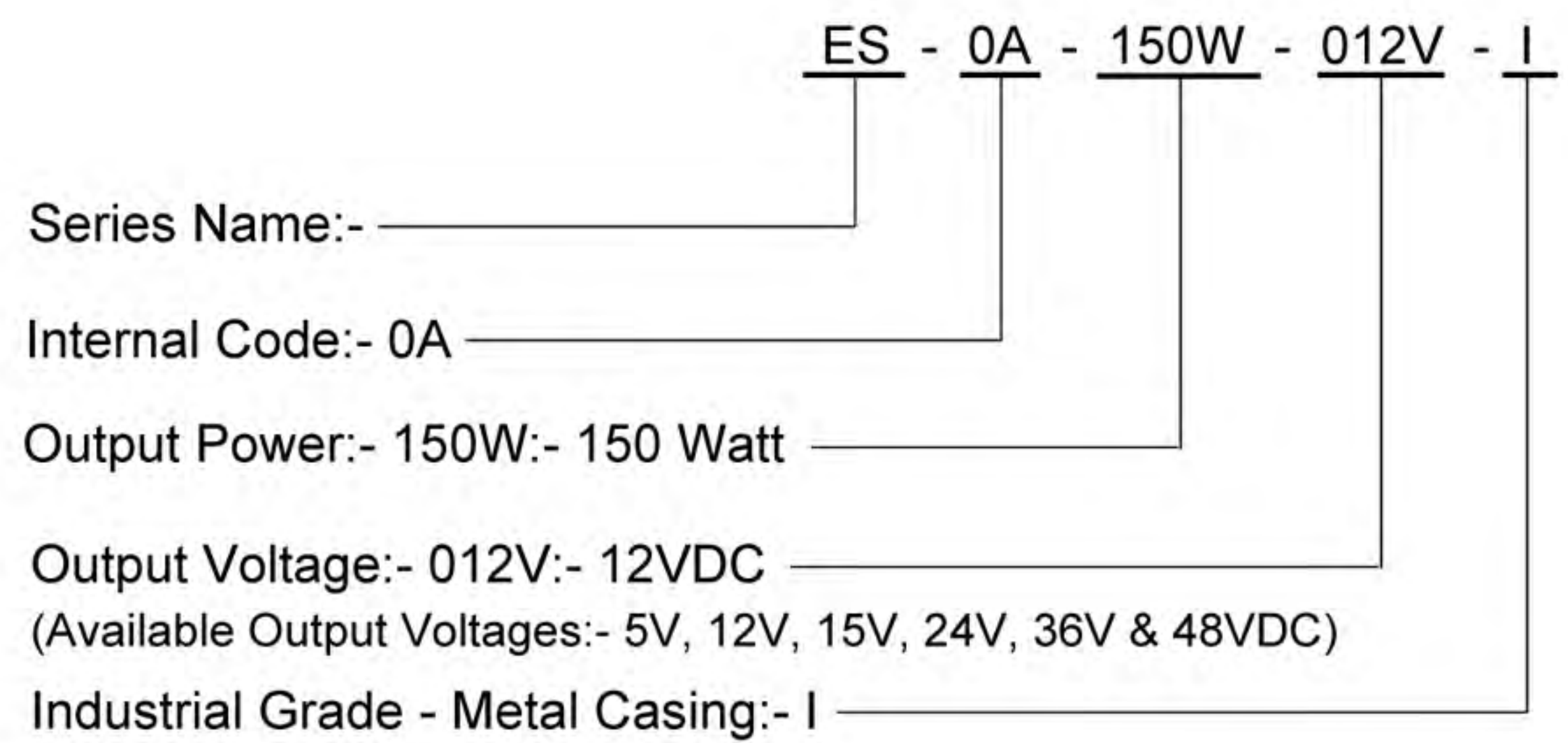
