

BPU170-112

V0.0

173W DC Wallbox EV charger

The BPU170-112 of AC/DC charger provide 173 Watts of continuous output power. All components are UL 94V-0 min compliant. This model meets FCC Part-15 class B and CISPR-32 class B emission Limits and is designed to comply with UL/c-UL. All units are 100% burned in and tested.

RoHS2
2011/65/EU



FEATURES:

- * Wide Operating Voltage, 90 to 264 VAC, 47 to 63 Hz
- * Single output
- * Protection: OVP, UVP, Charging timing protection, Charger thermal protection, Constant current protection, Battery charging error protection
- * Programmable C.V.+C.C.
- * 2 year warranty

APPLICATIONS:

- * Battery charger

APPROVALS:

PRELIMINARY

GENERAL SPECIFICATION:

- * **Short Circuit Protection:** Auto Recovery
- * **Cooling:** Free Air Convection.
- * **Flammability Rating:** UL94V-0
- * **Protection Classes:** Class II

Electrical Characteristics:

Symbol	Characteristic	Condition	Min.	Typ.	Max.	Unit
Vins	Safety Approval Input Voltage Range	Safety Approval & Specification in Label	100		240	VAC
Vin	Input Operate Voltage Range	Detail to see Fig.1	90		264	VAC
Fi	Input Frequency	Sine wave	47		63	Hz
PF	Power Factor Correction		0.95		1	
Po	Output Power Range	See Rating Chart			173	W
Iil	Low Line Input Current	Full Load, Vin=100VAC		2.3		A
Iih	High Line Input Current	Full Load, Vin=240VAC		1.1		A
Irl	Low Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=100VAC			60	A
Irh	High Line Input Inrush Current	Full Load, 25°C, Cool start, Vin=240VAC			120	A
Ik	Safety Ground Leakage Current	Vin=240VAC, Fi=60Hz			0.25	mA
η	Efficiency	Full Load, Vin=230VAC, Detail to see Rating Chart	See Rating Chart			
ΔVoi	Line Regulation	Full Load, Vin=100~120VAC or 200~240VAC			1	%
Ris	Insulation Resistance		50			MΩ
Tc	Temperature Coefficient	All Condition			±0.04	%/°C
HV	Dielectric Withstanding Voltage (P-S)	Primary to Secondary, limit current <10mA			4242	VDC
Vpg	Dielectric Withstanding Voltage (P-G)	Primary to PE, limit current <10mA			2121	VDC
EMI	EMC Emission	Meet EN55032 (CISPR32), EN55014	B			Class

Environmental:

Symbol	Characteristic	Condition	Min.	Typ.	Max.	Unit
To	Operating Temperature	Detail to see Fig.1 (Derate linearly from 100% load at 40°C to 50% load at 70°C)	-10		70	°C
Ts	Storage Temperature	10 ~ 95% RH	-20		60	°C
Ho	Operating Humidity	non-condensing	10		95%	RH
Hs	Storage Humidity		10		95%	RH
ESDa	Electro Static Discharge	Air Discharge, IEC61000-4-2			8	kV
ESDc	Electro Static Discharge	Contact Discharge, IEC61000-4-2			4	kV
MTBF	Mean Time Between Failure	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	50k			h
Vsl	Surge Voltage	Line-Neutral			1	kV

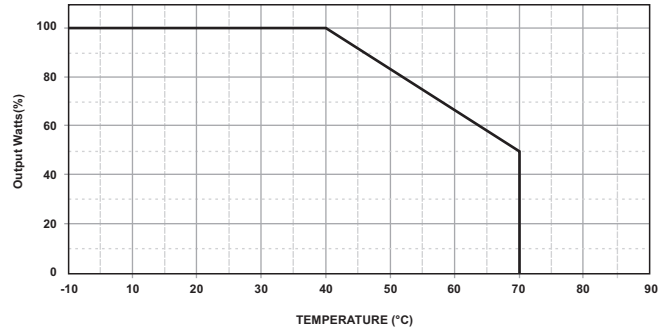
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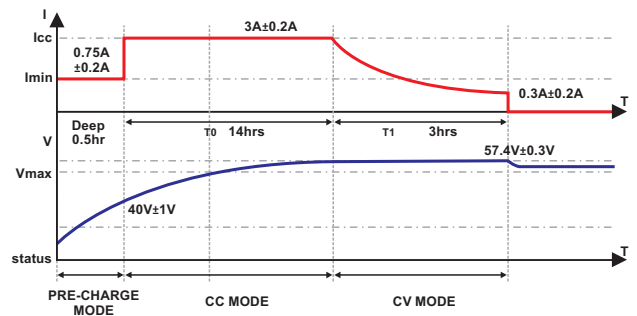
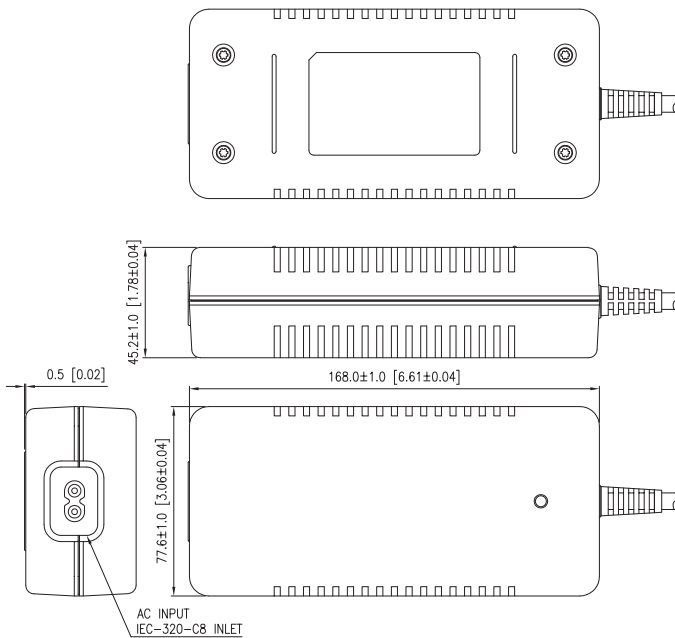
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SPECIFICATION NOTE :

1. The ripple is measured from peak to peak with a bandwidth-limit of 20MHz (Measured at the output connector with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor).
2. Efficiency is measured at rated load, and nominal line.



MECHANICAL DIMENSIONS: (UNIT: mm [inch])



- PRE-CHARGE CURRENT : 0.75A±0.2A
- PRE-CHARGE VOLTAGE : 32-40V±1V
- FULL CHARGE CURRENT : 3A±0.2A
- FULL CHARGE CUT-OFF CURRENT : 0.3A±0.2A
- FULL CHARGE VOLTAGE : 57.4V±0.3V

PACKING :

1. Net weight: 750g approx.
2. Optional output connectors available contact sales for details.

Rating Chart:

MODEL NO.	Current (max.)	Setting Voltage Range	Maximum Output Power	Typ. Efficiency	Typ. No Load Consumption
	(A)	(VDC)	(W)	(%)	(W)
BPU170-112	3	32 ~ 57.4±0.3	173	93	1

*Optional Vo2 (12V@0.5A)