



60W Single Output AC Dimmable LED Power Supply

PCD-60 series

■ Features :

- AC phase-cut dimming
- Work with leading edge and trailing edge TRIAC dimmers
- 115VAC or 230VAC models available
- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- IP30 design
- Class II power unit, no FG
- Class 2 power unit
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty



(for B type only)



(for B type only)



SELV IP30



FC (for A type only)



(for PCD-60-500~1400)



US (except PCD-60-500~1400)



(for B type only)

PCD-60-500 **A** A : With AC input 90~ 135VAC.
B : With AC input 180~ 295VAC.

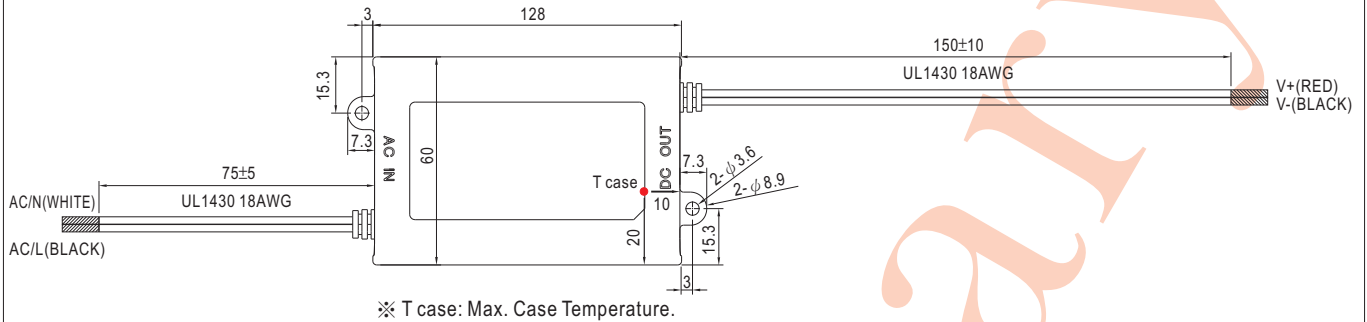
SPECIFICATION

MODEL		PCD-60-500	PCD-60-700	PCD-60-1050	PCD-60-1400	PCD-60-1750	PCD-60-2000	PCD-60-2400
OUTPUT	RATED CURRENT	500mA	700mA	1050mA	1400mA	1750mA	2000mA	2400mA
	OPERATING VOLTAGE RANGE	65 ~ 115V	50 ~ 86V	34 ~ 57V	25 ~ 43V	20 ~ 34V	18 ~ 30V	15 ~ 25V
	CURRENT RANGE	0 ~ 500mA	0 ~ 700mA	0 ~ 1050mA	0 ~ 1400mA	0 ~ 1750mA	0 ~ 2000mA	0 ~ 2400mA
	CURRENT ACCURACY	±5.0%						
	RATED POWER	57.5W	60.2W	59.85W	60.2W	59.5W	60W	60W
	RIPPLE & NOISE (max.) Note.1	4.6Vp-p	2.7Vp-p	2.2Vp-p	2Vp-p	1.5Vp-p	1.5Vp-p	1Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	140V	100V	63V	50V	50V	35V	35V
SETUP TIME		1000ms / 230VAC 2000ms / 115VAC at full load						
INPUT	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF>0.9/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)						
	EFFICIENCY (Typ.)	87%	86%	86%	85%	85%	85%	84%
	AC CURRENT (Typ.)	1.2A/115VAC 0.6A/230VAC						
	INRUSH CURRENT(max.)	10A/230VAC						
	LEAKAGE CURRENT	<0.5mA / 240VAC						
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.						
	OVER TEMPERATURE	95℃ ±10℃ (RTH1) Protection type : Shut down o/p voltage, re-power on to recover						
ENVIRONMENT	WORKING TEMP.	-30 ~ +60℃ (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, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes						
SAFETY & EMC	SAFETY STANDARDS	UL8750, CSA C22.2 No. 250.0-08(except for PCD-60-500~1400) ; ENEC EN613471, EN61347-2-13 independent(for B type only), IP30 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH						
	EMC EMISSION	Compliance to EN55015 (B type only), EN61000-3-2 Class C ; EN61000-3-3, FCC part15 Class B (A type only)						
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A						
	MTBF	Khrs min. MIL-HDBK-217F (25℃)						
	DIMENSION	128*60*31.5mm (L*W*H)						
	PACKING	Kg						
NOTE	1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.							

