



16W Single Output AC Dimmable LED Power Supply

**PCD-16 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
- IP42 design
- Class II power unit, no FG
- Class 2 power unit
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty



■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



PCD-16-350  A : With AC input 90~ 135VAC.  
B : With AC input 180~ 295VAC.

**SPECIFICATION**

MODEL	PCD-16-350 <input type="checkbox"/>	PCD-16-700 <input type="checkbox"/>	PCD-16-1050 <input type="checkbox"/>	PCD-16-1400 <input type="checkbox"/>	
OUTPUT	RATED CURRENT	350mA	700mA	1050mA	1400mA
	OPERATING VOLTAGE RANGE	24 ~ 48V	16 ~ 24V	12 ~ 16V	8 ~ 12V
	CURRENT ACCURACY	±5.0%			
	RATED POWER	16.8W	16.8W	16.8W	16.8W
	RIPPLE & NOISE (max.) Note.1	4.6Vp-p	2.7Vp-p	2.2Vp-p	2Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	60V	35V	25V	16V
SETUP TIME	500ms / 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)			
	TOTAL HARMONIC DISTORTION	A series	THD< 20% when output loading≥70% at 115VAC		
		B series	THD< 20% when output loading≥70% at 230VAC input and output loading≥80% at 277VAC input		
	EFFICIENCY (Typ.)	82%	81%	80.5%	80%
	AC CURRENT (Typ.)	0.4A/115VAC	0.2A/230VAC	0.15A/277VAC	
	INRUSH CURRENT(max.)	COLD START 10A(twidth=90µs measured at 50% Ipeak) at 115VAC / 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	A series	58 units (circuit breaker of type B) / 58 units (circuit breaker of type C) at 115VAC		
	B series	128 units (circuit breaker of type B) / 128 units (circuit breaker of type C) at 230VAC			
LEAKAGE CURRENT	<0.5mA / 120VAC / 240VAC				
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.			
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.	-30 ~ +60°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, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	UL8750, CSA C22.2 No. 250.0-08, ENEC BS EN/EN613471, BS EN/EN61347-2-13, BS EN/N62384(for B type only), BIS IS15885(for 350B,700B only),EAC TP TC 004, IP42 approved ; design refer to UL60950-1, BS EN/EN61347-1, BS EN/EN61347-2-13			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH			
	EMC EMISSION	Compliance to BS EN/EN55015 (B type only), BS EN/EN61000-3-2 Class C ; BS EN/EN61000-3-3, FCC part 18 non-consumer equipment (A type only), EAC TP TC 020			
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024,BS EN/EN61547, light industry level, EAC TP TC 020			
OTHERS	MTBF	6624.6K hrs min. Telcordia SR-332 (Bellcore) 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	<p>1. 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.</p> <p>2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</p> <p>3. 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.</p> <p>4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>5. For any application note and IP water proof function installation caution, please refer our user manual before using. <a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>				



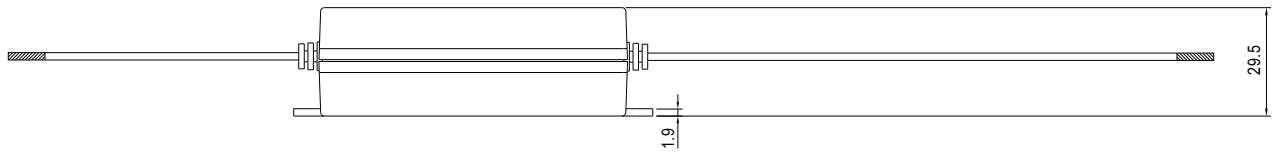
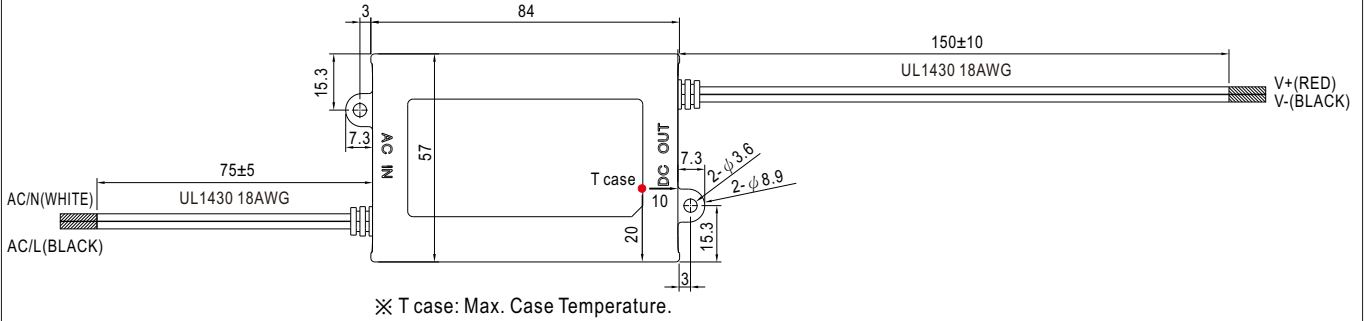
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**PCD-16 series**

