20~25W AC-DC Single Output Desktop

ES25B series



Features :

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- Class Ⅱ power (without earth pin)
- Full output 5~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- PWM 3842 control circuit and regulated
- LED indicator for power on
- Approvals: UL / CUL / TUV / BSMI / CB / FCC / CE
- 1 year warranty

SPECIFICATION

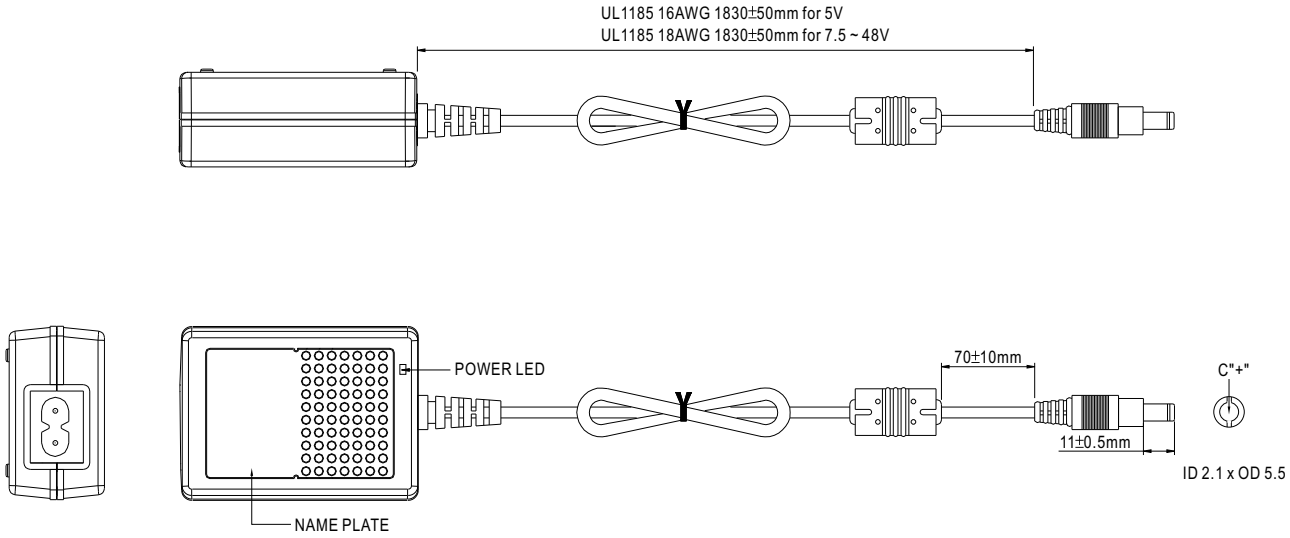
ORDER NO.		ES25B05-P1J	ES25B07-P1J	ES25B09-P1J	ES25B12-P1J	ES25B15-P1J	ES25B18-P1J	ES25B24-P1J	ES25B28-P1J	ES25B36-P1J	ES25B48-P1J
OUTPUT	SAFETY MODEL NO.	ES25B05-050	ES25B07-075	ES25B09-090	ES25B12-120	ES25B15-150	ES25B18-180	ES25B24-240	ES25B30-280	ES25B36-360	ES25B48-480
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	28V	36V	48V
	RATED CURRENT	4.0A	2.93A	2.77A	2.08A	1.66A	1.38A	1.04A	0.89A	0.69A	0.52A
	CURRENT RANGE	0.4 ~ 4.0A	0.3 ~ 2.93A	0.2 ~ 2.77A	0.1 ~ 2.08A	0.1 ~ 1.66A	0.1 ~ 1.38A	0.1 ~ 1.04A	0.1 ~ 0.89A	0.06 ~ 0.69A	0.05 ~ 0.52A
	RATED POWER (max.)	20W	22W	25W	25W	25W	25W	25W	25W	25W	25W
	RIPPLE & NOISE (max.) Note.3	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	240mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±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%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%
	SETUP, RISE, HOLD UP TIME	600ms, 50ms, 16ms at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	70%	72%	76%	76%	78%	80%	82%	82%	82%	82%
	AC CURRENT	0.7A / 100VAC									
	INRUSH CURRENT (max.)	40A / 230VAC									
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC									
PROTECTION	OVERLOAD	110 ~ 150% rated output power			130 ~ 180% rated output power						
		Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	105 ~ 135% rated output voltage									
		Protection type : Shut down o/p voltage, re-power on to recover									
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% / ℃ (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 Approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH									
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B									
	HARMONIC CURRENT	Compliance to EN61000-3-2,3									
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, Light industry level, criteria A									
OTHERS	MTBF	500Khrs min. MIL-HDBK-217F(25℃)									
	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									

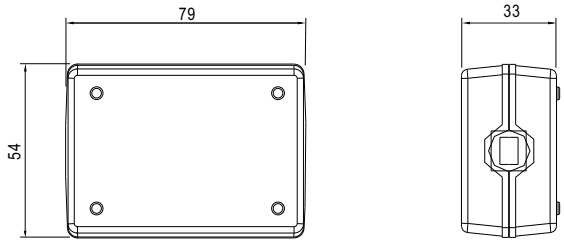
NOTE

1.All parameters are specified at 230VAC input, rated load, 25℃ 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



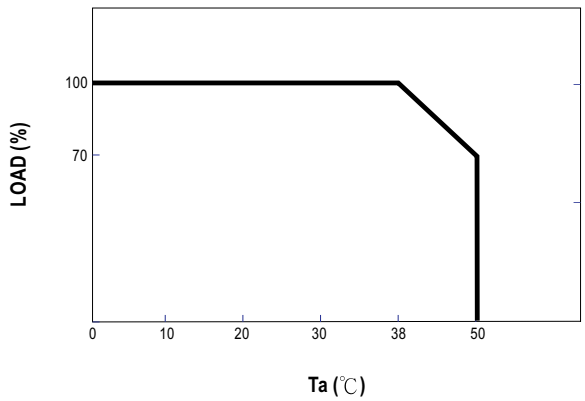


■ Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

■ Derating Curve



■ Static Characteristics

