IDL-25C series

(for B type only) SELV (for B type only) (for 350mA&700mA) (except for 350mA&700mA) (for B type only)

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
- Class 2 power unit
- No load power consumption<0.5W
- IP20 design
- 3 years warranty

Applications

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

Description

Model Encoding

IDL - 25C - 350 A

- A: With AC input 90~135VAC
- B: With AC input 180~295VAC

Output current

Output wattage

Series name

25W Single Output LED Power Supply

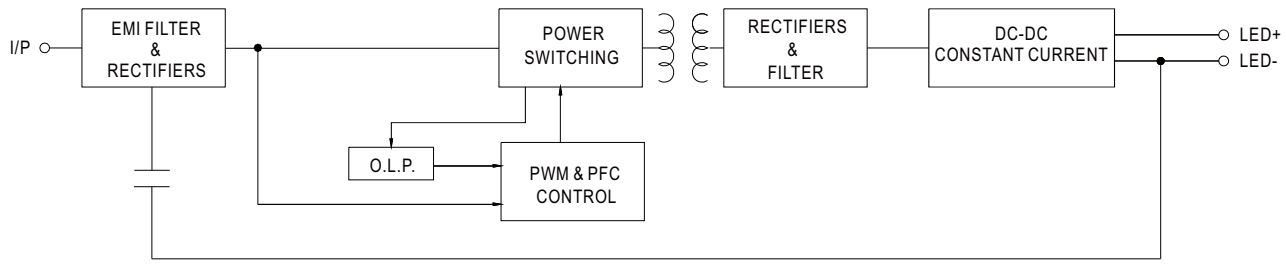
IDL-25C series

SPECIFICATION

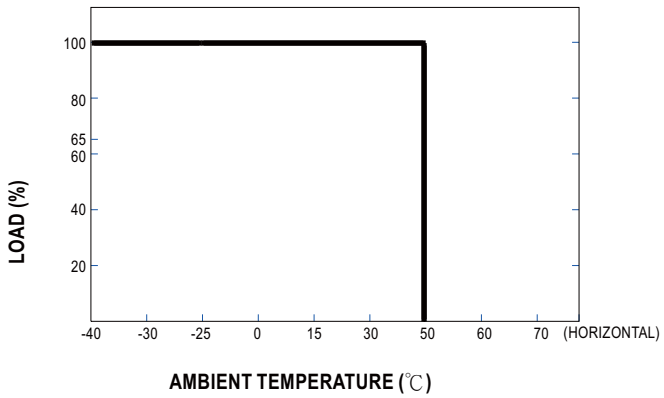
MODEL		IDL-25C-350	IDL-25C-500	IDL-25C-700	IDL-25C-1050	IDL-25C-1400
OUTPUT	RATED CURRENT	350mA	500mA	700	1050mA	1400mA
	OPERATING VOLTAGE RANGE	40 ~ 54V	30 ~ 50V	21 ~ 36V	14 ~ 24V	10 ~ 18V
	CURRENT ACCURACY	±5.0%				
	RATED POWER	18.9W	25W	25.2W	25.2W	25.2W
	RIPPLE & NOISE (max.) Note.2	2Vp-p	1Vp-p	1Vp-p	0.5Vp-p	0.5Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	60V	56V	42V	30V	24V
	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%
	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℃ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 95% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60℃)				
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	UL8750, CSA C22.2 No. 250.13-12, 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℃/ 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℃)				
	DIMENSION	100*50*22mm(L*W*H)				
	PACKING	Kg; pcs/ Kg/ CUFT				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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

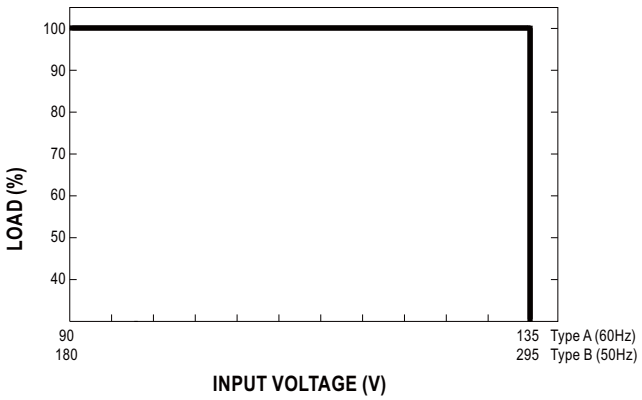
fosc : 50KHz



Derating Curve



Static Characteristics



Power Factor Characteristic

Constant Current Mode

PF

(60W)

LOAD

■ EFFICIENCY vs LOAD (350mA Model)

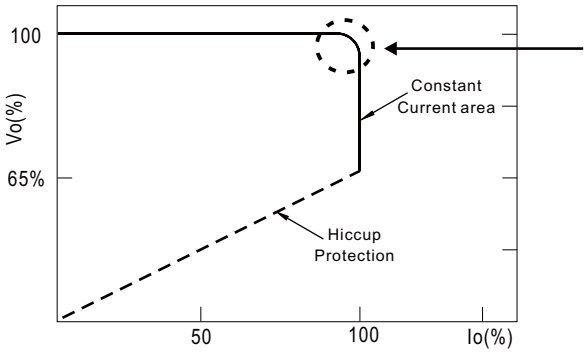
IDL-25C series possess superior working efficiency that up to 86% can be reached in field applications.

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.



Typical LED power supply I-V curve

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.

■ Mechanical Specification

Case No.IDL-25C Unit:mm