



■ Features :

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- Class II power (without earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- RCC control circuit and regulated
- LED indicator for power on
- Approvals: UL / CUL / TUV / BSMI / CCC / CB / FCC / CE
- 1 year warranty

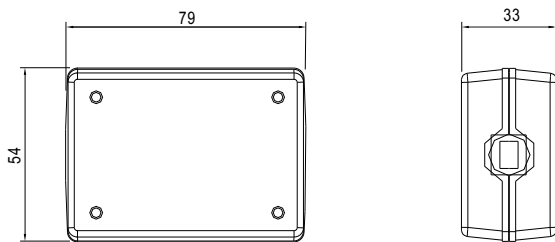
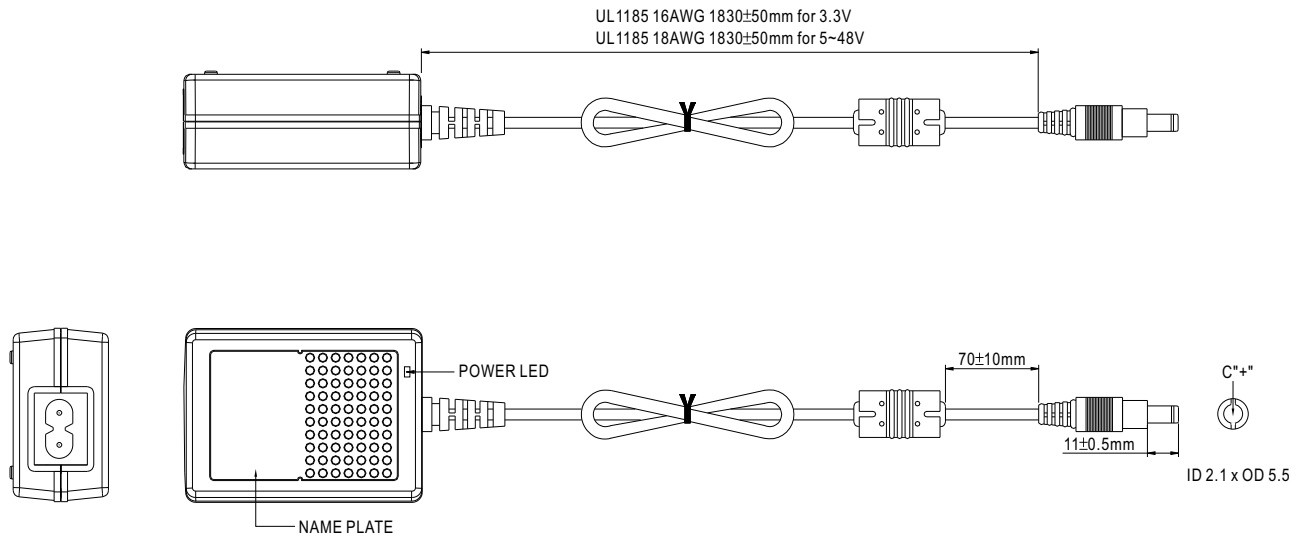


