



25W Single Output AC Dimmable LED Power Supply

PCD-25 series



■ Features :

- AC phase-cut dimming
- Work with leading edge and trailing edge dimmers
- 115VAC or 230VAC models available
- Fully isolated plastic case
- Constant current design
- Protections: Short circuit / Overload / Over temperature
- Built-in active PFC function
- Cooling by free air convection
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty



PCD-25-350 A : With AC input 90~ 135VAC.
 B : With AC input 180~ 295VAC.

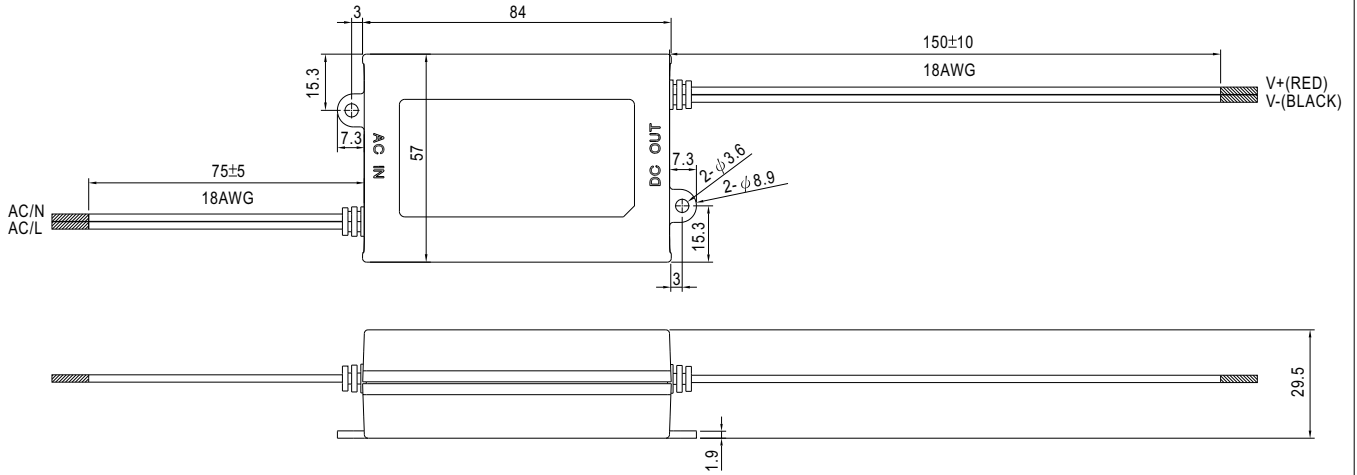
SPECIFICATION

MODEL	PCD-25-350 <input type="checkbox"/>	PCD-25-700 <input type="checkbox"/>	PCD-25-1050 <input type="checkbox"/>	PCD-25-1400 <input type="checkbox"/>	
OUTPUT	RATED CURRENT	350mA	700mA	1050mA	1400mA
	OPERATING VOLTAGE RANGE	40 ~ 58V	24 ~ 36V	16 ~ 24V	12 ~ 18V
	CURRENT RANGE	0 ~ 350mA	0 ~ 700mA	0 ~ 1050mA	0 ~ 1400mA
	OUTPUT CURRENT ACCURACY	±5%			
	RATED POWER	20.3W	25.2W	25.2W	25.2W
	RIPPLE & NOISE (max.) Note.1	4.6Vp-p	2.7Vp-p	2.2Vp-p	2Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	63V	50V	35V	25V
SETUP TIME	1000ms / 230VAC 2000ms / 115VAC at full load				
INPUT	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR	PF ≥ 0.9 at full load and rated output voltage			
	EFFICIENCY(Typ.)	82%	81%	80.5%	80%
	AC CURRENT	0.6A/115VAC 0.3A/230VAC			
	INRUSH CURRENT(max.)	40A/230VAC			
LEAKAGE CURRENT	<0.5mA / 240VAC				
PROTECTION	OVER CURRENT	95 ~ 110%			
	SHORT CIRCUIT	Protection type : Constant current limiting, recovers automatically after fault condition is removed			
	OVER TEMPERATURE	95°C ±10°C (Rth1) Protection type : Shut down o/p voltage			
ENVIRONMENT	WORKING TEMP.	-30 ~ +60°C (Refer to output load 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, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1310 Class 2, EN61347-1, EN61347-2-13			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH			
	EMI CONDUCTION & RADIATION	Compliance to EN55015 Class B (B type only), FCC part18 Class A (A type only)			
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C ; EN61000-3-3			
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A				
OTHERS	MTBF	906.5Khrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	84*57*29.5mm (L*W*H)			
	PACKING	0.19Kg; 72pcs/14.7Kg/0.92CUFT			
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 not using additional drivers is highly recommended.				



