



185W Multiple Channel Output Switching Power Supply

LDV-185 series



Features :

- 180~295VAC input range
- Multiple channel with constant current output
- Meet 4KV surge immunity level(EN61000-4-5)
- Protections: Short circuit / Over voltage / Over temperature
- Built-in active PFC function
- Cooling by free air convection
- IP67 design for indoor or outdoor installations
- Optional timer dimming function
- High efficiency up to 88%
- -40°C can power on
- Suitable for LED lighting and moving sign applications
- 3 years warranty

IP67  

LDV-185-350A ☐ Blank : IP67 rated. No timer dimming function.

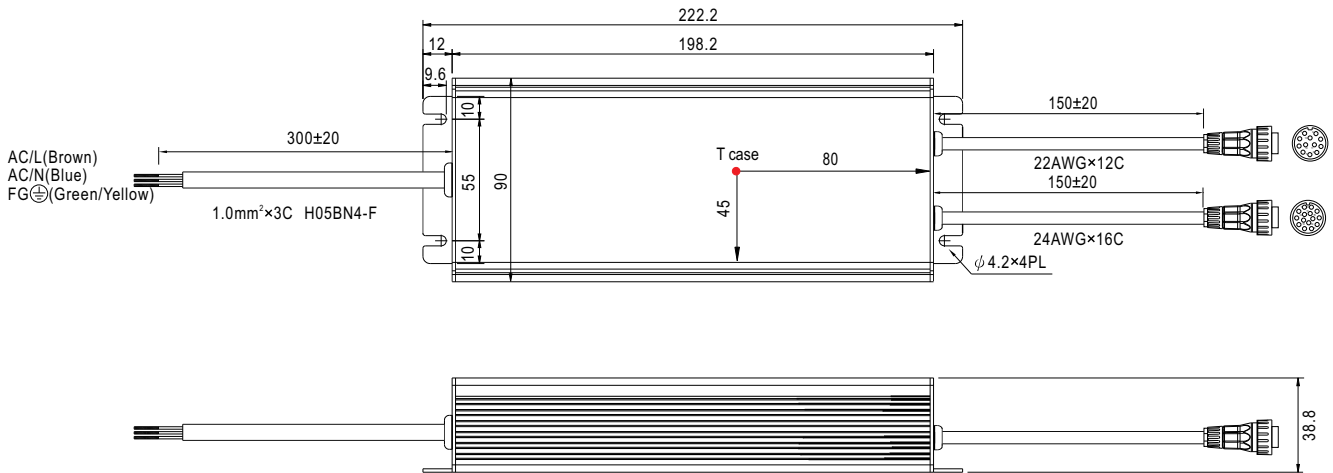
D(option): IP67 rated. Built-in timer dimming function, contact MEAN WELL for details.