SPECIFICATION

| ORDER NO. | | ES18B03-P1J | ES18B05-P1J | ES18B07-P1J | ES18B09-P1J | ES18B12-P1J | ES18B15-P1J | ES18B18-P1J | ES18B24-P1J | ES18B28-P1J | ES18B48-P1J | |
|---------------------------------------|--|---|-------------|-------------|-------------|--------------|-------------------------------|-------------|-------------|--------------|---------------|-------|
| OUTPUT | SAFETY MODEL NO. | ES18B03-033 | ES18B05-050 | ES18B07-075 | ES18B09-090 | ES18B12-120 | ES18B15-150 | ES18B18-180 | ES18B24-240 | ES18B30-280 | ES18B48-480 | |
| | DC VOLTAGE <small>Note.2</small> | 3.3V | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 28V | 48V | |
| | RATED CURRENT | 2.72A | 3.0A | 2.0A | 2.0A | 1.50A | 1.20A | 1.0A | 0.75A | 0.64A | 0.375A | |
| | CURRENT RANGE | 0.3 ~ 2.72A | 0.3 ~ 3.0A | 0.3 ~ 2.0A | 0.2 ~ 2.0A | 0.15 ~ 1.50A | 0.1 ~ 1.20A | 0.1 ~ 1.0A | 0.1 ~ 0.75A | 0.06 ~ 0.64A | 0.05 ~ 0.375A | |
| | RATED POWER (max.) | 9W | 15W | 15W | 18W | 18W | 18W | 18W | 18W | 18W | 18W | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p | 50mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 100mVp-p | 150mVp-p | 180mVp-p | 240mVp-p | 240mVp-p | |
| | VOLTAGE ADJ. RANGE | Fixed | | | | | | | | | | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±5.0% | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% |
| | LINE REGULATION <small>Note.5</small> | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LOAD REGULATION <small>Note.6</small> | ±5.0% | ±5.0% | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | ±2.0% |
| SETUP, RISE, HOLD UP TIME | 300ms, 100ms, 16ms at full load | | | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 135 ~ 370VDC | | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | | |
| | EFFICIENCY (Typ.) | 55% | 70% | 72% | 72% | 74% | 77% | 78% | 80% | 81% | 82% | |
| | AC CURRENT | 0.5A / 100VAC | | | | | | | | | | |
| | INRUSH CURRENT (max.) | 40A / 230VAC | | | | | | | | | | |
| LEAKAGE CURRENT(max.) | 0.25mA / 240VAC | | | | | | | | | | | |
| PROTECTION | OVERLOAD | 110 ~ 200% rated output power | | | | | 130 ~ 350% rated output power | | | | | |
| | OVER VOLTAGE | 105 ~ 135% rated output voltage Protection type : Clamp by zener diode, output short | | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | 0 ~ +50°C (Refer to output load derating curve) | | | | | | | | | | |
| | WORKING HUMIDITY | 20% ~ 90% RH non-condensing | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / °C (0 ~ 50°C) | | | | | | | | | | |
| SAFETY & EMC <small>(Note. 7)</small> | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | | | |
| | SAFETY STANDARDS | UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved | | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254 class B | | | | | | | | | | |
| OTHERS | HARMONIC CURRENT | Compliance to EN61000-3-2,3, GB17625.1 | | | | | | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A | | | | | | | | | | |
| | MTBF | 500Khrs min. MIL-HDBK-217F(25°C) | | | | | | | | | | |
| CONNECTOR | DIMENSION | 79*54*33mm (L*W*H) | | | | | | | | | | |
| | PACKING | 220g ; 60pcs / 13.5kg / CARTON | | | | | | | | | | |
| CONNECTOR | PLUG | Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested | | | | | | | | | | |
| | CABLE | Standard type UL1185 6ft (with ferrite core) for stock ; Other type available by customer requested | | | | | | | | | | |
| NOTE | <p>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2. DC voltage: The output voltage set at point measure by plug terminal & 50% load.</p> <p>3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.</p> <p>4. Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5. Line regulation is measured from low line to high line at rated load.</p> <p>6. Load regulation is measured from 20% to 100% rated load</p> <p>7. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.</p> | | | | | | | | | | | |

Mechanical Specification

Unit:mm

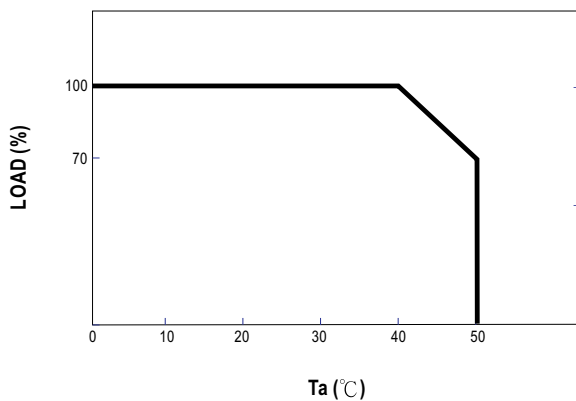


Plug Assignment

Standard plug: P1J (option)

| P1J | |
|--------|--------|
| P/N | OUTPUT |
| CENTER | + |

Derating Curve



Static Characteristics

