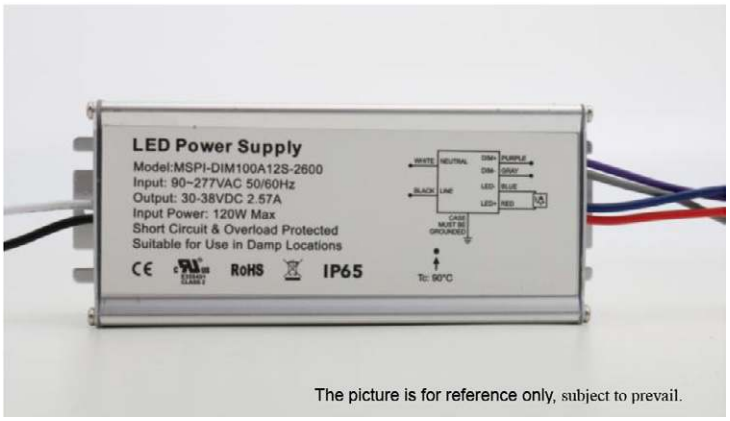
DATA SHEET: SINGLE OUTPUT SWITCHING POWER SUPPLY

(0-10V DIMMABLE, DIM100A SERIES)

PRODUCT BENEFITS

- International standard AC voltage input.
- Constant current power supply.
- Built-in active PFC function.
- Protection category: Short circuit/Over voltage.
- Type of cooling: natural air cooling.
- 0-10V Dimmable.
- LVLE qualified.
- 100% full load burn-in test.
- Applicable to LED illumination.



The picture is for reference only, subject to prevail.

MODEL NUMBER LIST

NO.	Model No.	Output Voltage Range	Output Current Range	Typical Input Power Range	Constant Current Accuracy	Power Factor (PF full load)		Efficacy
						120V AC	277V AC	
Single Output Switching Power Supply, 0-10V Dimmable, DIM100A Series								
1	AL-MSPI-DIM100A12S-1550mA	30~38Vdc	1500mA~1600mA	61W~64W Vf=36V	±3.0%	0.95	0.9	≥87%
2	AL-MSPI-DIM100A12S-1700mA	30~38Vdc	1650mA~1750mA	64W~68W Vf=34V	±3.0%	0.95	0.9	≥87%
3	AL-MSPI-DIM100A12S-1940mA	30~38Vdc	1890mA~2000mA	64W~68W Vf=34V	±3.0%	0.95	0.9	≥87%
4	AL-MSPI-DIM100A12S-2120mA	30~38Vdc	2040mA~2200mA	79W~83.5W Vf=34.2V	±3.0%	0.95	0.9	≥87%
5	AL-MSPI-DIM100A12S-2250mA	30~38Vdc	2180mA~2320mA	87W~93W Vf=36V	±3.0%	0.95	0.9	≥87%
6	AL-MSPI-DIM100A12S-2270mA	30~38Vdc	2230mA~2330mA	87W~95W Vf=36V	±3.0%	0.95	0.9	≥87%
7	AL-MSPI-DIM100A12S-2400mA	30~38Vdc	2330mA~2470mA	90W~95W Vf=34.6V	±3.0%	0.95	0.9	≥87%
8	AL-MSPI-DIM100A12S-2450mA	30~38Vdc	2370mA~2520mA	90W~97W Vf=34.6V	±3.0%	0.95	0.9	≥87%
9	AL-MSPI-DIM100A12S-2500mA	30~38Vdc	2420mA~2580mA	98W~106W Vf=36V	±3.0%	0.95	0.9	≥87%
10	AL-MSPI-DIM100A12S-2570mA	30~38Vdc	2490mA~2650mA	99W~106W Vf=35.3V	±3.0%	0.95	0.9	≥87%
11	AL-MSPI-DIM100A12S-2600mA	30~38Vdc	2500mA~2700mA	100W~108W Vf=35.2V	±3.0%	0.95	0.9	≥87%

ELECTRICAL SPECIFICATION:

Input Specification:

