COTEK

150W Single Output Power Supply AK-150 series

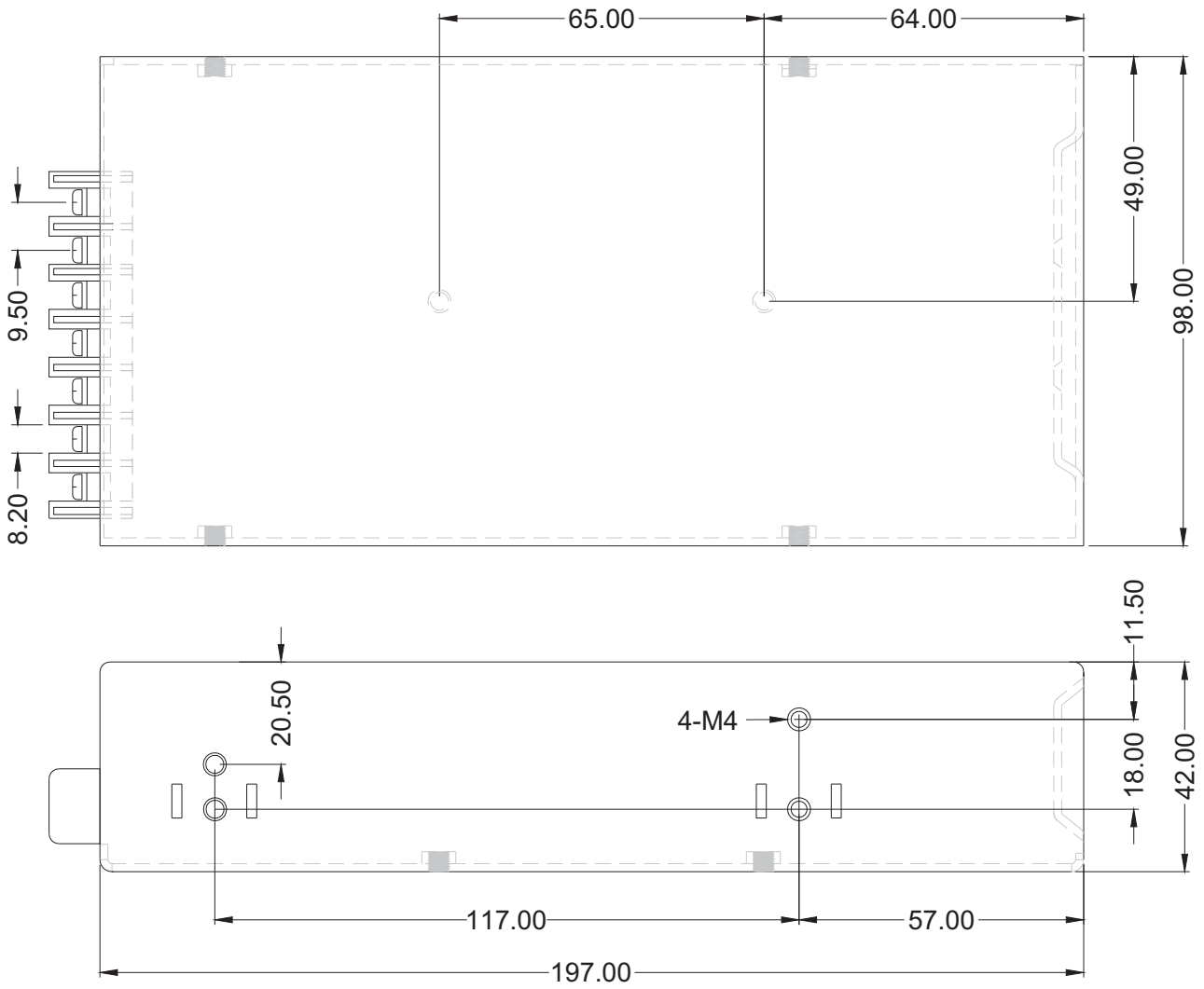
Features :

- Green design, No-load power consumption < 0.7W
- Universal AC input with active PFC
- Protections: Short circuit / Over load / Over voltage
  Brown-out (Low AC Input Voltage)
- Cooling by free air convection
- Power ON with LED indicator
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- Withstand 2G vibration test
- 100% full load burn-in test
- High efficiency, long life and high reliability
- 3 years warranty

