75W Single Output LED Power Supply

CEN-75 series

Features :

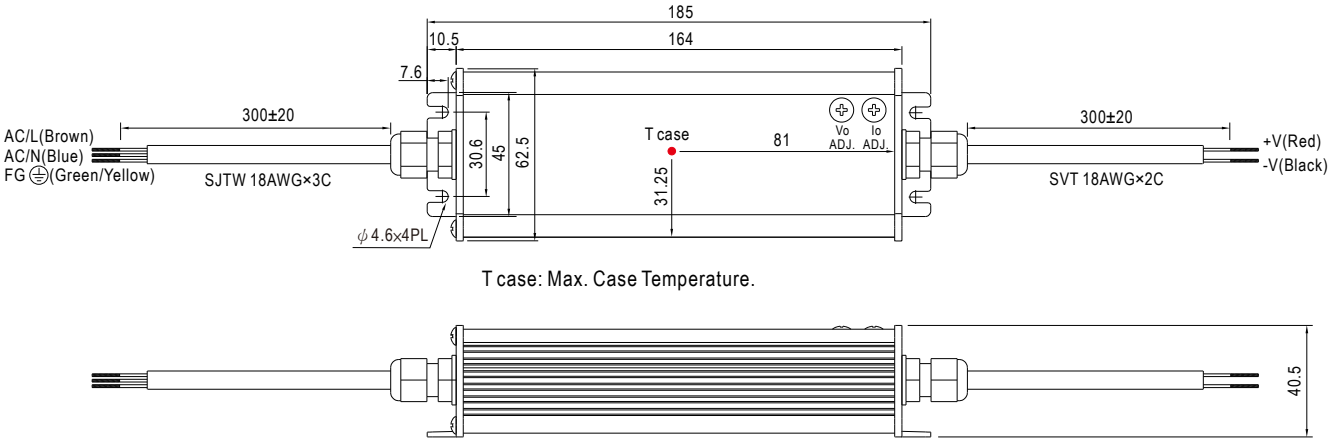
- Universal AC input / Full range (up to 295VAC)
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Output voltage and constant current level adjustable
- Built-in active PFC function
- IP66 design for indoor or outdoor installations
- Class 2 power unit
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- 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		CEN-75-36
OUTPUT	DC VOLTAGE	36V
	CONSTANT CURRENT REGION Note.5	27 ~ 36V
	RATED CURRENT	2.1A
	CURRENT RANGE	0 ~ 2.1A
	RATED POWER	75.6W
	RIPPLE & NOISE (max.) Note.2	3.6Vp-p
	VOLTAGE ADJ. RANGE (SVR1)	33 ~ 40V
	CURRENT ADJ. RANGE(SVR2)	1.58 ~ 2.1A
	VOLTAGE TOLERANCE Note.3	±10%
	LINE REGULATION	±3.0%
	LOAD REGULATION	±5.0%
	SETUP TIME	500ms / 230VAC 1200ms / 115VAC at full load
INPUT	VOLTAGE RANGE Note.4	90 ~ 295VAC 127 ~ 417VDC
	FREQUENCY RANGE	47 ~ 63Hz
	POWER FACTOR (Typ.)	PF>0.97/115VAC, PF>0.95/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)
	EFFICIENCY (Typ.)	90%
	AC CURRENT (Typ.)	1.1A/115VAC 0.55A/230VAC 0.4A/277VAC
	INRUSH CURRENT (Typ.)	COLD START 45A(twidth=85μs measured at 50% Ipeak) at 230VAC
	LEAKAGE CURRENT	<0.75mA / 240VAC
PROTECTION	OVER CURRENT	95 ~ 110%
		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	47 ~ 52V
		Protection type : Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")
	WORKING HUMIDITY	20 ~ 95% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
SAFETY & EMC	SAFETY STANDARDS	UL879, UL8750, CSA C22.2 No.207-M89, CSA C22.2 No.250.0-08, TUV EN61347-1, EN61347-2-13, IP66, J61347-1, J61347-2-13 approved
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≧75% load) ; EN61000-3-3
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61547, light industry level (surge 4KV), criteria B
OTHERS	MTBF	522.2Khrs min. MIL-HDBK-217F (25℃)
	DIMENSION	185*62.5*40.5mm (L*W*H)
	PACKING	0.6Kg;24pcs/15.4Kg/1.29CUFT
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltage. Please check the static characteristics for more details. 5. Please refer to "DRIVING METHODS OF LED MODULE". 6. 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. 7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.	

■ Mechanical Specification

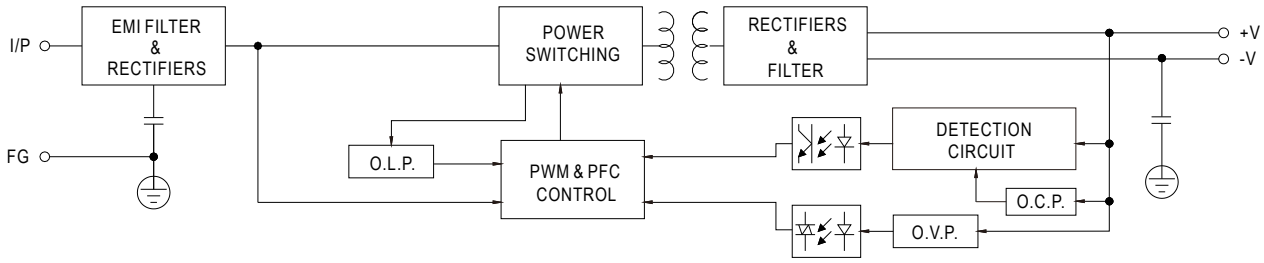
Case No.993B Unit:mm



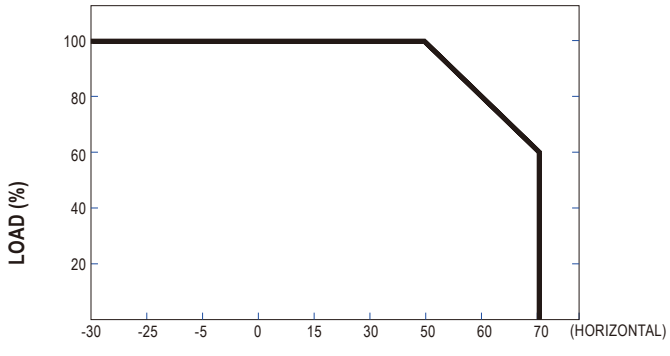
T case: Max. Case Temperature.