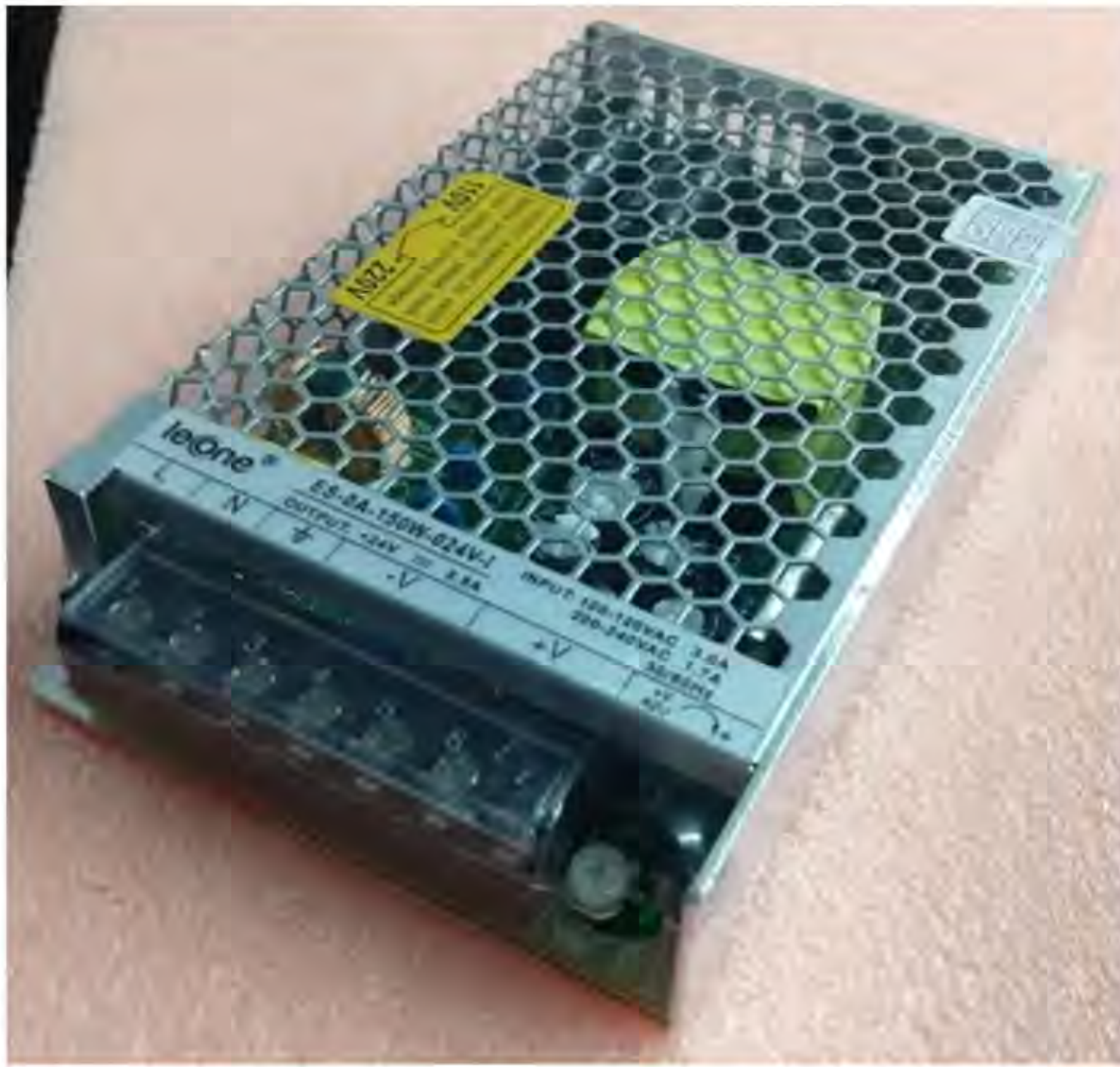