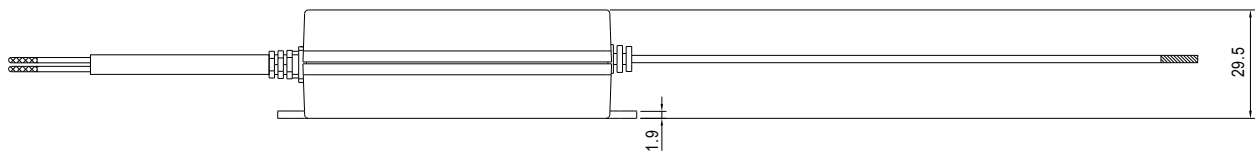
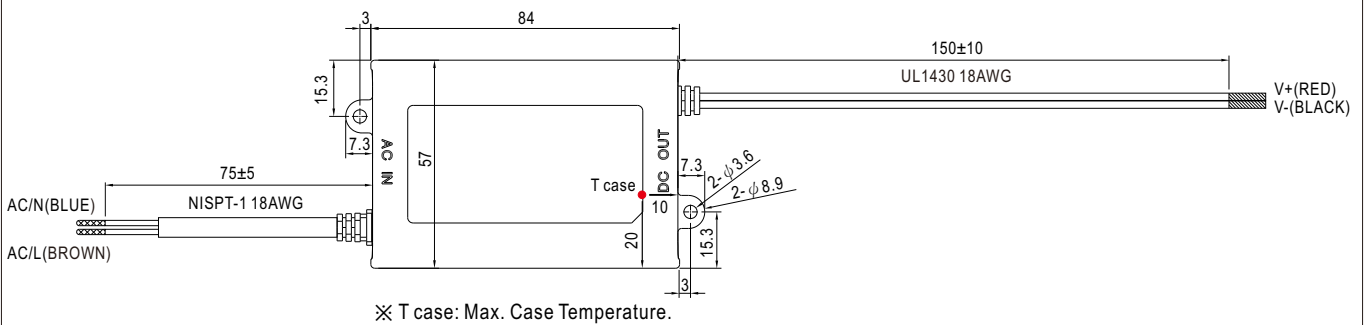
**Mechanical Specification**

Case No. PCD16A Unit: mm

**A Type: (PCD-16\_A)**

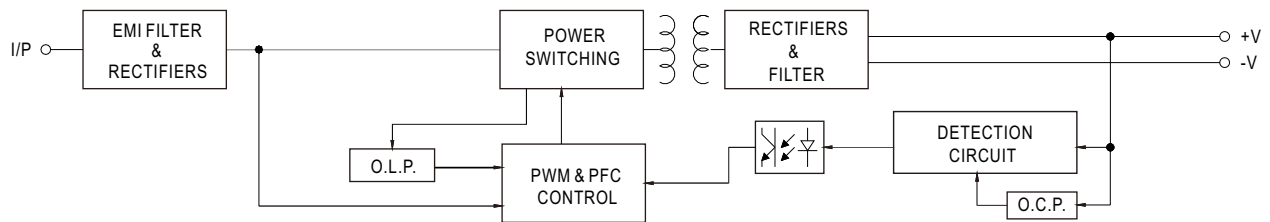


**B Type: (PCD-16\_B)**



**Block Diagram**

fosc : 90KHz(115VAC)  
120KHz(230VAC)