■ Block Diagram

fosc : 50KHz(115VAC)
75KHz(230VAC)

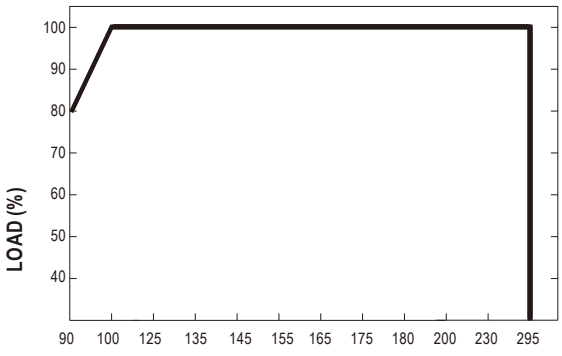


■ Derating Curve



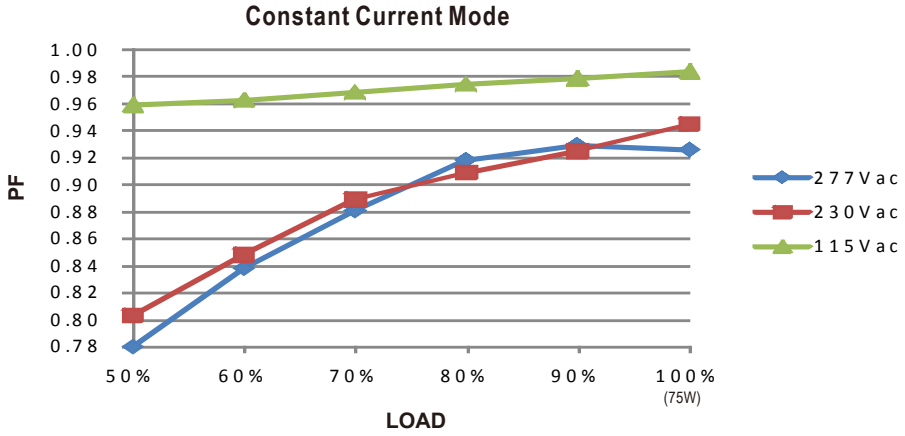
AMBIENT TEMPERATURE (℃)

■ Static Characteristics



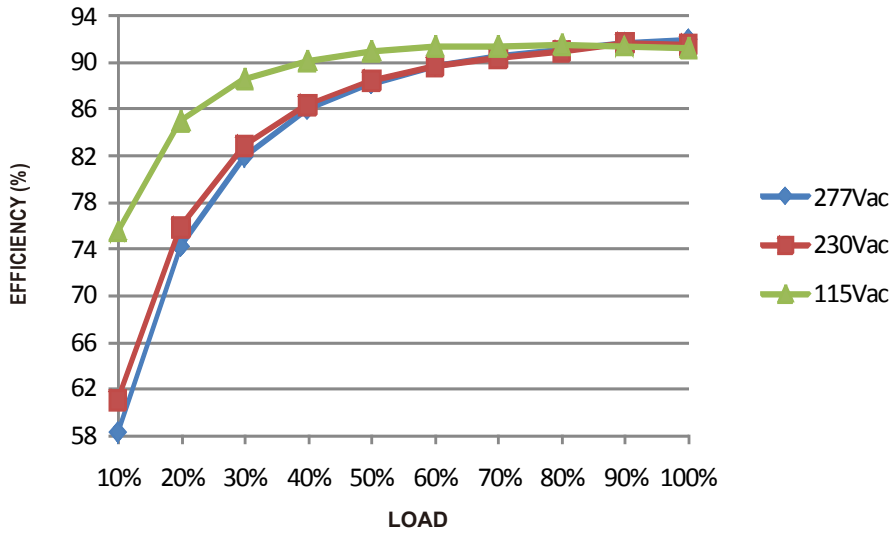
INPUT VOLTAGE (V) 60Hz

■ Power Factor Characteristic



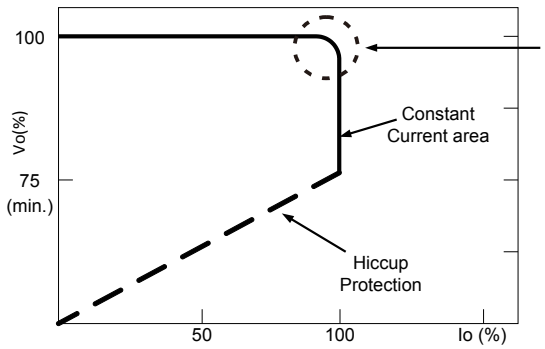
■ EFFICIENCY vs LOAD (48V Model)

CEN-75 series possess superior working efficiency that up to 91% can be reached in field applications.



■ DRIVING METHODS OF LED MODULE

This LED power supply is suggested to work in constant current mode area (CC) to drive the LEDs.



Typical LED power supply I-V curve

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.