

75W Single Output LED Power Supply

CEN-75 series



Features :

- Universal AC input / Full range (up to 295VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Output voltage and constant current level adjustable
- Built-in active PFC function
- IP66 design for indoor or outdoor installations
- · 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

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
	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
OUTPUT	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)		17~22V	22~27V	27~33V	33 ~ 40V	37~46V	43~53V	49~58V
	CURRENT ADJ. RANGE(SVR2)		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								
	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>0.97/115V/	AC, PF>0.95/23	0VAC, PF>0.9/2	77VAC at full loa	d (Please refer to	o "Power Factor (Characteristic" cu	urve)
	EFFICIENCY (Typ.)	87%	88%	89%	90%	90%	90%	91%	91%
	AC CURRENT (Typ.)	1.1A/115VAC	0.55A/230VA	C	1	1			
	INRUSH CURRENT (Typ.)	45A/230VAC							
	LEAKAGE CURRENT	<0.75mA/240VAC							
PROTECTION		95 ~ 110%							
	OVER CURRENT	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
		Protection type : Shut down o/p voltage, re-power on to recover							
		85℃±10℃ (RTH1)							
	OVER TEMPERATURE	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 STANDARDS	UL879, UL8750, TUV EN61347-1, EN61347-2-13, J61347-1, J61347-2-13, IP66 approved							
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC							
SAFETY &		I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH							
EMC	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (\ge 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 A							
OTHERS	MTBF	522.2Khrs min. MIL-HDBK-217F (25° C)							
	DIMENSION	183*62.5*40.5mm (L*W*H)							
	PACKING	0.56Kg;24pcs/14.4Kg/1.11CUFT							
IOTE	 All parameters NOT special Ripple & noise are measure Tolerance : includes set up Derating may be needed ur Constant current operation reconfirm special electrical of The power supply is consid 	Iv 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. hder low input voltage. Please check the static characteristics for more details. region is within 75% ~ 100% rated output voltage. This is the suitable operation region for LED related applications, but plea requirements for some specific system design. ered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by ial 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.



CEN-75 series





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

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs. Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode [with LED driver, at area (A)] and CC mode [direct drive, at area (B)].



Typical LED power supply I-V curve