MEAN WELL

# 360W Single Output Battery Charger

# PB-360 series



## Features :

- 3 stage charging
- AC 115/230VAC selected by switch
- Built-in passive PFC function compliance to EN61000-3-2 Class A (option)
- Protection: Overload / Short circuit / Reverse polarity / Over voltage / Over temperature
- Charger for lead-acid batteries
- 2 color LED loading indicator
- Low cost, High reliability
- FAN on/off control(Depends on charging current)
- 2 years warranty

c UL us CB (except for 48V) CE (P type only)

PB – 300/360 P – 12

1.300W without FAN
2.360W with FAN

P:With Passive PFC
N:Without Passive PFC

12:14.4V
24:28.8V
48:57.6V

## SPECIFICATION

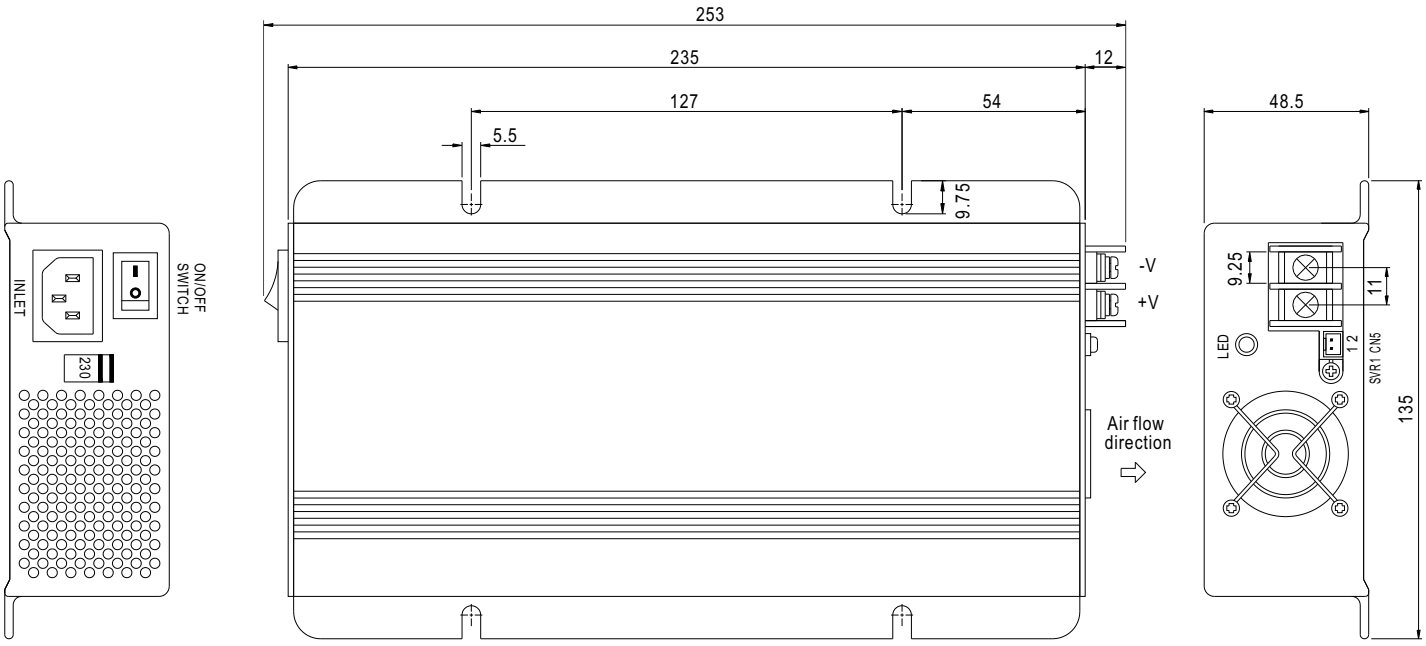
| MODEL | | PB-360□-12 | PB-360□-24 | PB-360□-48 |
|---|---|---|---|---|
| OUTPUT | BOOST CHARGE VOLTAGE | 14.4V | 28.8V | 57.6V |
| | FLOAT CHARGE VOLTAGE | 13.6V | 27.2V | 54.4V |
| | VOLTAGE ADJUSTABLE RANGE | 13 ~ 14.7V | 26 ~ 28.8V | 52 ~ 58.6V |
| | RECOMMENDED BATTERY CAPACITY(AMP HOURS)(Note 5) | 80 ~ 200Ah | 40 ~ 125Ah | 20 ~ 65Ah |
| | BATTERY TYPE | Open & Sealed Lead Acid | | |
| | OUTPUT CURRENT | 24.3A | 12.5A | 6.25A |
| INPUT | VOLTAGE RANGE | 90 ~ 132VAC / 180 ~ 264VAC selected by switch 248 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | |
| | EFFICIENCY (Typ.) | 85% | 86% | 87% |
| | POWER FACTOR (Typ.) | >0.65 (with P type) at 230VAC | | |
| | AC CURRENT (Typ.) | 7A/115VAC 3.5A/230VAC | | |
| | INRUSH CURRENT (Typ.) | COLD START 60A | | |
| | LEAKAGE CURRENT | <3.5mA / 240VAC | | |
| PROTECTION | OVERLOAD | 90 ~ 110% rated output current | | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is removed | | |
| | SHORT CIRCUIT | O/P Built in fuse (FS100) to protect short circuit condition, shut down o/p voltage and can not re-power on | | |
| | REVERSE POLARITY | By internal fuse | | |
| | OVER VOLTAGE | 16 ~ 18V | 31 ~ 35V | 59 ~ 64V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | |
| | OVER TEMPERATURE | Protection type : Automatically derate charge current until zero | | |
| FUNCTION | REMOTE CONTROL (CN5) | Open: Normal work Short: Stop Charging | | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +60℃ (Refer to output load derating curve) | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85℃, 10 ~ 95% RH | | |
| | TEMP. COEFFICIENT | ±0.05%/℃ (0 ~ 45℃) | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | IEC60335-2-29 CB approved by TUV(except for 48V), UL60950-1 approved | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 (only P type) | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A | | |
| OTHERS | MTBF | 115.8Khrs min. MIL-HDBK-217F (25℃) | | |
| | DIMENSION | 253*135*48.5mm(L*W*H) | | |
| | PACKING | 1.5Kg; 6pcs/10Kg/0.95CUFT | | |