leOne[®]

ES-0A-150W

POWER SUPPLY

Single Output Switching Power Supply



Features:-

- AC input range selected by switch(115/230)
- Withstand 300VAC surge input for 5 second
- Miniature size and 1U low profile,low weight
- Protections:Short circuit/Overload/Over voltage
Over temperature
- 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

Applications:-

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

Descriptions:-

ES-0A-150W series is a 150W single output enclosed type power supply with 30mm of low profile design. Adopting the input of 115VAC or 230VAC (selectable by switch), the entire series provides an output voltage line of 5V, 12V, 15V, 24V, 36V & 48V.

In addition to the high efficiency up to 90%, the desing of metallic mesh case enhances the heat dissipation of ES-0A-150W that the whole series operates from -30°C through 70°C 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. ES-0A-150W has the complete protection functions and 5G anti-vibration capability. ES-0A-150W series serve as a high price to performance power supply solution for various industrial applications.

Specifications:-

Model		005V	012V	015V	024V	036V	048V
Output	DC voltage	5V	12V	15V	24V	36V	48V
	Rated current	20A	12.5A	10A	6.5A	4.3A	3.3A
	Current range	0~20A	0~12.5A	0~10A	0~6.5A	0~4.3A	0~3.3A
	Rated power	100W	150W	150W	156W	154.8W	158.4W
	Ripple&noise	120mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p
	DC voltage ADJ. range	± 10%	± 10%	± 10%	± 10%	± 10%	± 10%
	Voltage tolerance <small>Note.3</small>	± 3%	± 2%	± 1%	± 1%	± 1%	± 1%
	Line regulation <small>Note.4</small>	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Load regulation <small>Note.5</small>	± 2%	± 1%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
	Setup,rise,hold up time	800ms,30ms,40ms/230VAC(full load)					
Input	Voltage range	90~132VAC/170~264VAC(selected by switch) ,240~373VDC(Withstand 300VAC surge input for 5 second)					
	Frequency range	47~63Hz					
	AC current	2.8A/115VAC 1.6/230VAC					
	Efficiency	84.5%	87%	88%	88%	89%	90%
	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					
Over temperature	100°C±10°C(RT1 detect beside transformer)						
	Protection type:cut off the output,auto-recovery after the temperature become normal						
Environment	Working temperature	-30°C ~ +70°C(Please refer to“derating curve”)					
	Working humidity	20%~90%RH Non-condensing					
	Storage temp& humidity	-40°C ~ +85°C;10%~95%RH Non-condensing					
	Withstand vibration	10~500Hz,3G 10min./1Cycle, Period for 60min, Each axes					
Safety	Withstand voltage	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 1.25KVAC					
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG: 100M Ohms/500VDC/25°C/70%RH					
Others	Dimension	159*97*30 mm (L*W*H)					
	Weight	0.43kg/30pcs/13.9kg/0.023m³/0.82CUFT					
	MTBF	≥580K hrs min.					

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. 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°C/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.

