



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



	SAFETY MODEL NO.				ES18A09-P1J			ES18A18-P1J			ES18A48-P1J	
-		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	
μ.	RATED CURRENT	2.72A	3.0A	2.0A	2.0A	1.50A	1.20A	1.0A	0.75A	0.64A	0.375A	
OUTPUT	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%	±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											
	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC										
INPUT	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 / 24	0VAC									
PROTECTION		110 ~ 200% rated output power 130 ~ 350% rated output power										
	OVERLOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed										
		105 ~ 135% rated output voltage										
	OVER 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℃, 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 (Note. 7)	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*36mn	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 typ	oe UL1185 6f	t (with ferrite o	ore) for stock	; Other type	available by o	customer requ	uested			
NOTE	1.All parameters are specified 2.DC voltage: The output volt 3.Ripple & noise are measure 4.Tolerance: includes set up 1 5.Line regulation is measure 6.Load regulation is measure 7.The power supply is consid	age set at po ed at 20MHz tolerance, line I from low line d from 20% t	oint measure by using a 1 e regulation, e to high line o 100% rate	by plug term 2" twisted pa load regulation at rated load d load	inal & 50% lo ir terminated n.	ad. with a 0.1uf	·		e system con	nplies with the	Э	