SPECIFICATION

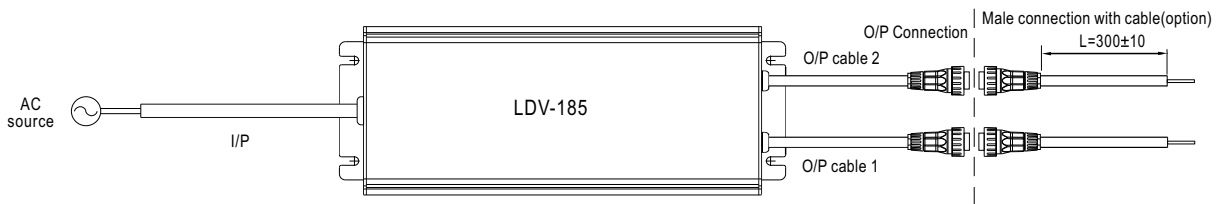
MODEL		LDV-185-350A	LDV-185-350B	LDV-185-350C	LDV-185-700A	LDV-185-700B	LDV-185-700C
OUTPUT	SINGLE CHANNEL RATED CURRENT	350mA	350mA	350mA	700mA	700mA	700mA
	DC VOLTAGE RANGE <small>Note 5.</small>	30 ~ 35V	35 ~ 40V	40 ~ 48V	30~35V	35~40V	40~48V
	RATED POWER(max.) <small>Note 3.</small>	147W	168W	185W	147W	168W	185W
	MAX CHANNEL <small>Note 3.</small>	12CH	12CH	12CH	6CH	6CH	6CH
	SETUP, RISE TIME <small>Note 2.</small>	2500ms, 50ms					
	HOLD UP TIME	10ms / 230VAC					
	CONSTANT CURRENT ACCURACY	±5%					
INPUT	VOLTAGE RANGE	180~ 295VAC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	PF>0.95/230VAC PF>0.92/277VAC at full load(please refer to “Power Factor Characteristic” Curve)					
	EFFICIENCY (Typ.) <small>Note 4.</small>	≥88%					
	AC CURRENT	1.5A/230VAC 1.0A/277VAC					
	INRUSH CURRENT(max.)	COLD START 60A/230VAC					
	LEAKAGE CURRENT	<0.75mA / 240VAC					
PROTECTION	SHORT CIRCUIT	Channel shut down when each channel fault, re-power on to recovery					
	OVER VOLTAGE	41 ~ 50V	47 ~ 50V	54 ~ 63V	41~50V	47~50V	54~63V
		Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery					
	OVER TEMPERATURE	100°C±10°C(RTH2)					
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
ENVIRONMENT	OTP DIMMING	When the NTC (RTH3) temperature is higher than 90°C±10°C, PSU will enter dimming mode with decreasing output current					
	WORKING TEMP.	-30 ~ +70°C (Refer to “Derating curve”), -40°C can power on					
	WORKING HUMIDITY	20 ~ 95% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)					
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
	SAFETY STANDARDS	IP67 approved; Design refer to EN61347-1,EN61347-2-13,UL8750					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC 1minute					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH					
	EMC EMISSION	Compliance to EN55015,EN61000-3-2 Class C (≥75% load) ; EN61000-3-3					
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A					
	MTBF	198.2Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	222.2*90*38.8mm (L*W*H)					
NOTE	PACKING	1.27 Kg; 12pcs/16.2Kg/1.02CUFT					
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 3. Please do not exceed the rated power when choosing channel quantity and voltage range(350C/700C model). 4. Efficiency is measured under 230VAC input with Pout>120W and each output channel connecting with the same quantity of LEDs(similar Vf sum). 5. DC output voltage is measured between LEDB						

Mechanical Specification

Case No.LDV-185A Unit:mm



WATERPROOF CONNECTION



NOTE: 1.Cable 1 and 2 for 350mA models, Cable 1 for 700mA models

2.Each channel of LED- must be isolated

3.Pin1~4(LED Y) & pin7~10(LED ㄱ) of cable 1 must be used when connected to LED loads , do not floating, or the PSU can't start up

O/P Connection(Female)

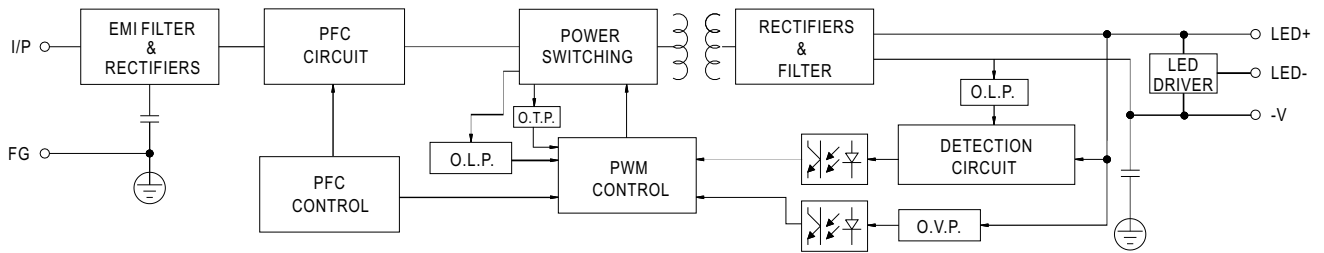
Cable	Pin Configuration(female)	Pin	Pin definition
Cable 1		1~6	LED Y
		7~12	LED ㄱ for each channel
		13~14	NC
		15	V
Cable 2		1~6	LED Y
		7~12	LED ㄱ for each channel