MODEL		AK-150-05	AK-150-7.5	AK-150-12	AK-150-13.5	AK-150-15	AK-150-24	AK-150-27	AK-150-48
Output	DC Voltage Range	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	Rated Current	20A	20A	12.5A	11.2A	10A	6.3A	5.6A	3.2A
	Current Range	0 ~ 20A	0 ~ 20A	0 ~ 12.5A	0 ~ 11.2A	0 ~ 10A	0 ~ 6.3A	0 ~ 5.6A	0 ~ 3.2A
	Rated Power	100W	150W	150W	151.2W	150W	151.2W	151.2W	153.6W
	Ripple & Noise (max.) Note.2	100 mVp-p	100 mVp-p	100 mVp-p	100 mVp-p	100 mVp-p	120 mVp-p	120 mVp-p	200 mVp-p
	Voltage Adj. Range	4.5~5.5V	6.75~8.25V	10.8~13.2V	12.15~14.9V	13.5~16.5V	21.6~26.4V	24.3~29.7V	43.2~52.8V
	Voltage Tolerance Note.3	±2%	±1.5%	±1%	±1%	±1%	±1%	±1%	±1%
	Line Regulation	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Setup, Rise Time	<2500ms, <110ms at full load							
	Hold Up Time (Typ.)	>32ms / 230VAC, >10ms / 115VAC at full load							
Input	Voltage Range Note.4	90 ~ 264VAC 127 ~ 370VDC							
	Frequency Range	50 / 60Hz							
	Power Factor (Typ.)	>0.92 / 230VAC >0.98 / 115VAC at full load							
	Efficiency (Typ.)	79%	82%	86%	87%	87%	87%	89%	89%
	AC Current (Typ.)	1.8 A / 115VAC 0.9A / 230VAC							
	Inrush Current (Typ.)	30A / 115VAC 55A / 230VAC							
	Leakage Current	< 2mA / 230VAC							
Protection	Over Load	> 105% rated output power							
		Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	Over Voltage	115% ~ 150% rated output voltage							
		Protection type : latch-off mode							
	Over Temperature	90°C ±5°C detect on Air							
		Protection type : shut down o/p voltage, after temperature goes down ang re-power ON to recover							
Environment	Working Temp.	-20°C ~ +70°C (Refer to output load de-rating curve)							
	Working Humidity	20 ~ 90% R.H non-condensing							
	Storage Temp., Humidity	-40 ~ +85°C 10 ~95% R.H							
	Temp.Coefficient	±0.03%/°C (0 ~ 50°C)							
	Vibration	10 ~ 500Hz, 2G 10min./1 cycle, period for 60 min. Each along X,Y,Z axes							
Safety & EMC Note.5	Safety Standards	UL 60950-1, 2nd Edition, TUV EN60950-1 : 2006+A11 Approved							
	Withstand Voltage	I/P - O/P : 3KVAC(4242 DC) I/P - FG : 1.5KVAC(2121 DC) O/P-FG : 0.5KVAC(707DC), 1 min							
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC							
	EMI Conduction & Radiation	EN55022: 2006 Class B							
	Harmonic Current	EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005							
	EMS Immunity	EN61204-3: 2000, EN55024: 1998+A1: 2001+A2: 2003 light industry level, criteria A							
Others	MTBF	161K HRS Compliance : MIL-HDBK-217F							
	Cooling	Cooling by free convection							
	Dimension (WxHxD)(mm/inch)	197x98x42mm / 7.76x3.86x1.65inch							
	Packing	0.7kg ; 24Pcs/16.8kg							
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. 4. De-rating may be needed under low input voltages. Please check the de-rating curve for more details. 5. 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.								

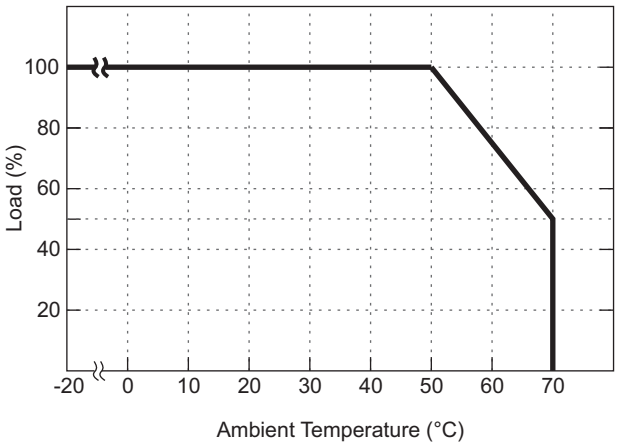
Mechanical Specification

Unit : mm



De-rating Curve

Load VS. Temp.



Load VS. I/P Voltage