Item	Minimum	Standard	Maximum	Remarks
Single Output Switching Power Supply, 0-10V Dimmable, DIM100A Series				
Input Voltage	90 VAC	/	277 VAC	
Input Frequency	47 Hz	/	63 Hz	
Input AC current	/	/	1.28A	
Inrush Current	/	/	60A	25°C,Cold start
Power Factor	0.9	/	0.99	100~277Vac, 75%~100% load

OUTPUT SPECIFICATION:

Item	Minimum	Standard	Maximum	Remarks
Output Voltage Range	30Vdc	/	38Vdc	
Output Current Range	/	/	2600mA	
Output power	/	/	99W	
Ripple and noise	/	/	1Vpk-pk	Band Width 20MHz, probe parallel with capacitor,10uF+104
Line Regulation	/	±3%	/	
Load Regulation	/	±3%	/	
Start-up time	/	/	700ms	
Hold-up time	/	/	3.6mS	

PROTECTION SPECIFICATION:

Item	Remarks
Over Voltage protection	42V±5%
Over Current Protection	Driver is in constant current mode
Short-Circuit Protection	Automatic Recover. Driver recovers automatically when short circuit default is removed and no harm has done to it.

ENVIRONMENT CONDITION:

Item	Minimum	Standard	Maximum	Remarks
Operating Temperature	-30°C	/	+45°C	Humidity: 20~95% RH
Case Temperature	/	/	+90°C	
Storage Temperature	-40°C	/	+80°C	Humidity: 10~95% RH
Relative Humidity	20%	/	90%	No Condensation

SAFETY SPECIFICATION:

Item		Standard	Remarks
Isolation Voltage	Primary to Secondary	I/P-O/P:3.75Vac/5mA/1min	Current leakage, less than 5mA, test time 1 minute. No arcing. No broken
	Primary to P.G	I/P-FG:2000Vac/5mA/1min	
	Secondary to P.G	O/P-FG:500Vac/5mA/1min	

EMC:

Item	Standard	Remarks
THD	<20%	
Surge	Line to Line 4KV, line to earth 6KV	
CE	EN55015	
UL/CUL	UL8750	

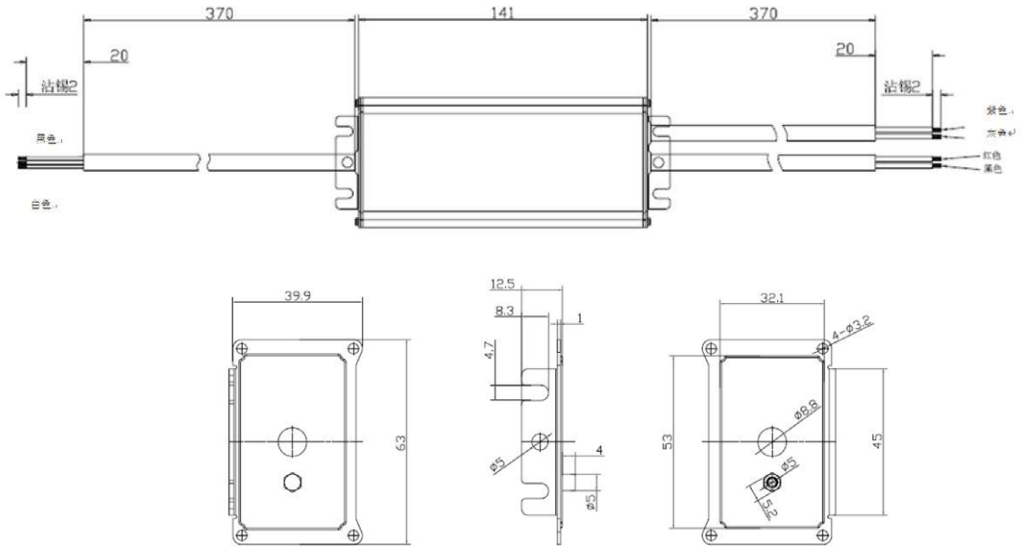
DIMENSION:

Item	Standard	Remarks
Size	(132*56*29)mm	±2 mm
Weight	700g	±50 g

REMARKS:

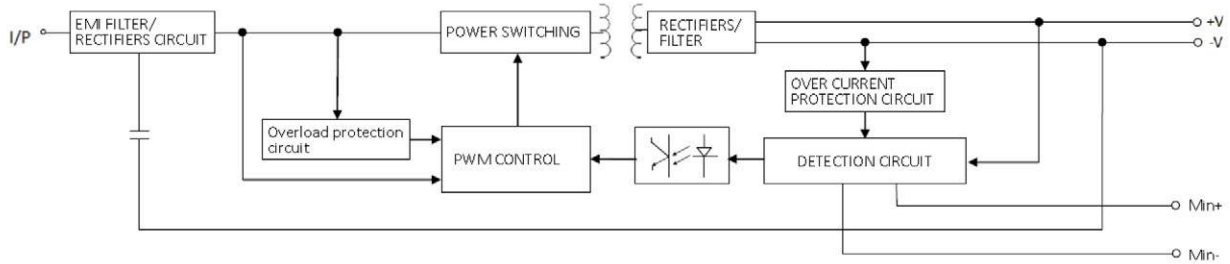
1. Unless otherwise specified, all specifications are tested at 25°C.
2. Case temperature testing point locates at the arrowhead.
3. Driver as a device used in conjunction with the terminal equipment, due to EMC under the influence of load, terminal equipment needed to re-confirm the EMC with full set of equipment

MECHANICAL SPECIFICATION

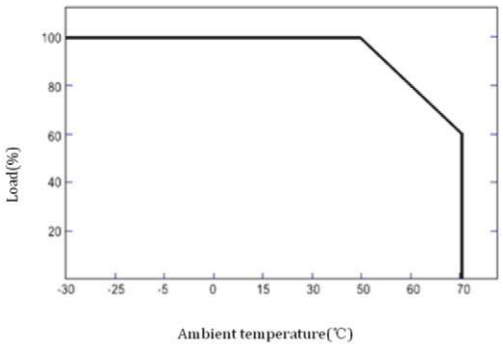


Recommended Mounting Direction

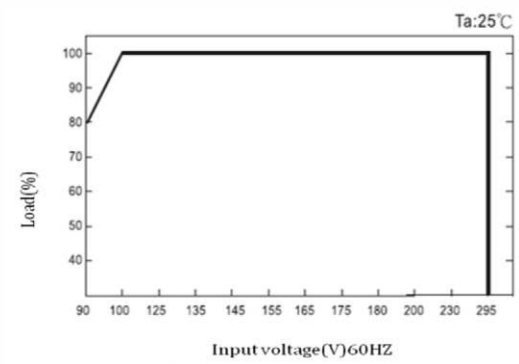
Block Diagram



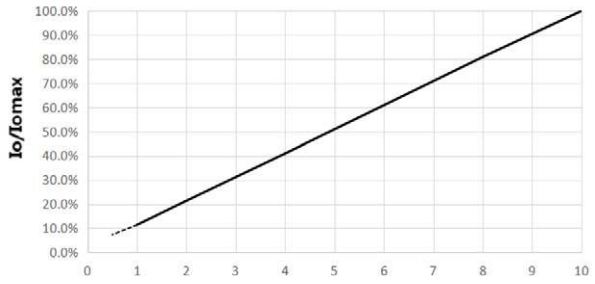
Load derating curve



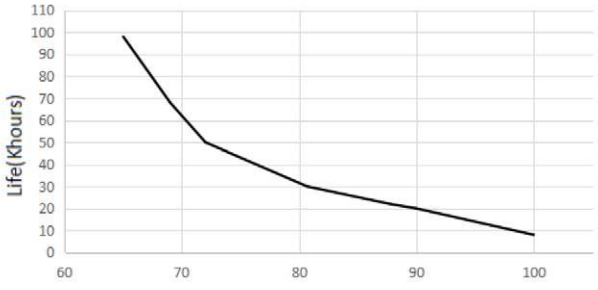
Static characteristic curve



Dimming characteristic curve



Life VS Vase Temperature



Note: According to the dimmer compatibility of different dimming characteristics are different, dimming short circuit can be turned off (after the resumption of work).