Male Waterproof Output Connector With Cable

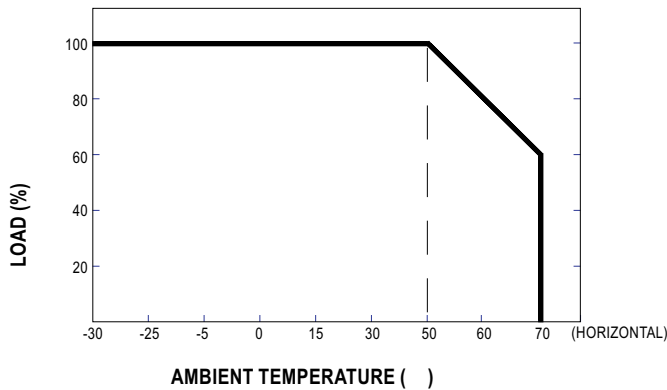
Order NO.	Pin Configuration(male)	Pin Definition	Wire Color	Wire Stock
DS-LDV185-OPA		1	BLUE	24AWG*16C
		2	PURPLE	
		3	ORANGE	
		4	YELLOW	
		5	RED	
		6	WHITE	
		7	WHITE/RED	
		8	BROWN	
		9	WHITE/ORANGE	
		10	GRAY	
		11	CLEAR LUCITE/BLUE	
		12	CLEAR LUCITE/PURPLE	
		13	NC	
		14	NC	
		15	V	
DS-LDV185-OPB		1	WHITE/YELLOW	22AWG*12C
		2	GRAY	
		3	BLUE	
		4	YELLOW/GREEN	
		5	ORANGE	
		6	YELLOW	
		7	PURPLE	
		8	CLEAR LUCITE	
		9	WHITE/BLACK	
		10	BLACK	
		11	GREEN	
		12	RED	

※MEAN WELL offers male waterproof connectors with cable length of 300mm as our standard mating accessories,Power Supply unit and mating accessory should be ordered separately.

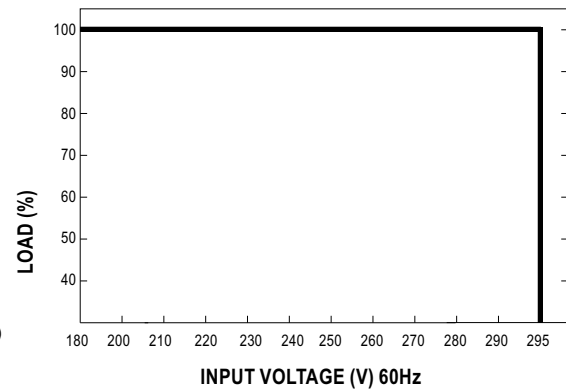
Block Diagram



Derating Curve



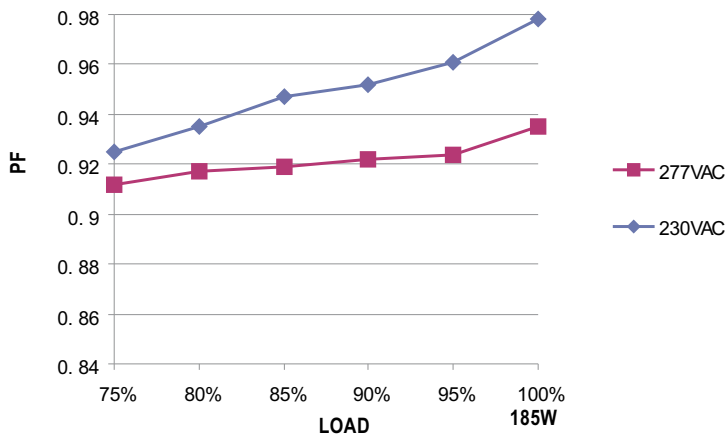
Static Characteristics



Power Factor Characteristic

Power factor will be higher than 0.9 when output loading is 75% or higher.

Constant Current Mode



EFFICIENCY vs LOAD (350C Model)

