



Features

- . Wide input 90V to 264VAC, 50~60Hz suitable for worldwide
- . Output voltage selectable from 14.4V, 28.8V and 57.6V
- . Class B Conducted and Radiated EMI for information devices
- . Built-in CANBus protocol for control, setting and monitoring
- . Metal case and fan forced convection better for cooling
- . High Efficiency up to 92% and power factor up to 0.98
- . Over Temperature/ Reverse Connection/ Short Circuit Protections

Safety Standards

- . IEC60335-1:2010+A1:2013 + A2:2016 /IEC60335-2-29 CB
- . UL1310:2018 Ed.7+R:09 + CSA C22.2#223:2015 Ed.3
- . EN 60335-2-29 /EN60335-1:2012 for European Union
- . AS/NZS 60335.2.29: 2017 for Australia and New Zealand
- . J61558-1/J61558-2-16 /J3000 /J55014-1 for Japan market.

Product Description:

It is a highly reliable 750W miniaturized, versatile, and ultra-wide voltage intelligent charger with wide range 90-264Vac input and single output available from 10.5V to 80Vdc for different voltage batteries. Equipped with a standard IEC320-C14 AC inlet. The entire series supplies different models which is suitable for 12V /24V /48V lead-acid batteries and Li-ion batteries. This 750W series battery charger is widely used in charging electric bicycles, tricycles, scooters, power tools, robots and other electric-related equipment.

With the efficiency up to 92% and built-in active PFC with PF>0.98, this 750W battery charger is designed according to worldwide satisfy standards. The charger utilizes aluminum alloy case and thermal controlled fan for cooling keeping the charger in low temperature rise.



Technical Specification

Typ. Model	KPB-750-12	KPB-750-24	KPB-750-48
Output			
Output Voltage (CV)	14.6VDC	28.8VDC	57.6VDC
Charge Voltage Range	10.5 ~ 21V	21 ~ 42V	42 ~ 80V
Charging Current	43A Max	22.5A	11.3A
Output Power	722.4W Max.	756.0W Max.	759.4W Max.
Voltage Accuracy	±0.2V	±0.2V	±0.2V
LED Indicator	Power on: Green light flashed / Charging: Orange light on / Full charged: Green light on / Abnormal: Red light flashed		
Input			
Input voltage	90 - 264Vac or 127- 374Vdc		
Input Frequency	50-60Hz (When the input is AC)		
Input Current	8A Max. @ 100 ~240Vac 50/60Hz input		
Inrush Current	50A Max. @ 100 ~240Vac 50/60Hz input		
Power Factor	>0.98 @ 120Vac 60Hz input; >0.95 @230Vac 50Hz input		
Efficiency (Typ.)	92%	93%	93%
Leakage Current	≤1mA @ full input range		
Protections			
Over temperature	Shut down o/p voltage, re-power on to recover		
Short Circuit	When Short Circuit happened ,charger will turn off. No damage.		
Reverse Connection	When the battery is polarity reversed ,the charger will cut off the connection between the circuit and the battery		
Environmental			
Operation Temperature	-25°C to +50°C, 10%RH to 90%RH		
Operation Altitude	≤2000m @ full load and rated operating temperatures		
MTBF	≥50000Hrs @ full load and rated operating temperatures		
Mechanical			
Dimensions (W x L x H)	230.0 x 158.0 x 67.0mm (9.06 x 6.22 x 2.64 inch)		
Unit Weight	1.84kg±100 grams		
Packing Information	4pcs/ Carton, carton dimensions:47*37*20cm, 9.0kgs/ Carton		

