hvrele HENGWEI POWER

LRS-75W Series Single Output Switching Power Supply

Dimension：99*97*30mm

Features：

- Universal AC input/Full range
- Miniature size and 1U low profile,low weight
- Protections：Short circuit/Overload/Over voltage
- Cooling by free air convection
- No load power consumption < 0.5W
- Operating altitude up to 5000 meters（Note6）
- LED indicator for power on
- 100% full load burn-in test
- High efficiency,long life and high reliability
- 2 years warranty

Applications：

- LED lighting
- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus

Description：

LRS-75 series is a 75W single-output enclosed type power supply with 30mm of low profile design.Adopting the full range 85~264 VAC input,the entire series provides an output voltage line of 5V,12V,15V,24V,36V and 48V.

In addition to the high efficiency up to 91%,the design of metallic mesh case enhances the heat dissipation of LRS-75 that the whole series operates from -30℃ through 70℃ under air convection without a fan.Delivering an extremely low no load power consumption (less than 0.5W), it allows the end system to easily meet the worldwide energy requirement,LRS-75 has the complete protection functions and 3G anti-vibration capability; it is complied with the international safety regulations such as TUV EN60950-1，UL60950-1 and Gb4943, TUV EN61347-1， UL 61347-1

LRS-75 series serve as a high price-to-performance power supply solution for various industrial applications.

Model Encoding

LRS - 75 - 12

- 12 — Output voltage
- 75 — Output wattage
- LRS — Series name

LRS-75W Series Single Output Switching Power Supply

SPECIFICATION

Model		LRS-75-5	LRS-75-12	LRS-75-15	LRS-75-24	LRS-75-36	LRS-75-48
Output	DC voltage	5V	12V	15V	24V	36V	48V
	Rated current	14A	6A	5A	3.2A	2.1A	1.6A
	Current range	0~14A	0~6A	0~5A	0~3.2A	0~2.1A	0~1.6A
	Rated power	70W	72W	75W	76.8W	75.6W	76.8W
	Ripple&noise	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	DC voltage ADJ. range	±10%	±10%	±10%	±10%	±10%	±10%
	Voltage tolerance Note.3	±3%	±2%	±1%	±1%	±1%	±1%
	Line regulation Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation Note.5	±2%	±1%	±0.5%	±0.5%	±0.5%	±0.5%
	Setup,rise,hold up time	800ms,30ms,30ms/230VAC(full load)					
Input	Voltage range	90~264VAC ,127~373VDC(Withstand 300VAC surge input for 5 second)					
	Frequency range	47~63Hz					
	AC current	1.4A/115VAC 0.85/230VAC					
	Efficiency	86%	88%	89%	90%	91%	91%
	Inrush current	Cold start 50A/230VAC					
	leakage current	<0.75mA/240VAC					
Protection	Overload	Rated output power110% ~ 150%Start overload protection					
		Protection type:hiccup mode,auto-recovery after fault condition is removed					
	Over voltage	Rated output voltage 115%~135% Start over voltage protection					
		Protection type:cut off the output,auto-recovery after fault condition is removed					
Environment	Working temperature	-30℃ ~ +70℃(Please refer to"derating curve")					
	Working humidity	20%~90%RH Non-condensing					
	Storage temp& humidity	-40℃ ~ +85℃;10%~95%RH Non-condensing					
	Withstand vibration	10~500Hz,3G 10min./1Cycle，Period for 60min，Each axes					
Safety	Withstand voltage	I/P-O/P：1.5KVAC I/P-FG：1.5KVAC O/P-FG：0.5KVAC					
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG：100M Ohms/500VDC/25℃/70%RH					
Standards compliance	Safety standards	Compliance to UL 62368 -1,TUV EN62368-1,UL 61347-1,TUV EN 61347-1					
	EMC emission	Compliance to EN 55032,EN 55015(CISPR22)Class A，GB9254 Class A,EN 55014,EN 61000-3-2,3					
	EMC immunity	Compliance to EN 61000-4-2,3,4,5,6,8,11, EN 55024,EN 61000-6-1					
Others	Dimension	99*97*30 mm（L*W*H）					
	Weight	0.25kg/72pcs/20kg/0.035m³/1.23CUFT					
	MTBF	⩾660K hrs min. MIL-HDBK-217F(25℃)					

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. Tolerance : includes set up tolerance, line regulation and load regulation.

