



■ Features

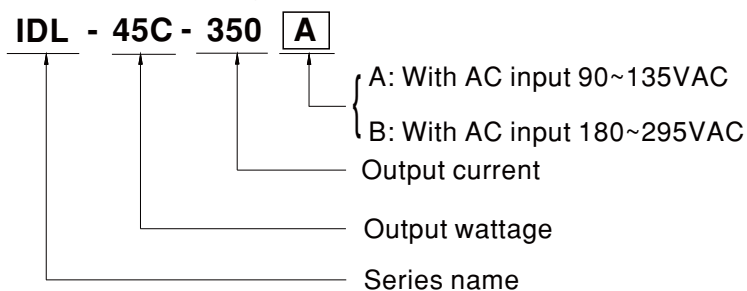
- 115VAC or 230VAC models available
- Built-in active PFC function
- Protections: Short circuit
- Cooling by free air convection
- Fully isolated plastic case
- Built-in 0~10Vdc and PWM signal dimming function
- Class II power unit, no FG
- No load power consumption<0.5W
- IP20 design
- 3 years warranty

■ Applications

- LED panel lighting
- LED flood lighting
- Indoor LED lighting

■ Description

■ Model Encoding





45W Single Output LED Power Supply

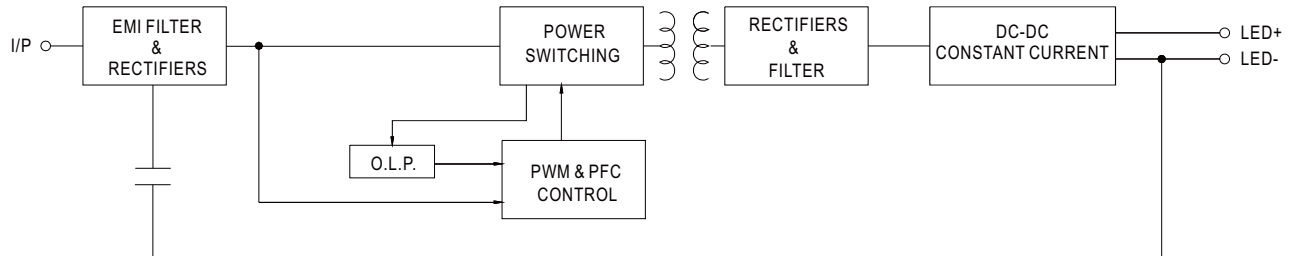
IDL-45C series

SPECIFICATION

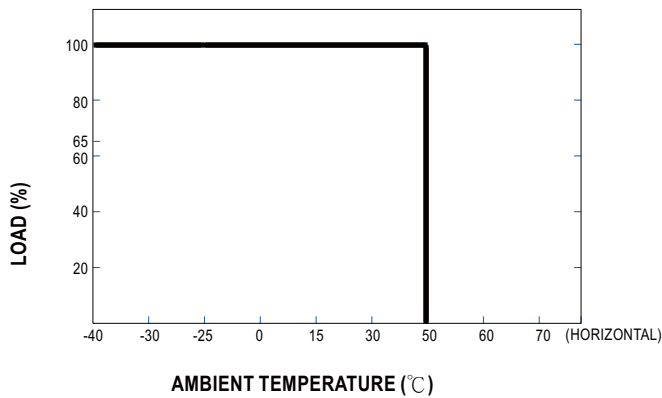
MODEL		IDL-45C-350	IDL-45C-500	IDL-45C-700	IDL-45C-1050	IDL-45C-1400	IDL-45C-1750
OUTPUT	RATED CURRENT	350mA	500mA	700	1050mA	1400mA	1750mA
	OPERATING VOLTAGE RANGE	68 ~ 114V	54 ~ 90V	38 ~ 64V	26 ~ 43V	20 ~ 32V	16 ~ 26V
	CURRENT ACCURACY	±5.0%					
	RATED POWER	39.9W	45W	44.8W	45.15W	44.8W	45.5W
	RIPPLE & NOISE (max.) Note.2	2Vp-p	1Vp-p	1Vp-p	0.5Vp-p	0.5Vp-p	0.5Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	120V	96V	70V	49V	38V	32V
	SETUP TIME	500ms / 230VAC					
INPUT	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/115VAC, PF>0.95/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)					
	TOTAL HARMONIC DISTORTION	THD< 20% when output loading≥65% at 230VAC input and output loading≥75% at 277VAC input					
	EFFICIENCY (Typ.)	86%	85%	85%	84%	83%	82%
	AC CURRENT	0.6A/115VAC	0.4A/230VAC	0.3A/277VAC			
	INRUSH CURRENT (Typ.)	COLD START 45A(twidth=100μs measured at 50% Ipeak) at 230VAC					
	LEAKAGE CURRENT	<0.75mA / 120VAC / 240VAC					
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed					
ENVIRONMENT	WORKING TEMP.	-40 ~ +50°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 ~ 60°C)					
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	ENEC EN61347-1 & EN61347-2-13 independent, EN62384					
	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 EN55015, EN61000-3-2 Class C (≥65% load) ; EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level(surge 2KV), criteria A					
OTHERS	MTBF	Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	120*65*25mm(L*W*H)					
	PACKING	Kg; pcs/ Kg/ CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. 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. 4. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.						

■ Block Diagram

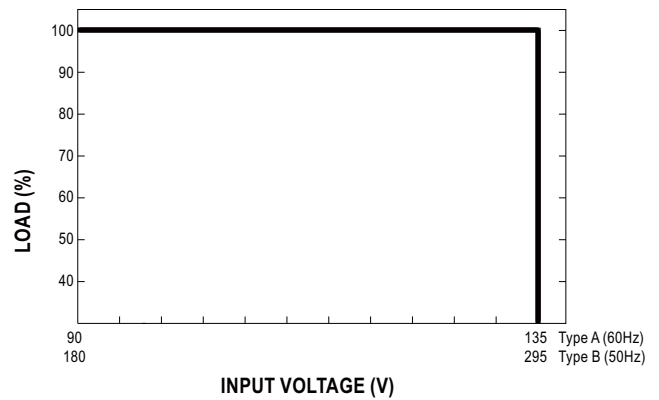
fosc : 50KHz



■ Derating Curve



■ Static Characteristics



■ Power Factor Characteristic

Constant Current Mode

PF

LOAD

(60W)

■ EFFICIENCY vs LOAD (350mA Model)

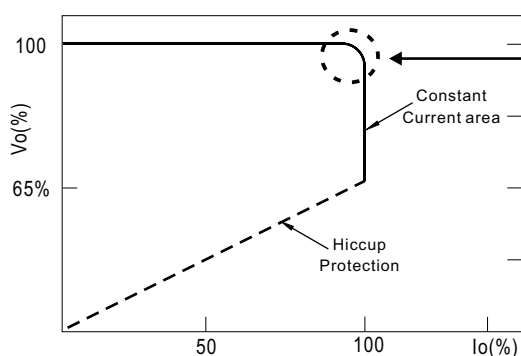
IDL-45C series possess superior working efficiency that up to 86% can be reached in field applications.

EFFICIENCY (%)

LOAD

■ DRIVING METHODS OF LED MODULE

This LED power supply is suggested to work in constant current mode area (CC) to drive the LEDs.



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

Typical LED power supply I-V curve

■ Mechanical Specification

Case No.IDL-45C Unit:mm