TEST REPORT

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDIDTION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-0.2V ~ +0.2V	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD / Ta:25°C	-0.08V ~ +0.09V	P
2	CONTINUOS OUTPUT CURRENT	43A	I/P:230VAC /I/P:115VAC O/P:CV=12V / Ta:25°C	42.68A /230VAC 42.65A/115VAC	P
3	LED INDICATOR	Charging (CC): Orange Floating charging: GREEN	I/P:230VAC O/P: SETTING / Ta:25°C	>1.320A, LED: Orange <1.283A, LED: GREEN	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDIDTION	RESULT	VERDICT
1	VOLTAGE RANGE	90VAC~264VAC	I/P:TESTING O/P:FULL LOAD / Ta:25°C	85V~264V	P
2	FREQUENCY RANGE	50HZ - 60HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD / Ta:25°C	TEST: OK	P
3	POWER FACTOR	0.95 / 230VAC 0.98 / 115VAC	I/P:230VAC IP: 115VAC O/P: FULL LOAD & Ta:25°C	PF=0.967 / 230VAC PF=0.995 / 115VAC	P
4	EFFICIENCY	92% (Typ)	I/P:230VAC O/P:FULL LOAD / Ta:25°C	92.62%	P
5	AVERAGE EFFICIENCY	>90%	I/P:115/230VAC & O/P:25%、50%、75%、 100% LOAD & Ta:25°C	90.21% (115VAC) 90.53% (230VAC)	P
6	AC CURRENT	8.7A (Max)	I/P:100VAC & O/P:FULL LOAD Ta:25°C	7.53A	P
7	INRUSH CURRENT	<50A COLD START	I/P: 230VAC / O/P:FULL LOAD Ta:25°C	36.9A	P
8	LEAKAGE CURRENT	≤ 1mA	I/P:240VAC & O/P:Min LOAD Ta:25°C	L-FG:0.82mA N-FG:0.81mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDIDTION	RESULT	VERDICT
1	OVER LOAD PROTECTION	95 ~ 115%	I/P:230VAC I/P:115VAC O/P:TESTING Ta:25°C	100.5% /230VAC 100.5% /115VAC Constant current limiting recovers automatically after fault condition is removed	P
2	OVER VOLTAGE PROTECTION	21.50V ~ 26V	I/P:230VAC /I/P:115VAC O/P:MIN LOAD Ta:25°C	22.30V /230VAC 22.35V /115VAC Shut down o/p voltage, re-power on to recover	P
3	SHORT PROTECTION	SHORT OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD & Ta:25°C	NO DAMAGE HICCUP MODE	P
4	REVERSE CONNECTION	REVERSE CONNECTION for 1H NO DAMAGE	I/P: 230VAC O/P: TESTING Ta:25°C	Shut down O/P voltage, no damage. Re-power on to recover	P

SAFETY TEST & E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDIDTION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P: 3.0KVAC/min I/P- FG: 2.0KVAC/min O/P-FG:0.5KVAC/min	I/P-O/P: 3.2 KVAC/min I/P-FG: 2.2 KVAC/min O/P-FG:0.6 KVAC/min Ta:25°C	I/P-O/P:3.815A I/P-FG: 2.975mA O/P-FG:1.323mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>10MΩ I/P-FG: 500VDC>10MΩ O/P-FG:500VDC>10MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta:25°C	I/P-O/P: 9999MΩ I/P-FG: 9999MΩ O/P-FG:9999 MΩ NO DAMAGE	P
3	CONDUCTION	BS EN/EN55014(CISPR32), FCC PART 15 / CISPR22 CAN	I/P: 230 VAC (50HZ) O/P: FULL/50% LOAD Ta: 25°C	PASS Test by certified Lab	P
4	RADIATION	BS EN/EN55014(CISPR32), FCC PART 15 / CISPR22 CAN	I/P: 230 VAC (50HZ) O/P: FULL LOAD Ta: 25°C	PASS Test by certified Lab	P
5	SURGE	BS EN/EN61000-4-5 LIGHT INDUSTRY L-N: 1KV	I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C	CRITERIA B	P
6	E.S.D	BS EN/EN61000-4-2 LIGHT INDUSTRY AIR: 8KV / Contact: 4KV	I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C	CRITERIA B	P

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	LINDA	JUDY	ZHANG DL