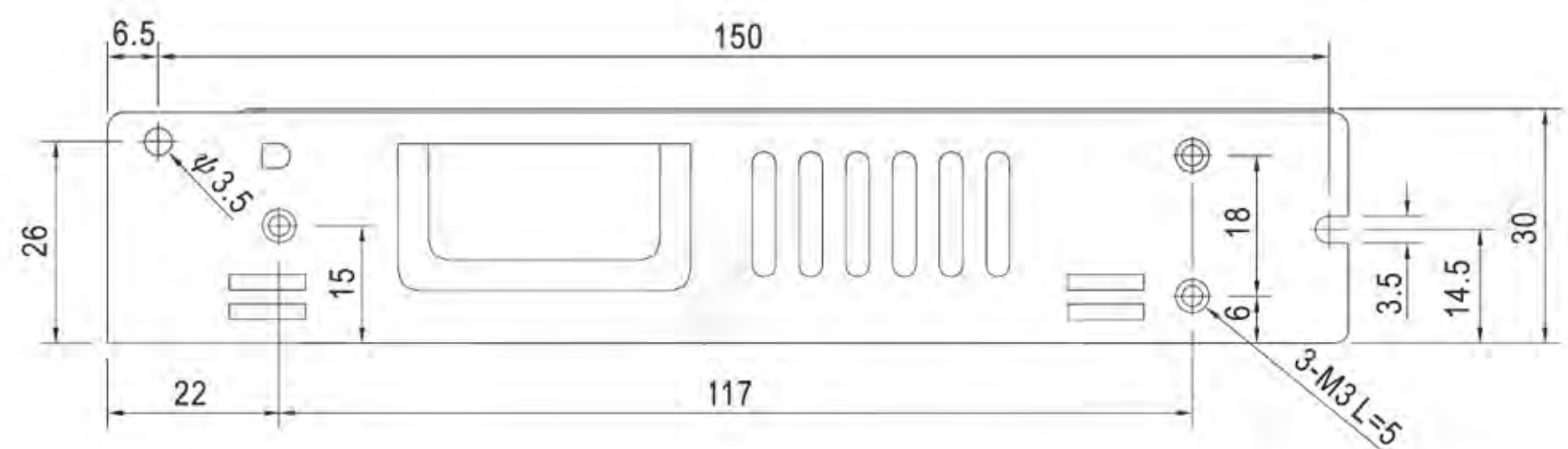
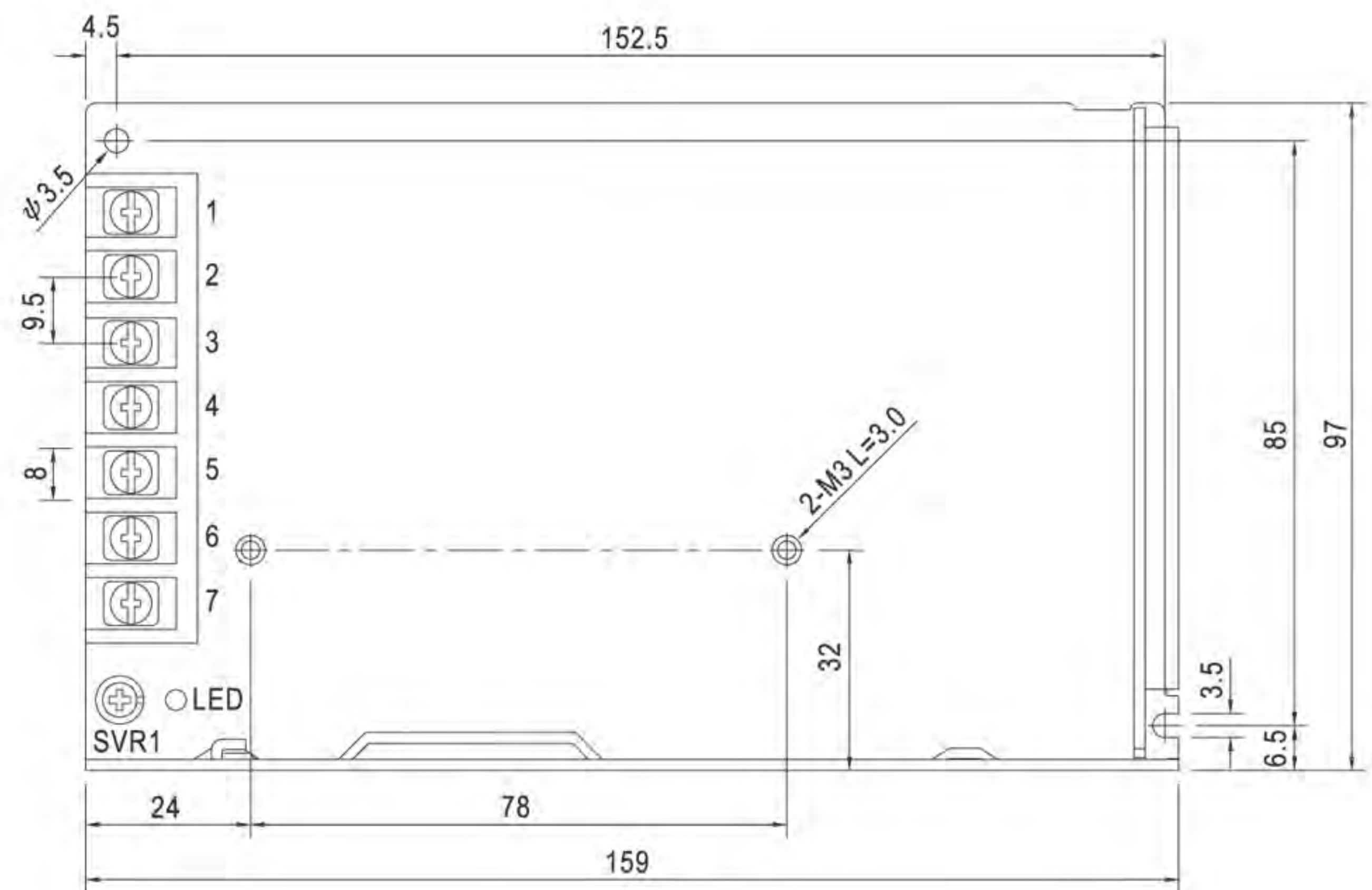
Mechanical Specifications:-

