



## **BEU700** series

The BEU700 series of AC/DC charger provide 697 Watts of continuous output power. All components are UL 94V-1 min compliant. This model meets FCC Part-15 class A and CISPR-22 class A emission Limits and is designed to comply with UL/c-UL. All units are 100% burned in and tested.



### **APPROVALS:**

# CB 🕀

### **Electrical Characteristics:**

### 697W DC Wallbox EV charger

### **FEATURES:**

- \* Wide Operating Voltage, 99 to 264 VAC, 47 to 63 Hz
- \* Single output

**RoHS**<sub>2</sub>

2011/65/EU

- \* Protection: OTP
- \* Size : 4.5"x9.25"x1.6"
- \* Suitable professional EV charging station, battery exchange
- \* Programable C.V.+C.C.
- \* RS-485 Communication Format
- \* 2 year warranty

### **APPLICATIONS:**

- \* EV charging station
- \* Battery exchange station
- \* Battery charger
- \* LED lighting
- \* Laser Equipment

### **GENERAL SPECIFICATION:**

- \* Short Circuit Protection: Auto Recovery
- \* Cooling: Forced Air.
- \* Flammability Rating: UL94V-1
- \* Protection Classes: Class I
- \* Safety: IEC 60950-1:2005/A2:2013, EN 60950-1:2006/A2:2013 BSMI:CNS13438, CNS14336-1, CNS15663

Symbol	Characteristic	Condition	Min.	Тур.	Max.	Unit
Vins	Safety Approval Input Voltage Range	Safety Approval & Specification in Label	110		240	VAC
Vin	Input Operate Voltage Range	Detail to see Fig.1	99		264	VAC
Fi	Input Frequency	Sine wave	47		63	Hz
PF	Power Factor Correction		0.90		1	
Ро	Output Power Range	See Rating Chart			697	W
Iil	Low Line Input Current	Full Load, Vin=100VAC		8.5		Α
Iih	High Line Input Current	Full Load, Vin=240VAC		3.5		Α
Irl	Low Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=100VAC			50	Α
Irh	High Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=240VAC			108	Α
Ik	Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.75	mA
η	Efficiency	Full Load, Vin=230VAC, Detail to see Rating Chart	See Rating Char		t	
△Voi	Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%
OVP	Over Voltage Protection	Set at 58.1V@3s, auto recovery	112		132	%
OLP	Over Load Protection	Recovers automatically after fault condition is removed	105		112	%
Ris	Insulation Resistance		50			MΩ
Тс	Temperature Coefficient	All Condition			±0.04	%/°C
HV	Dielectric Withstanding Voltage (P-S)	Primary to Secondary, limit current <10mA	4120			VAC
Vpg	Dielectric Withstanding Voltage (P-G)	Primary to PE, limit current <10mA	2060			VAC
EMI	EMC Emission	Meet EN55032 (CISPR32), EN55024-1-2	А			Class

### **Environmental:**

Symbol	Characteristic	Condition	Min.	Тур.	Max.	Unit
То	Operating Temperature	Detail to see Fig.1 (Derate linearly from 100% load at 40°C to 50% load at 70°C)	-20		70	°C
Ts	Storage Temperature	10 ~ 95% RH	-40		85	°C
Но	Operating Humidity	non-condensing	0		95%	RH
Hs	Storage Humidity		0		95%	RH
ESDa	Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
ESDc	Electro Static Discharge	Contact Discharge, IEC61000-4-2			6	kV
MTBF	Mean Time Between Failure	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	100k			h
Vsl	Surge Voltage	Line-Neutral			1	kV
Vsg	Surge Voltage	Line-PE & Neutral-PE			2	kV



# **SSINPRO**

# **BEU700** series

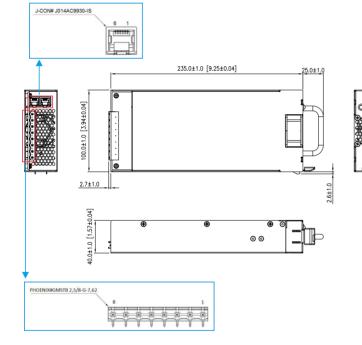
### 697W DC Wallbox EV charger

#### SPECIFICATION NOTE :

- 1. Output can provide up to peak load when the power supply starts up. Continuous staying in more than rated load is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
- 5. Efficiency is measured at rated load, and nominal line.

#### 100 80 Output Watts(%) 60 40 20 0 SS -20 10 20 30 40 50 60 70 80 90 TEMPERATURE (°C) (FIG.1) TEMPERATURE DERATING CURVE 58.1V 57.4V 12A 42V 140 1/ 39V CV MODE PRECHARG CC MODE

### MECHANICAL DIMENSIONS: (UNIT: mm[inch])





2. Input & Output connector mates with PHOENIX#GMSTB 2,5/8-G-7,62.

3. Communication mates with J-CON# J014AC9930-IS.

### **PIN CHART**

#### Input & Output connector

•••••• Current(5°C~40°C)

Voltage

PIN	FUNTION		
1	L		
2	N		
3	G		
4	Vo +		
5	Vo +		
6	RTN		
7	RTN		
8	N/C		

#### P2 communication Connector

PIN	FUNTION
6	RS485 D-
5	RS485 D+
4	NC
3	NC
2	CAN1L
1	CAN1H

P1 communication Connector				
PIN	FUNTION			
6	NC			
5	PGC			
4	PGD			
3	GND			

VCC

MCLR

2

1

### **Rating Chart:**

MODEL NO.	Current (max.)	Setting Voltage Range	Maximum Output Power	Total Regulation	Typ. Efficiency	Typ. No Load Consumption
	(A)	(VDC)	(W)	(%)	(%)	(W)
BEU700-112	12	39~58.1	697	±2	87	10