Mechanical Specification

Case No.PCD16A Unit:mm



Type A: With AC input 90-135VAC

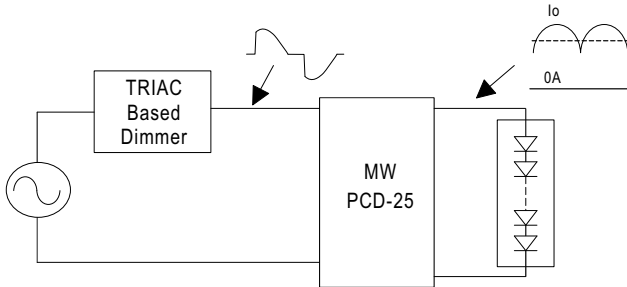
AC/N	White
AC/L	Black

Type B: With AC input 180-295VAC

AC/N	Blue
AC/L	Brown

AC Dimming Operation

◎ The following diagram depicts a typical installation utilizing the PCD-25 :



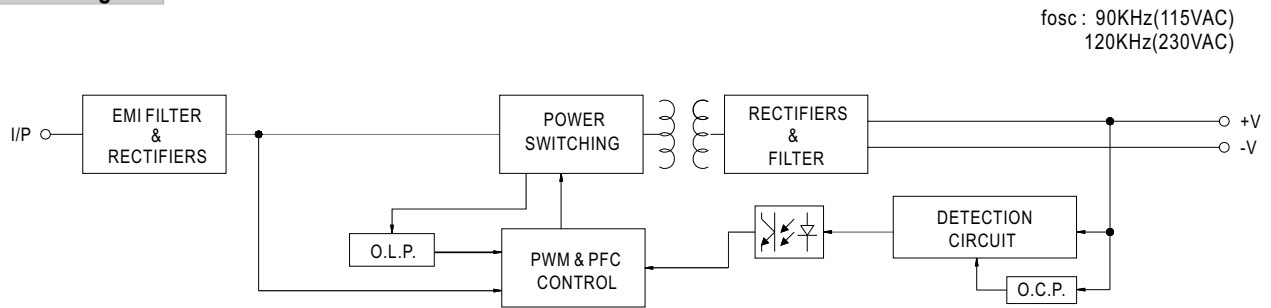
Under direct driving, the power supply will work in "constant current mode (CC)" and output voltage of the power supply will be clamped by sum of forward voltage (V_F) of the LED strip.

◎ Dimmer Compatibility Chart

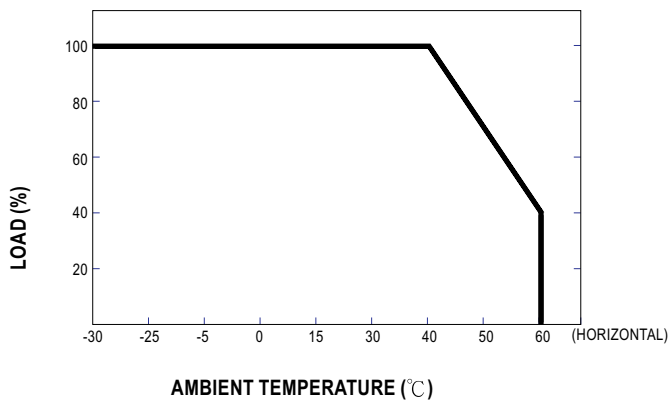
Manufacturer	Dimmer Model
LUTRON	SKYLARK SF-12P-277 (277VAC / 60Hz)
LUTRON	DVF-103P-277 (277VAC / 60Hz)
LUTRON	SKYLARK SF-10P (120VAC / 60Hz)
LUTRON	SKYLARK S-600P (120VAC / 60Hz)
LUTRON	SKYLARK DVF-103P (120VAC / 60Hz)
LEVITON	ILLUMATECH TM Cat.No.IP106 (120VAC / 60Hz)
LEVITON	SURESLIDE TM Cat.No.6633-P (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.)

■ Block Diagram



■ Derating Curve



■ Static Characteristics