**NOTE**

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
5. This is Mean Well's suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.

## ■ Mechanical Specification

Case No.801A Unit:mm

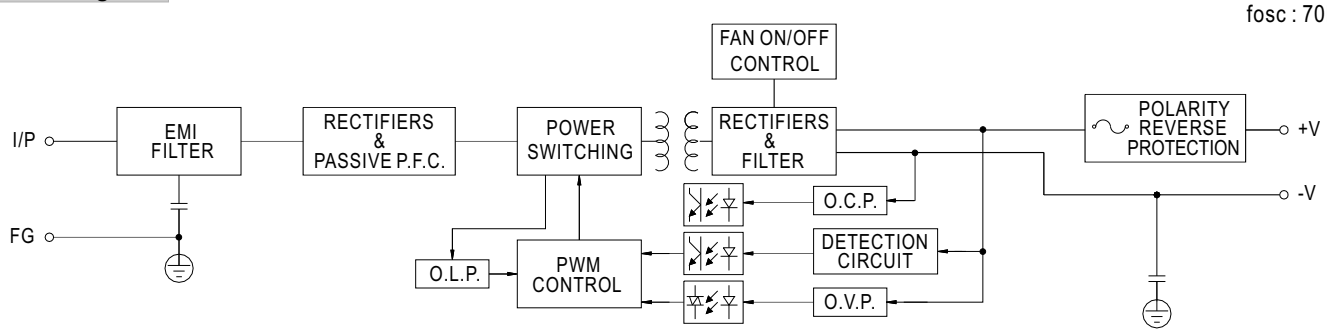



Remote Control(CN5) : JST B2B-XH or equivalent

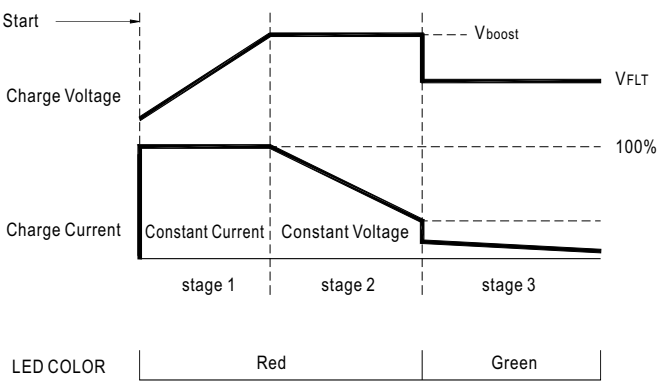
| Assignment | Mating Housing | Terminal |
|---|---|---|
| PIN1,2 Open: Normal work | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| PIN1,2 Short: Stop Charging | | |

## ■ Block Diagram

fosc : 70KHz




## ■ Charging Curve




| State | PB-360-12 | PB-360-24 | PB-360-48 |
|---|---|---|---|
| Vboost | 14.4V | 28.8V | 57.6V |
| VFLT | 13.6V | 27.2V | 54.4V |

## ■ Output Load VS Temperature

