



9~18W AC-DC Single Output Desktop

ES18A series



Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Class I power (with 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



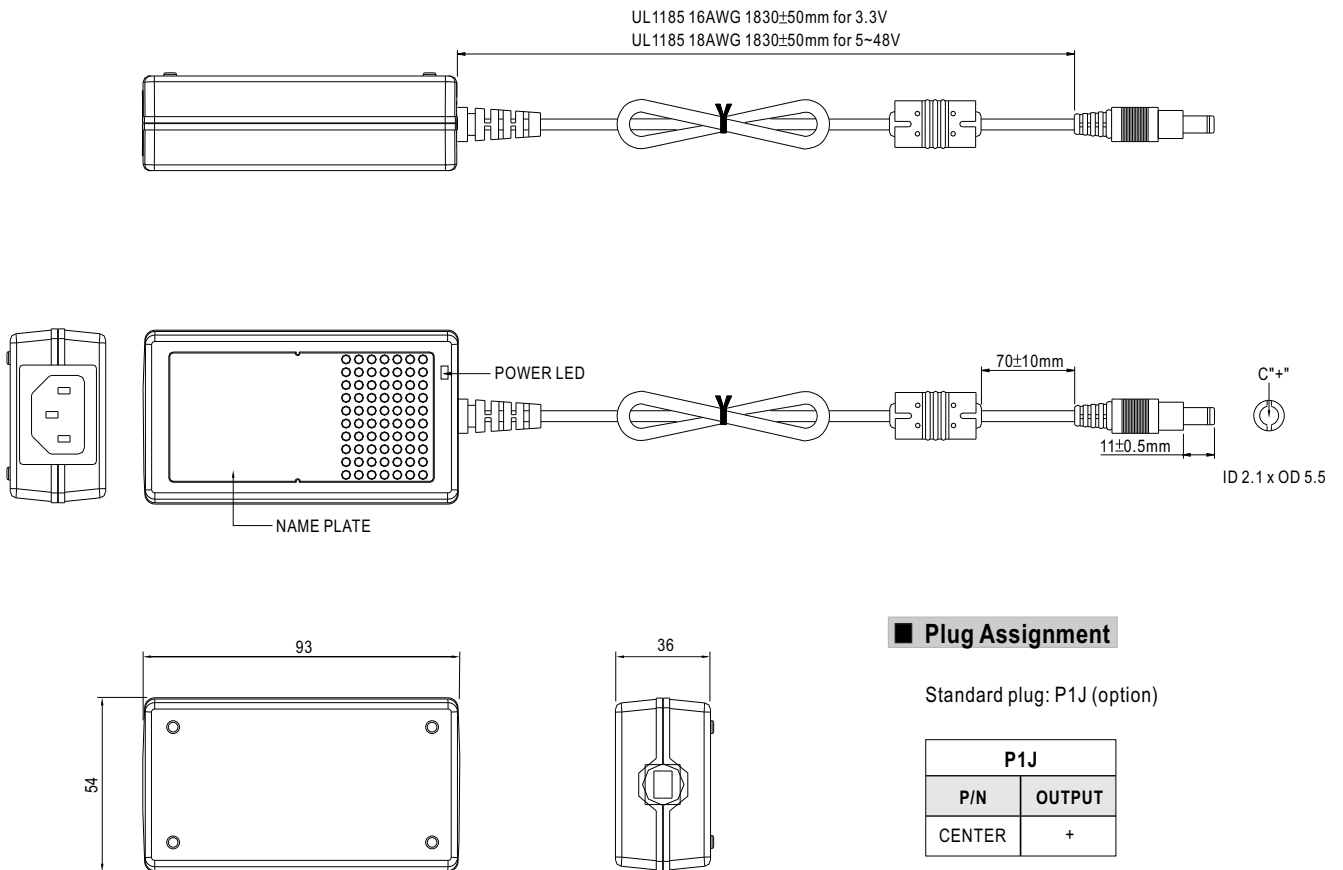
SPECIFICATION

ORDER NO.		ES18A03-P1J	ES18A05-P1J	ES18A07-P1J	ES18A09-P1J	ES18A12-P1J	ES18A15-P1J	ES18A18-P1J	ES18A24-P1J	ES18A28-P1J	ES18A48-P1J
OUTPUT	SAFETY MODEL NO.	ES18A03	ES18A05	ES18A07	ES18A09	ES18A12	ES18A15	ES18A18	ES18A24	ES18A28	ES18A48
	DC VOLTAGE Note.2	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.) Note.3	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 Note.4	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION Note.6	±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.)	0.75mA / 240VAC									
PROTECTION	OVERLOAD	110 ~ 200% rated output power					130 ~ 350% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	105 ~ 135% rated output voltage									
		Protection type : Clamp by zener diode, output short									
ENVIRONMENT	WORKING TEMP.	0 ~ +50℃ (Refer to output load derating curve)									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50℃)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943 Approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC , I/P-FG:1.5KVAC									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH									
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254 class B									
	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									
OTHERS	MTBF	500Khrs min. MIL-HDBK-217F(25℃)									
	DIMENSION	93*54*36mm (L*W*H)									
	PACKING	250g ; 60pcs / 15kg / 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									

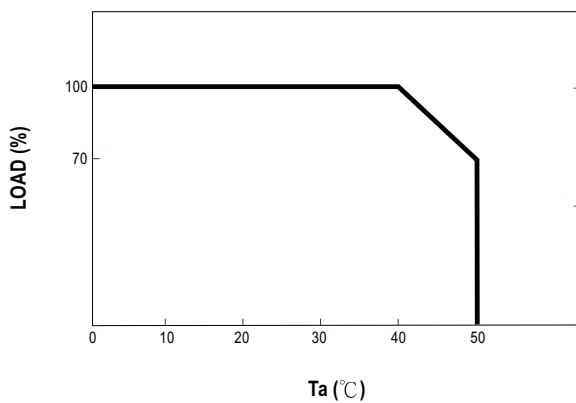
- 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.
- 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.
- 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- 4.Tolerance: includes set up tolerance, line regulation, load regulation.
- 5.Line regulation is measured from low line to high line at rated load.
- 6.Load regulation is measured from 20% to 100% rated load
- 7.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.

Mechanical Specification

Unit:mm



Derating Curve



Static Characteristics

