



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Built-in active PFC function
- Cooling by free air convection
- Output current level adjustable
- 100% full load burn-in test
- High reliability
- Suitable for built-in applications of LED lighting
- 2 years warranty

SELV

EQUIVALENT (except for 48V)



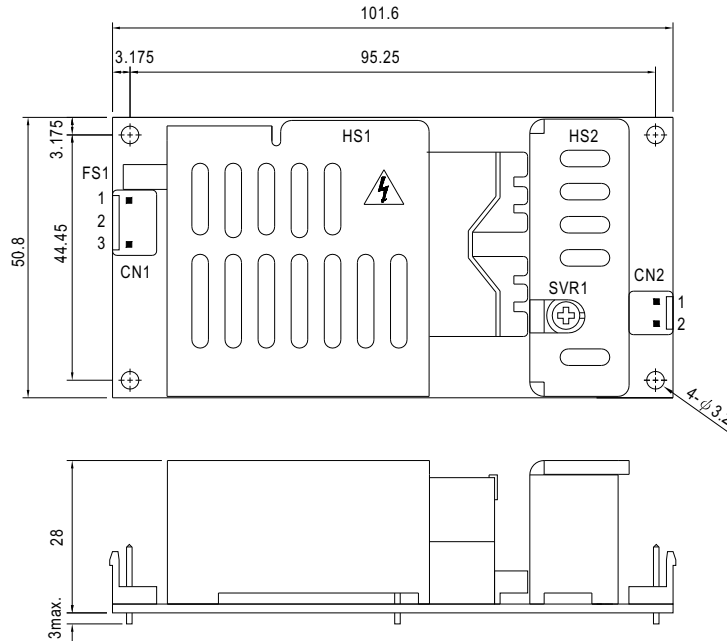
CBC CE

SPECIFICATION

| MODEL | PLP-45-12 | PLP-45-24 | PLP-45-48 | |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------|
| OUTPUT | DC VOLTAGE | 12V | 24V | 48V |
| | CONSTANT CURRENT OPERATION VOLTAGE <small>Note.5</small> | 9 ~ 12V | 18 ~ 24V | 36 ~ 48V |
| | RATED CURRENT | 3.8A | 1.9A | 0.95A |
| | CURRENT RANGE | 0 ~ 3.8A | 0 ~ 1.9A | 0 ~ 0.95A |
| | RATED POWER | 45.6W | 45.6W | 45.6W |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 4.2Vp-p | 3.8Vp-p | 4.8Vp-p |
| | CURRENT ADJ. RANGE | 2.85 ~ 3.8A | 1.425 ~ 1.9A | 0.715 ~ 0.95A |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±10% | | |
| | LINE REGULATION | ±3.0% | | |
| | LOAD REGULATION | ±5.0% | | |
| SETUP TIME | 1000ms / 230VAC 2000ms / 115VAC at full load | | | |
| INPUT | VOLTAGE RANGE <small>Note.4</small> | 90 ~ 264VAC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | |
| | POWER FACTOR | PF ≥ 0.9 at 75 ~ 100% load, 115VAC / 230VAC | | |
| | EFFICIENCY(Typ.) | 86% | 89% | 89% |
| | AC CURRENT | 0.6A/115VAC 0.3A/230VAC | | |
| | INRUSH CURRENT(max.) | 42A/230VAC | | |
| | LEAKAGE CURRENT | <0.75mA / 240VAC | | |
| PROTECTION | OVER CURRENT <small>Note.5</small> | 100 ~ 110% Protection type : Constant current limiting, recovers automatically after fault condition is removed | | |
| | SHORT CIRCUIT | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | |
| | OVER VOLTAGE | 15 ~ 18V | 28 ~ 35V | 57 ~ 63V Protection type : Shut down o/p voltage, re-power on to recover |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70°C (Refer to output load derating curve) | | |
| | WORKING HUMIDITY | 20 ~ 95% RH non-condensing | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +80°C, 10 ~ 95% RH | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | |
| | VIBRATION | 10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes | | |
| SAFETY & EMC | SAFETY STANDARDS | TUV EN61347-1, EN61347-2-13 approved, design refer to UL60950-1 | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55015 | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2 Class C(≥ 75% load); EN61000-3-3 | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A | | |
| OTHERS | MTBF | 586.5Khrs min. MIL-HDBK-217F (25°C) | | |
| | DIMENSION | 101.6*50.8*28mm (L*W*H) | | |
| | PACKING | 0.16Kg; 96pcs/16.4Kg/0.89CUFT | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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, direct connecting to LED's is not suggested for models with "RIPPLE & NOISE" > ±10% and using additional drivers is highly recommended. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltage. Please check the derating curve for more details. 5. Constant current operation region is within 75% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design. 6. Heat sink HS1,HS2 can not be shorted. 7. Heat sink HS1 must have safety isolation distance with system case. | | | |

Mechanical Specification

Unit:mm



- ⚠ 1.HS1,HS2 can not be shorted.
- ⚠ 2.HS1 must have safety isolation distance with system case.

AC Input Connector (CN1) : JST B3P-VH or equivalent

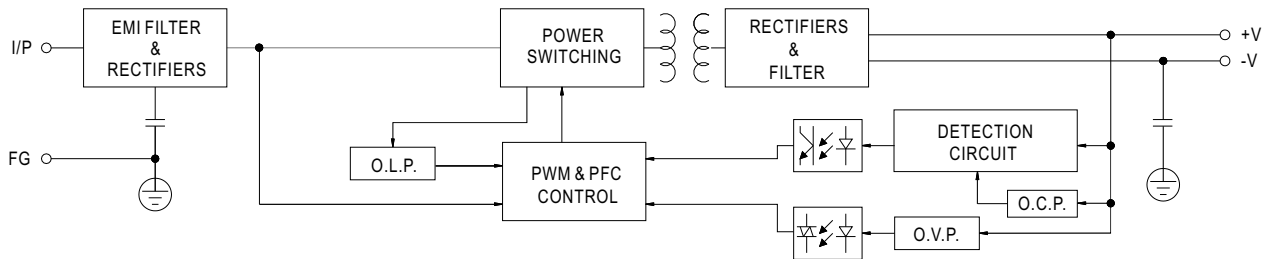
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/L | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/N | | |

DC Output Connector (CN2) : JST B2P-VH or equivalent

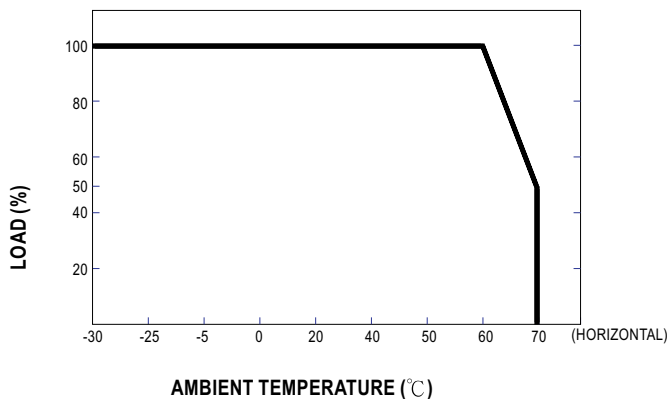
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | +V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | -V | | |

Block Diagram

fosc : 90KHz(115VAC)
120KHz(230VAC)



Derating Curve



Static Characteristics

