

40083: CONVERTER 230V LED 24V 90VA IP67 DIMMABLE 1-10V

Features :

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 90.5%
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- Fully encapsulated with IP67 level (Note.6)
- Class power unit, no FG
- Class 2 power unit
- Built-in 3 in 1 dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations



SPECIFICATION

MODEL	40083			
OUTPUT	DC VOLTAGE	24V		
	CONSTANT CURRENT REGION Note.4	14.4 ~ 24V		
	RATED CURRENT	3.75A		
	RATED POWER	90W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p		
	VOLTAGE TOLERANCE Note.3	±4.0%		
	LINE REGULATION	±0.5%		
	LOAD REGULATION	±0.5%		
	SETUP, RISE TIME Note.7	2000ms, 200ms at 95% load	230VAC / 115VAC	
	HOLD UP TIME(Typ.)	16ms/230VAC	16ms/115VAC at full load	
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC	127 ~ 431VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.97/115VAC, PF>0.96/230VAC, PF>0.95/277VAC at full load		
	EFFICIENCY (Typ.)	90%		
	AC CURRENT (Typ.)	0.95A / 115VAC	0.5A / 230VAC	0.4A / 277VAC
	INRUSH CURRENT(Typ.)	COLD START 55A at 230VAC		
	LEAKAGE CURRENT	<0.75mA / 277VAC		
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	28 ~ 34V Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	90 +/-10 (RTH2) Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-40 ~ +70°C		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	+/-0.03%/°C (0-50°C)		
	VIBRATION	10 ~ 500Hz, 5G 12min./1 cycle, period for 72min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS	UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), EN61347-1, EN61347-2-13 independent, IP67, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1		
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC		
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 2.5 ° C / 70% RH		
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 CLASS C, EN61000-3-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level(surge 2KV), criteria A		
OTHERS	MTBF	267.2K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	161*61*36mm (L*W*H)		
	PACKING	0.7Kg; 20pcs/15Kg/0.73CUFT		
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design. Derating may be needed under low input voltages. Please check the static characteristics for more details. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 			

Mechanical Specification