Unit:mm

Dimension: 159*97*30mm

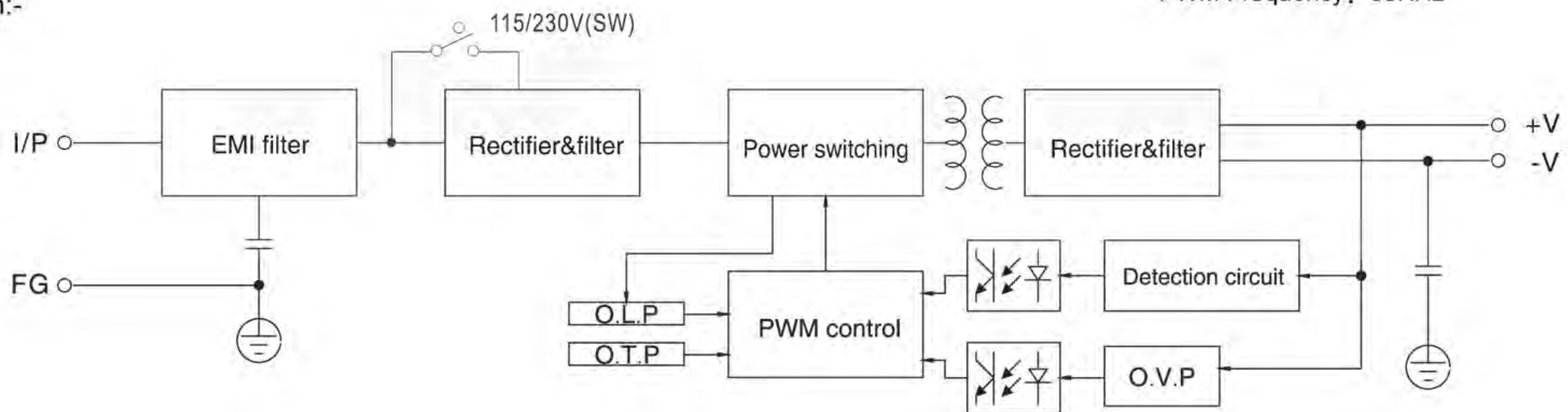
Terminal Pin No.Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/N	4,5	DC OUTPUT -V
2	AC/L	6,7	DC OUTPUT +V
3	FG \perp		