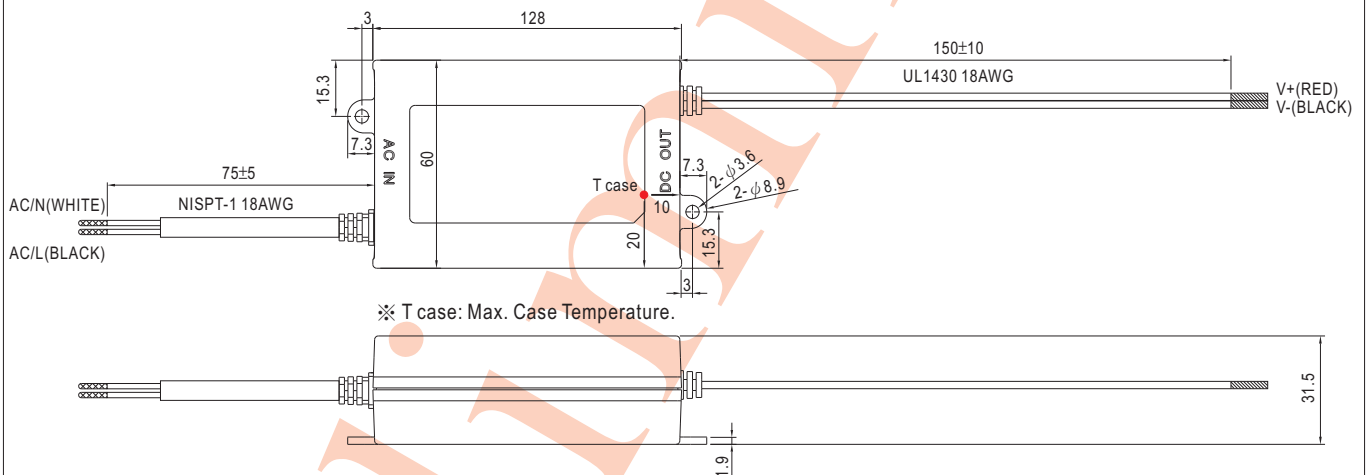
Mechanical Specification

Case No. Unit:mm

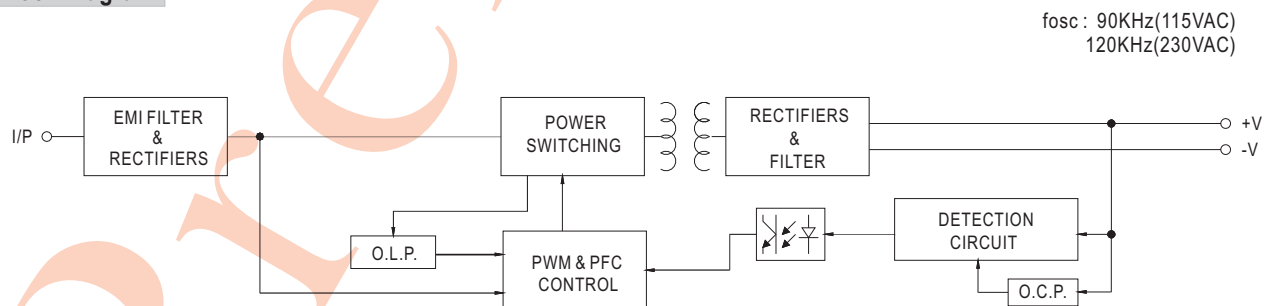
A Type:(PCD-60-_A)



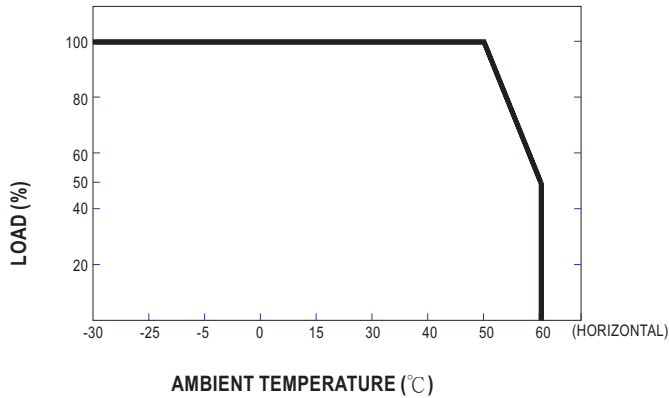
B Type:(PCD-60-_B)