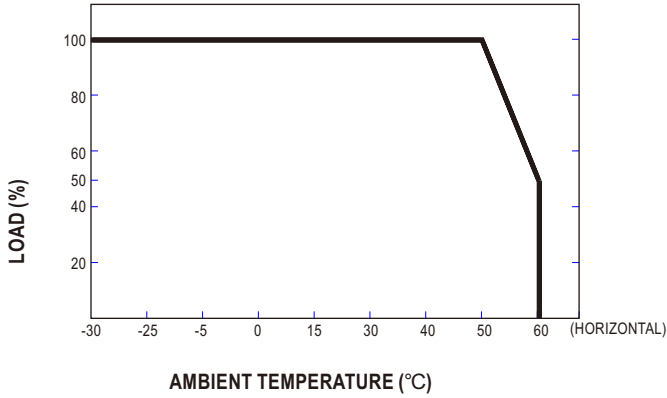




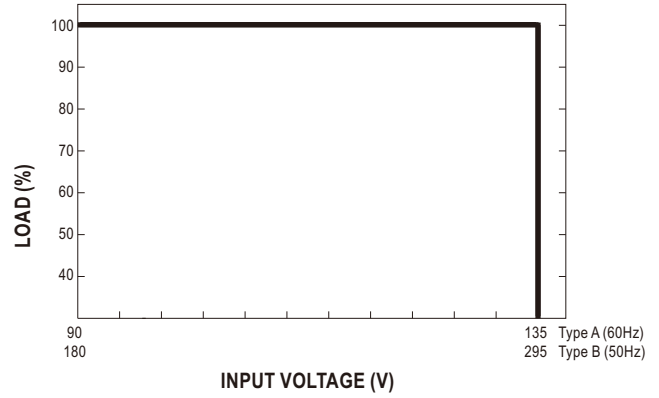
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■ Derating Curve

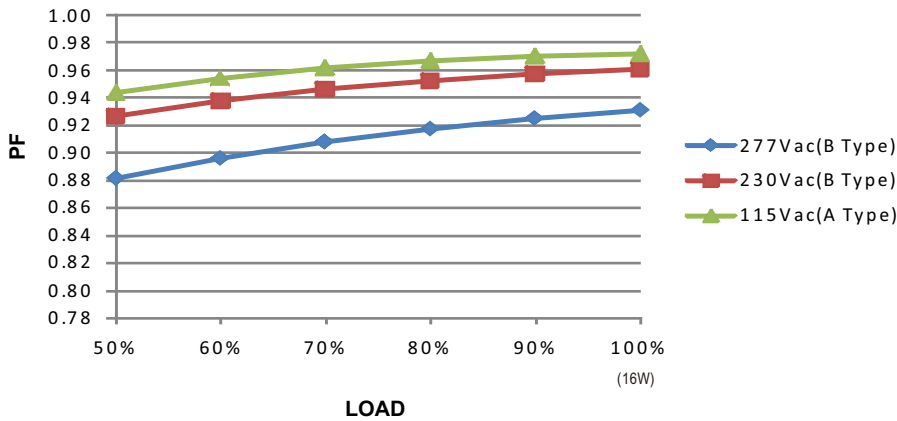


■ Static Characteristics



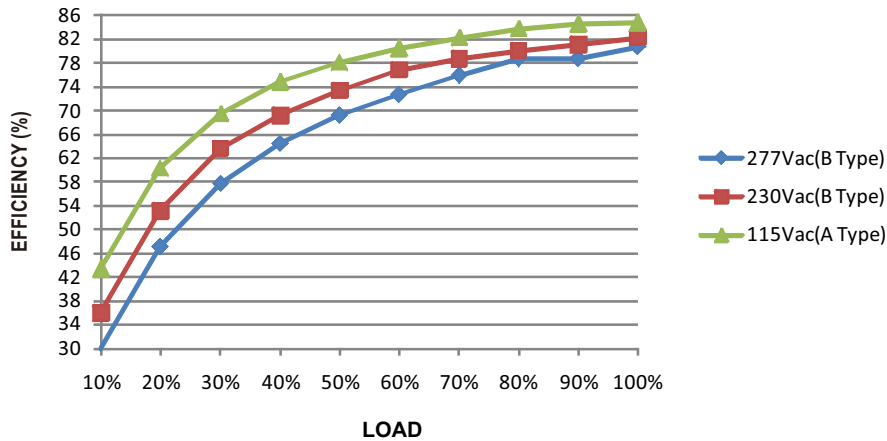
■ Power Factor Characteristic

Constant Current Mode



■ EFFICIENCY vs LOAD (PCD-16-350)

PCD-16 series possess superior working efficiency that up to 86% can be reached in field applications.



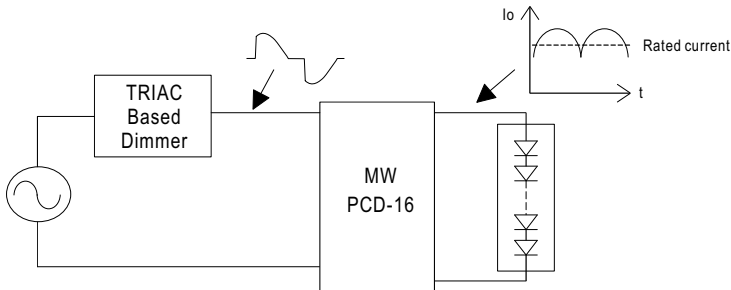


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■ **AC Dimming Operation**

⊙ The following diagram depicts a typical installation utilizing the PCD-16 :



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<sub>F</sub>) 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.)