



### ■ 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

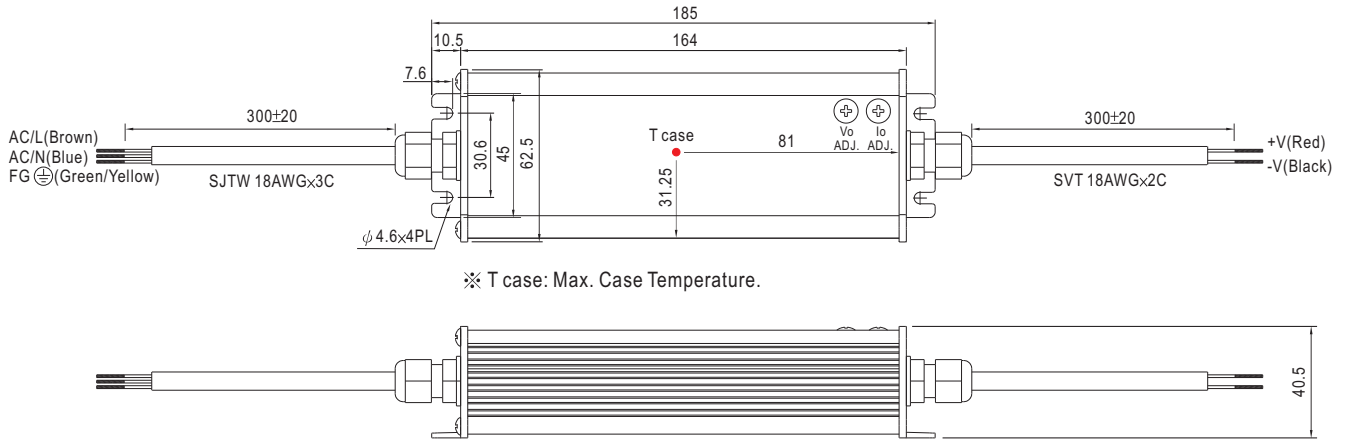


### SPECIFICATION

MODEL	CEN-75-15	CEN-75-20	CEN-75-24	CEN-75-30	CEN-75-36	CEN-75-42	CEN-75-48	CEN-75-54		
OUTPUT	DC VOLTAGE	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT OPERATION VOLTAGE Note.5	11.25 ~ 15V	15 ~ 20V	18 ~ 24V	22.5 ~ 30V	27 ~ 36V	31.5 ~ 42V	36 ~ 48V	40.5 ~ 54V	
	RATED CURRENT	5A	3.75A	3.15A	2.5A	2.1A	1.8A	1.57A	1.4A	
	CURRENT RANGE	0 ~ 5A	0 ~ 3.75A	0 ~ 3.15A	0 ~ 2.5A	0 ~ 2.1A	0 ~ 1.8A	0 ~ 1.57A	0 ~ 1.4A	
	RATED POWER	75W	75W	75.6W	75W	75.6W	75.6W	75.36W	75.6W	
	RIPPLE & NOISE (max.) Note.2	2.7Vp-p	2Vp-p	2.7Vp-p	3Vp-p	3.6Vp-p	4Vp-p	4.6Vp-p	5Vp-p	
	VOLTAGE ADJ. RANGE (svr1)	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	37 ~ 46V	43 ~ 53V	49 ~ 58V	
	CURRENT ADJ. RANGE (svr2)	3.75 ~ 5A	2.81 ~ 3.75A	2.36 ~ 3.15A	1.88 ~ 2.5A	1.58 ~ 2.1A	1.35 ~ 1.8A	1.18 ~ 1.57A	1.05 ~ 1.4A	
	VOLTAGE TOLERANCE Note.3	±10%								
	LINE REGULATION	±3.0%								
LOAD REGULATION	±5.0%									
SETUP TIME	1400ms / 230VAC 2800ms / 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.)	87%	88%	89%	90%	90%	90%	91%	91%	
	AC CURRENT (Typ.)	1.1A/115VAC	0.55A/230VAC	0.4A/277VAC						
	INRUSH CURRENT (Typ.)	45A/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	17.5 ~ 21V	22.8 ~ 26V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 52V	54 ~ 60V	59 ~ 65V	
	OVER TEMPERATURE	85°C ±10°C (RTH1) Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	-30 ~ +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	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:1.88KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 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	522.2K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	185*62.5*40.5mm (L*W*H)								
	PACKING	0.56Kg;24pcs/14.4Kg/1.11CUFT								
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</li> <li>5. Constant current operation region is within 75% ~ 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.</li> <li>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.</li> <li>7. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</li> </ol>									

