



# 9~18W AC-DC Single Output Desktop

# ES18C series



### ■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C6
- Class I power ( with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Over load / Over voltage
- RCC control circuit and regulated
- Fully enclosed plastic case
- LED for power on
- Approvals: UL/ CUL / TUV / BSMI / CCC / CB / CE / FCC
- 1 year warranty

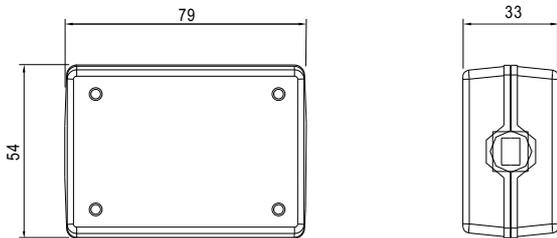
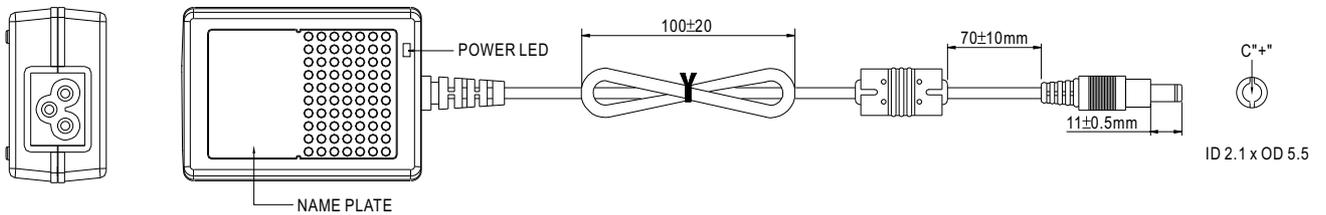
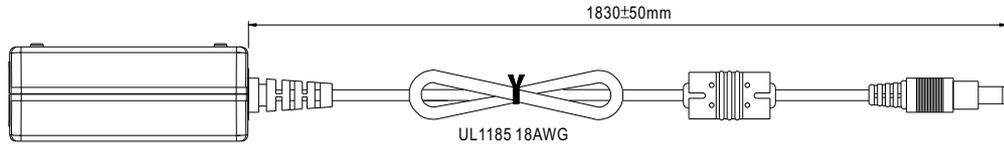


### SPECIFICATION

ORDER NO.		ES18C03-P1J	ES18C05-P1J	ES18C07-P1J	ES18C09-P1J	ES18C12-P1J	ES18C15-P1J	ES18C18-P1J	ES18C24-P1J	ES18C28-P1J	ES18C48-P1J	
OUTPUT	<b>SAFETY MODEL NO.</b>	ES18C03	ES18C05	ES18C07	ES18C09	ES18C12	ES18C15	ES18C18	ES18C24	ES18C28	ES18C48	
	<b>DC VOLTAGE</b> Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	28V	48V	
	<b>RATED CURRENT</b>	2.72A	3.0A	2.0A	2.0A	1.50A	1.20A	1.0A	0.75A	0.64A	0.375A	
	<b>CURRENT RANGE</b>	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	
	<b>RATED POWER (max.)</b>	9W	15W	15W	18W	18W	18W	18W	18W	18W	18W	
	<b>RIPPLE &amp; NOISE (max.)</b> Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	240mVp-p	
	<b>VOLTAGE ADJ. RANGE</b>	Fixed										
	<b>VOLTAGE TOLERANCE</b> Note.4	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	<b>LINE REGULATION</b> Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	<b>LOAD REGULATION</b> Note.6	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
<b>SETUP, RISE, HOLD TIME</b>	200ms, 50ms, 16ms at full load											
INPUT	<b>VOLTAGE RANGE</b>	90 ~ 264VAC 135 ~ 370VDC										
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz										
	<b>EFFICIENCY (Typ.)</b>	55%	70%	72%	74%	76%	77%	78%	80%	81%	82%	
	<b>AC CURRENT</b>	0.5A / 100VAC										
	<b>INRUSH CURRENT (max.)</b>	40A / 230VAC										
	<b>LEAKAGE CURRENT(max.)</b>	0.75mA / 240VAC										
PROTECTION	<b>OVER LOAD</b>	110 ~ 200% rated output power					130 ~ 350% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed										
	<b>OVER VOLTAGE</b>	105 ~ 135% rated output voltage										
		Protection type : Clamp by zener diode, output short										
ENVIRONMENT	<b>WORKING TEMP.</b>	0 ~ +50°C (Refer to output load derating curve)										
	<b>WORKING HUMIDITY</b>	20% ~ 90% RH non-condensing										
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH										
	<b>TEMP. COEFFICIENT</b>	±0.03% / °C (0 ~ 50°C)										
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC (Note. 7)	<b>SAFETY STANDARDS</b>	UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336, CCC GB4943 Approved										
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC, I/P-FG:1.5KVAC										
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG:100M Ohms / 500VDC										
	<b>EMI CONDUCTION &amp; RADIATION</b>	Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254 class B										
	<b>HARMONIC CURRENT</b>	Compliance to EN61000-3-2,3, GB17625.1										
	<b>EMS IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, Light industry level, criteria A										
OTHERS	<b>MTBF</b>	500Khrs min. MIL-HDBK-217F(25°C)										
	<b>DIMENSION</b>	79*54*33mm (L*W*H)										
	<b>PACKING</b>	220g ; 60pcs / 13kg / CARTON										
CONNECTOR	<b>PLUG</b>	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested										
	<b>CABLE</b>	Standard type UL1185 6ft (with ferrite core) for stock ; Other type available by customer requested										
NOTE	<ol style="list-style-type: none"> <li>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH. Ambient.</li> <li>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</li> <li>4.Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>5.Line regulation is measured from low line to high line at rated load.</li> <li>6.Load regulation is measured from 20% to 100% rated load</li> <li>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.</li> </ol>											

■ Mechanical Specification

Unit:mm

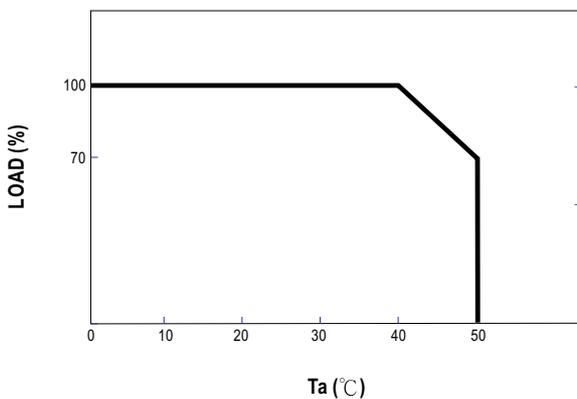


■ Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

■ Derating Curve



■ Static Characteristics

