

40082: CONVERTER 230V LED 24V 60VA IP67 DIMMABLE 1-10V

Features :

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 90%
- 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 II 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
- 3 years warranty



SPECIFICATION

MODEL		60W-24V		
OUTPUT	DC VOLTAGE	24V		
	CONSTANT CURRENT REGION Note.4	14.4 ~ 24V		
	RATED CURRENT	2.5A		
	RATED POWER	60W		
	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	1000ms, 80ms / 115VAC at full load	1000ms, 80ms / 230VAC	
	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>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)		
	EFFICIENCY (Typ.)	89%		
	AC CURRENT (Typ.)	0.8A / 115VAC	0.4A / 230VAC	0.32A / 277VAC
	INRUSH CURRENT (Typ.)	COLD START 55A(twidth=270µs measured at 50% Ipeak) at 230VAC		
	LEAKAGE CURRENT	<0.75mA / 240VAC		
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.		
	OVER VOLTAGE	Protection type : Shut down and latch off o/p voltage, re-power on to recover 28 ~ 35V		
	OVER TEMPERATURE	90°C ±10°C (RTH2) Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")		
	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./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS Note.6	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 / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load) ; 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	396.7K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	162.5*43*32mm (L*W*H)		
	PACKING	0.45Kg; 32pcs/15.4Kg/0.93CUFT		

- 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 0.1µf & 47µf parallel capacitor.
 3. Tolerance : includes set up tolerance, line regulation and load regulation.
 4. 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.
 5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
 6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
 7. 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.
 8. 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-quality EMC Directive on the complete installation again.
 9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

Mechanical Specification

