



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 / CB
- 1 year warranty

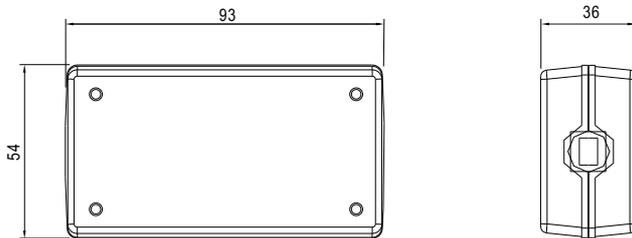
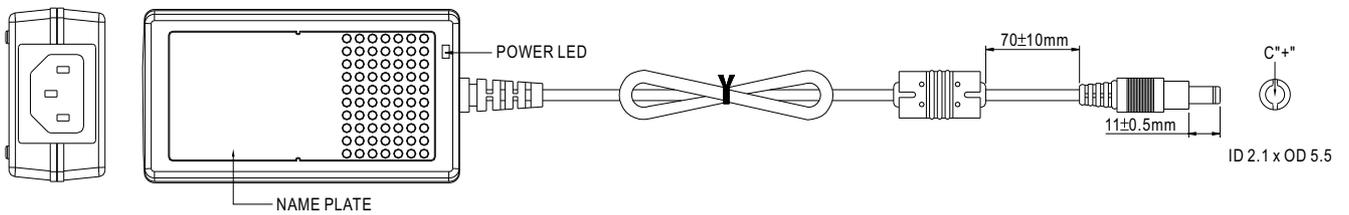
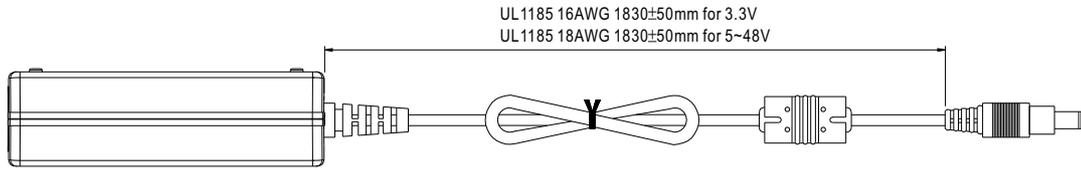


SPECIFICATION

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 <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%	
	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%	
	LOAD REGULATION <small>Note.6</small>	±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°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)										
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC <small>(Note. 7)</small>	SAFETY STANDARDS	UL60950-1, CSA C22.2, TUV EN60950-1 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°C / 70% RH										
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B										
	HARMONIC CURRENT	Compliance to EN61000-3-2,3										
	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°C)										
	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										
NOTE	<ol style="list-style-type: none"> All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. DC voltage: The output voltage set at point measure by plug terminal & 50% load. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. Tolerance: includes set up tolerance, line regulation, load regulation. Line regulation is measured from low line to high line at rated load. Load regulation is measured from 20% to 100% rated load 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. 											

Mechanical Specification

Unit:mm

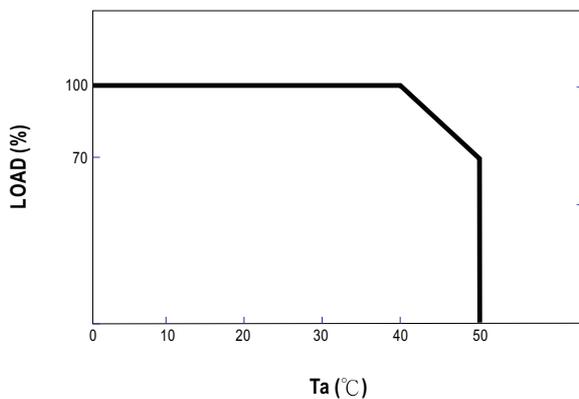


Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

Derating Curve



Static Characteristics

