

## 480W Single Output Industrial DIN Rail Power Supply

# AKL10007-xx





### **Features**:

- Built-in passive PFC function compliance to EN61000-3-2
- High efficiency 89% and low dissipation
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test

#### **SPECIFICATION**

MODEL		AKL10007-01	AKL10007-02		
OUTPUT	DC VOLTAGE	24V	48V		
	RATED CURRENT	20A	10A		
	CURRENT RANGE	0 ~ 20A	0 ~ 10A		
	RATED POWER	480W	480W		
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p		
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 53V		
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%		
	LOAD REGULATION	±1.0%	±1.0%		
	SETUP, RISE TIME	1200ms, 40ms/230VAC at full load			
	HOLD TIME (Typ.)	16ms/230VAC at full load			
	VOLTAGE RANGE	180 ~ 264VAC 250 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
INPUT	POWER FACTOR (Typ.)	≥0.7			
	EFFICIENCY (Typ.)	89%			
	AC CURRENT (Typ.)	4A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC			
	LEAKAGE CURRENT	<3.5mA / 240VAC			
	OVER LOAD	105 ~ 150% rated output power			
		Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	NOVER VOLTAGE	30 ~ 36V	54 ~ 60V		
PROTECTIO		Protection type : Shut down o/p voltage, re-power on t	o recover		
	OVER TEMPERATURE	100C ± 5°C (TSW : Detect on heatsink of power switch)			
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down			
	WORKING TEMP.	-20 ~ +70 °C (Refer to output load derating curve)			
ENVIRONMENT	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	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			
	SAFETY STANDARDS	UL508µL60950-1,TUV EN60950-1 Approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC			
EMC					
(Note 4)	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61000-6-2 (EN50082-2) Heavy industry level, criteria A			
OTHERS	MTBF	180.9Khrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	227*125.2*100mm (W*H*D)			
	PACKING	2.4Kg; 6pcs/15Kg/1.75CUFT			
NOTE	<ul><li>2. Ripple &amp; noise are measure</li><li>3. Tolerance : includes set up</li></ul>	y mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ad at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  ered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets			

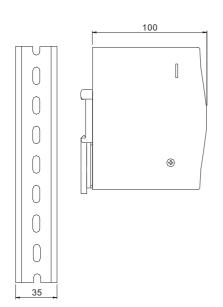


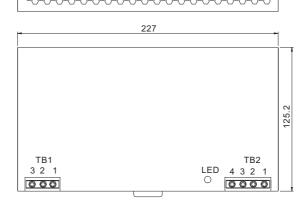
# 480 W Single Output Industrial DIN Rail with PFC Function

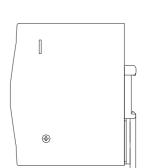
# AKL10007-xx



Case No.930 Unit:mm







+V ADJ.

ADMISSIBLE DIN-RAIL:TS35/7.5 ORTS35/15

TB1 Terminal Pin. No Assignment

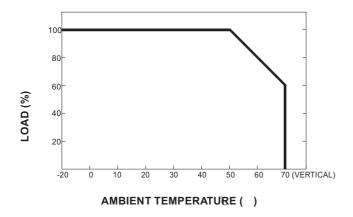
Pin No.	Assignmen
1	AC/L(DC+)
2	AC/N(DC-)
3	FG⊕

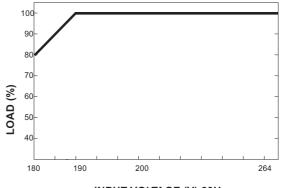
TB2 Terminal Pin. No Assignment

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT-V

### **Derating Curve**

## **Output Derating VS Input Voltage**





INPUT VOLTAGE (V) 60Hz

file:	Serial-No.
date: 15.02.2007	XX-XXXX