4.Line regulation is measured from low line to high line at rated load.

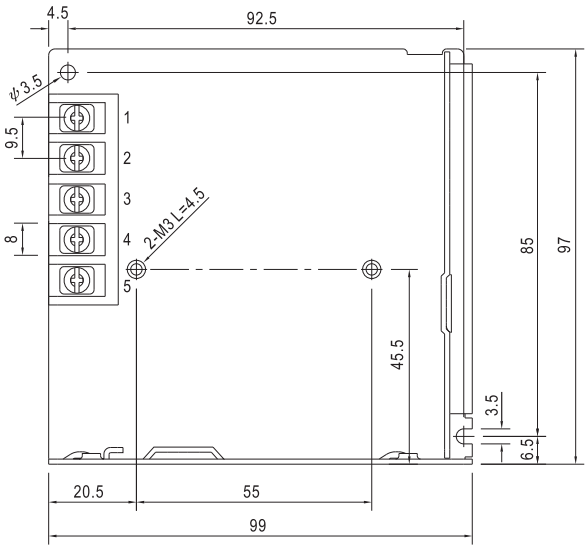
5.Load regulation is measured from 0% to 100% rated load

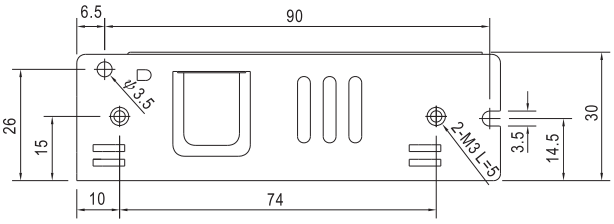
6.The ambient temperature derating of 5℃/1000 m is needed for operating altitude greater than 2000m(6500ft)

7.The power supply is considered as a component which will be installed into a finalequipment.The final equipment must be re-confirmed that it still meets EMC directives.For guidance on how to perform these EMC tests.

Mechanical specification

Unit:mm



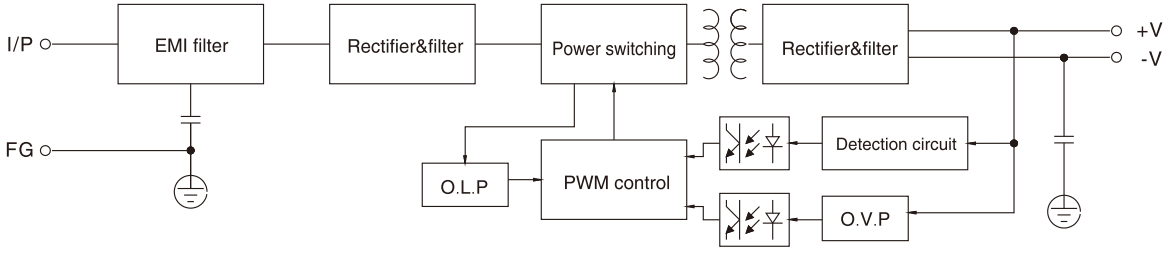


Terminal Pin No.Assignment

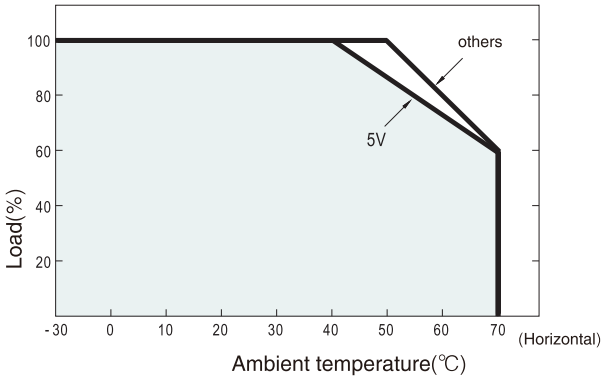
Pin No.	Assignment	Pin No.	Assignment
1	AC/N	4	DC OUTPUT -V
2	AC/L	5	DC OUTPUT +V
3	FG ⏚		

Block diagram

PWM Frequency：65KHz



Derating curve



Static characteristic