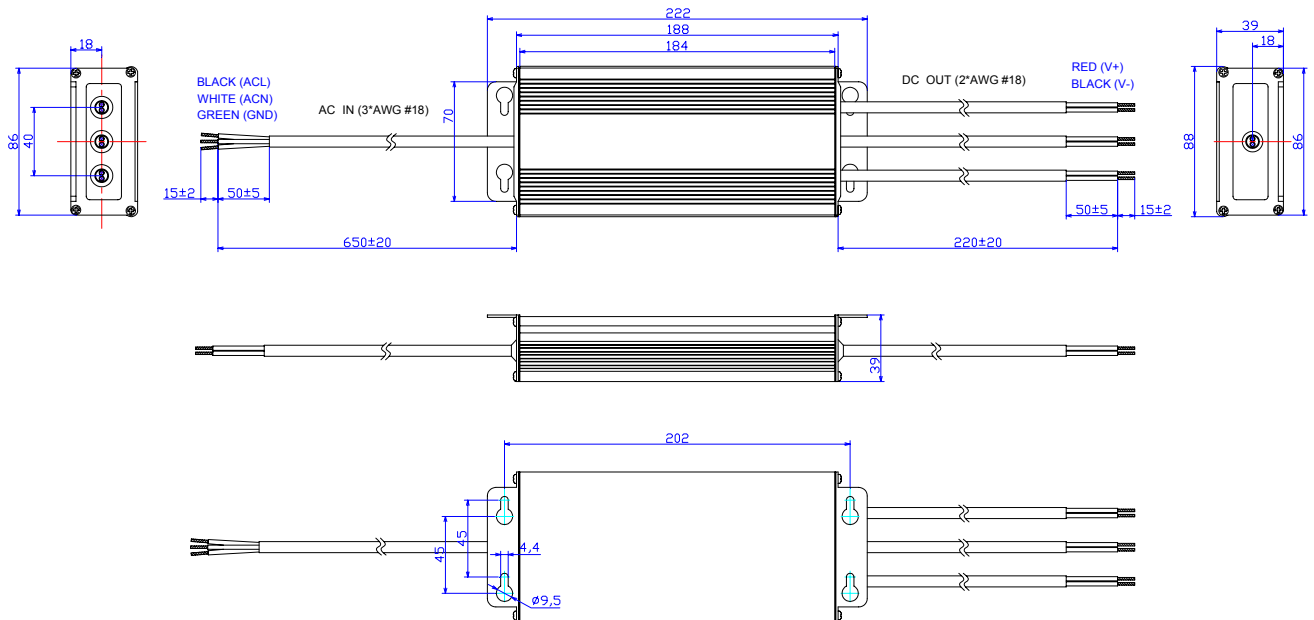
Safety Category	Standard
CUL	UL8750 Compliance to UL1012 UL935, CAN/CSA-C22.2 No. 0, CSA-C22.2 No. 107.1, CSA-C22.2 No. 250.0
CE	EN61347-1, EN61347-2-13
EMI Standards	Notes
EN 55015	Conducted emission Test & Radiated emission Test
EN 61000-3-2	Harmonic current emissions
EN 61000-3-3	Voltage fluctuations & 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
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

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## Derating Curve



## 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.

## Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2009-12-03	V1.0	First Release		
2010-02-08	A	Models Note	/	Add: The output current is adjustable at factory from 50% to 100%.
		Over Temperature Protection	Maximum temperature of components inside the case.	Maximum temperature of components inside the case. Auto Recovery mode. The output shall be auto-recovery when the temperature becomes normal.
		MTBF	420,000 hours At 110Vac input, 80%Load and 25°C ambient temperature (MIL-HDBK-217F).	230,000 hours At 220Vac input, 80%Load and 25°C ambient temperature (MIL-HDBK-217F).
		Life time	60,000 hours At 110Vac input, 80%Load and 45°C ambient temperature.	70,000 hours At 220Vac input, 80%Load and 45°C ambient temperature.
		Operating Temperature	Humidity: 10% RH to 100% RH	Humidity: 10% RH to 100% RH Derating: 2% per °C from 60°C to 70°C
		Derating Curve	/	Add Derating Curve
2010-05-31	B	Add Leakage Current in Input Specifications	/	Max. 1 mA At 277Vac 50Hz input
		Add star rank for recommended models	/	☆: Popular model.
		Standardize the tolerance in Mechanical Outline	/	/

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