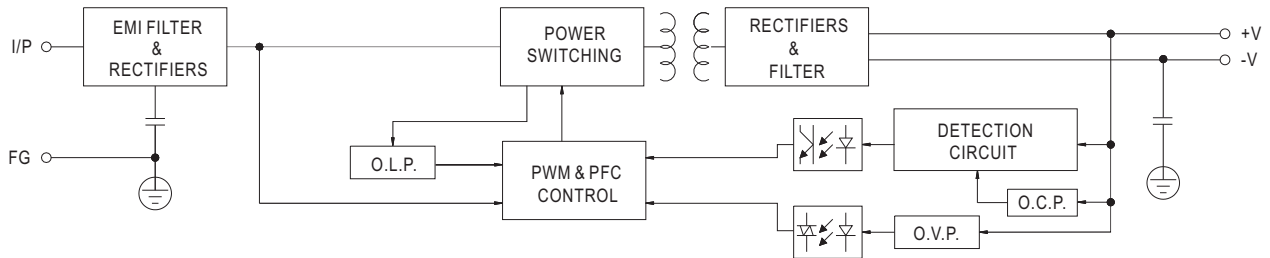
**Mechanical Specification**

Case No.993B Unit:mm

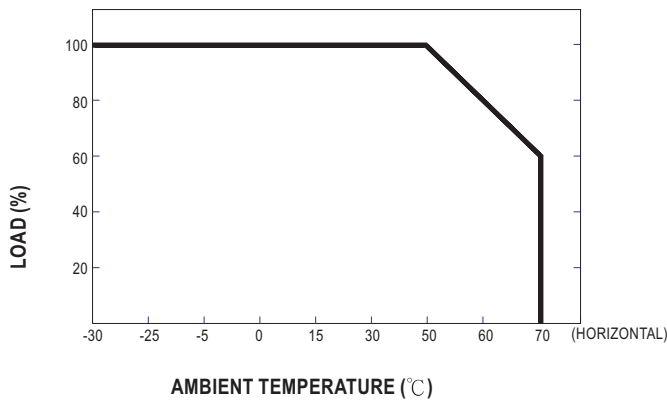


**Block Diagram**

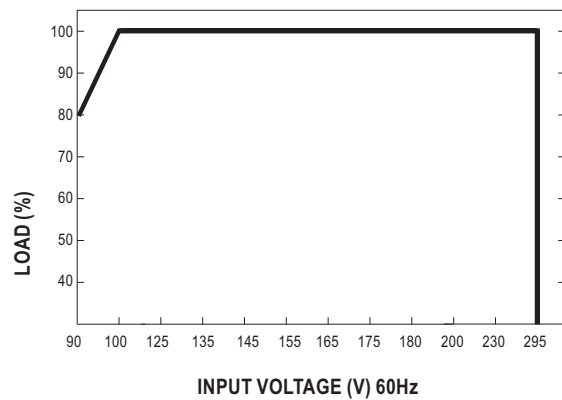
fosc : 50KHz(115VAC)  
75KHz(230VAC)



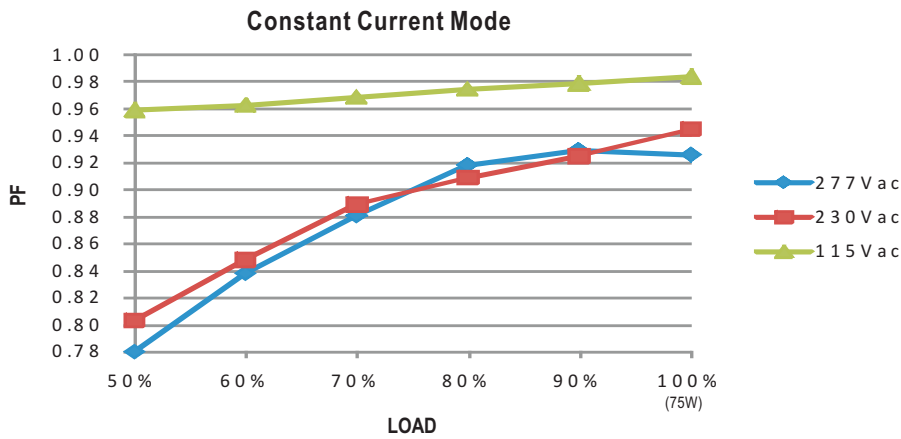
**Derating Curve**



**Static Characteristics**

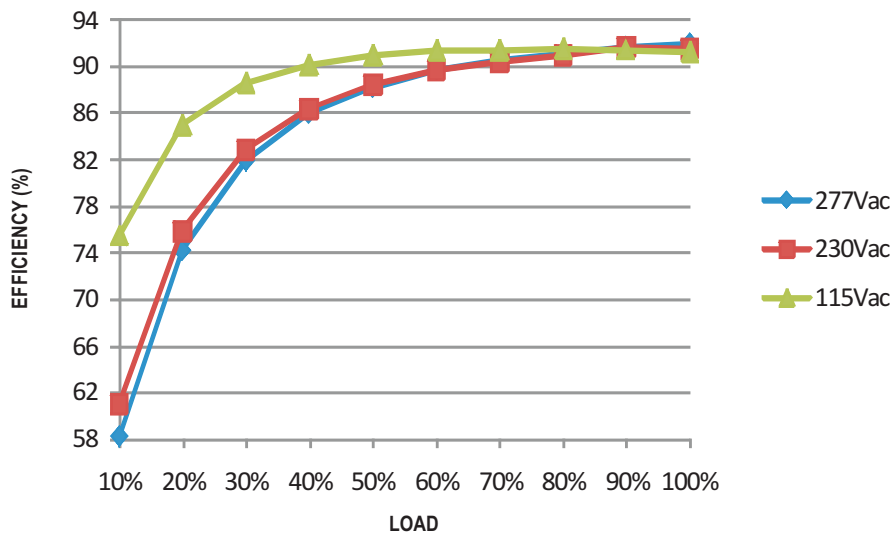


**Power Factor Characteristic**



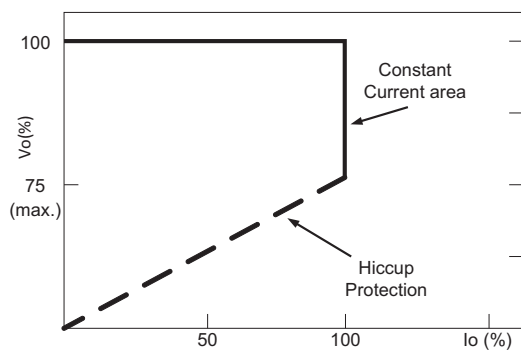
**EFFICIENCY vs LOAD (48V Model)**

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