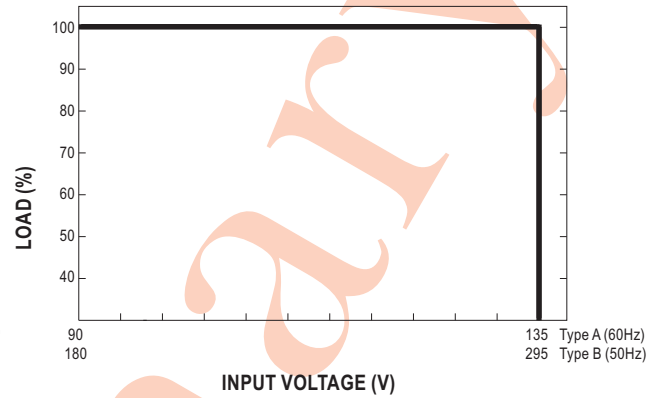
Block Diagram



Derating Curve

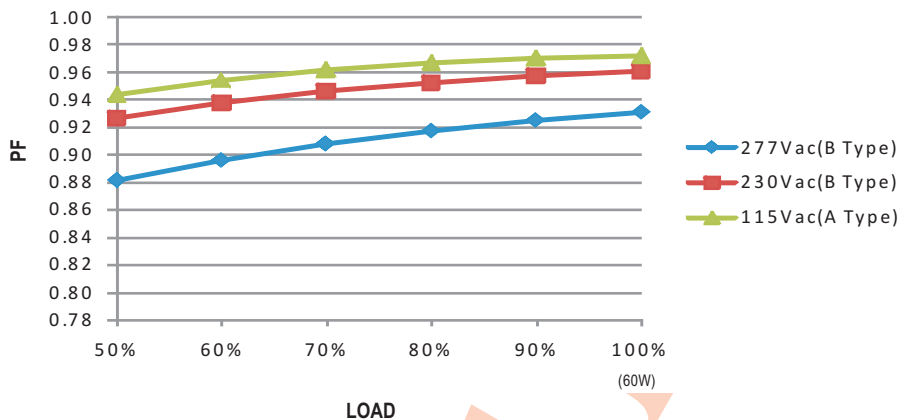


Static Characteristics



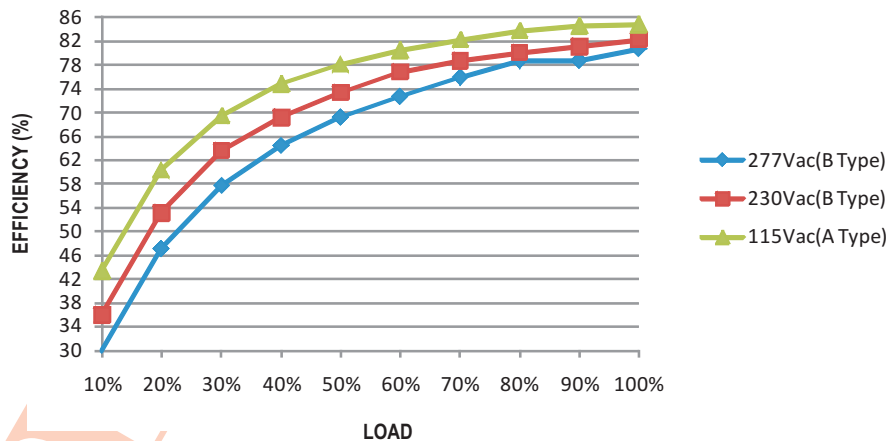
Power Factor Characteristic

Constant Current Mode



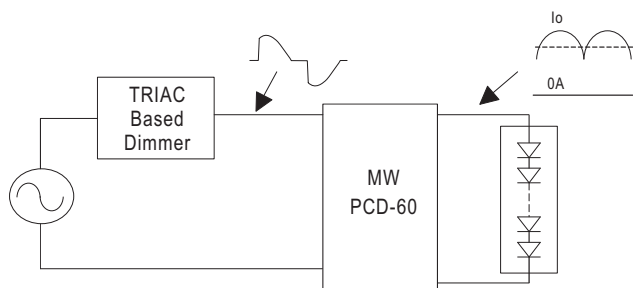
EFFICIENCY vs LOAD (PCD-60-500)

PCD-60 series possess superior working efficiency that up to 87% can be reached in field applications.



AC Dimming Operation

© The following diagram depicts a typical installation utilizing the PCD-60 :



Under direct driving, the power supply will work in "constant current mode (CC)" and output voltage of the power supply will be clamped by sum of forward voltage (V_F) of the LED strip.

Dimmer Compatibility Chart

Manufacturer	Dimmer Model	
MEAN WELL	ATD-150-110	(100-120VAC / 60Hz)
MEAN WELL	ATD-150-230	(220-240VAC / 50Hz)
MEAN WELL	ATD-150-277	(267-287VAC / 60Hz)
LUTRON	SKYLARK SF-12P-277	(277VAC / 60Hz)
LUTRON	DVF-103P-277	(277VAC / 60Hz)
LUTRON	SKYLARK SF-10P	(120VAC / 60Hz)
LUTRON	SKYLARK S-600P	(120VAC / 60Hz)
LUTRON	SKYLARK DVF-103P	(120VAC / 60Hz)
LEVITON	ILLUMATECH TM Cat.No.IP106	(120VAC / 60Hz)
LEVITON	SURESLIDE TM Cat.No.6633-P	(120VAC / 60Hz)
LEVITON	SURESLIDE TM Cat. NO.6615-P	(120VAC / 60Hz)
JUNG	Licht-Management 225 TDE	(230VAC / 50Hz)
JUNG	Licht-Management 225 NV DE	(230VAC / 50Hz)
BERKER	Tronic-Drehdimmer 286710	(230-240VAC / 50Hz)
Bodo Ehmann LICHTREGLER	T39.01	(230VAC / 50Hz)
CLIPSAL	32E450UDM	(220-240VAC / 50Hz)
CLIPSAL	NO 32E450TM	(220-240VAC / 50Hz)

Conduction angle: 30 degrees(min.) / 180 degrees(max.)