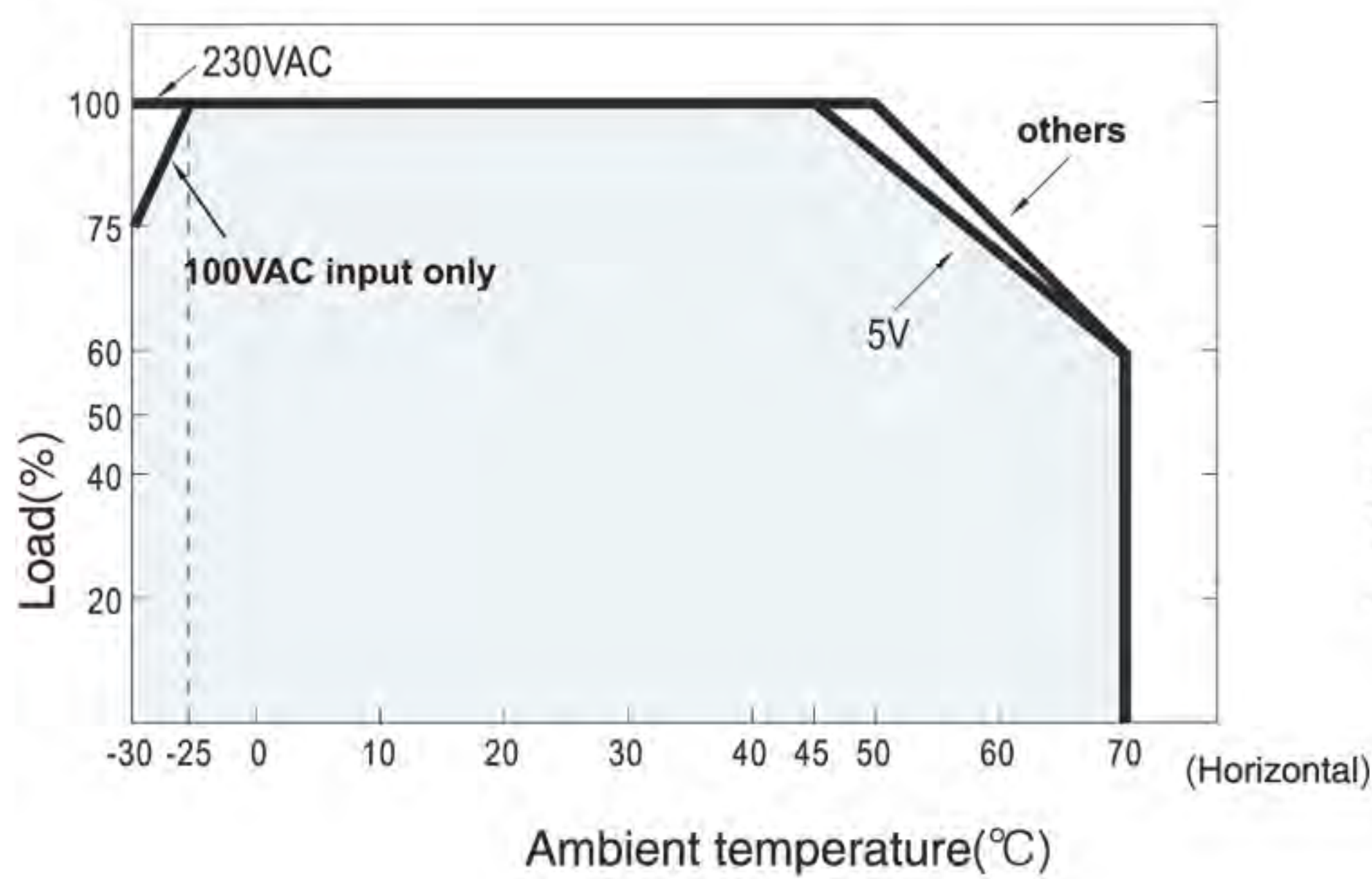


PWM Frequency: 65KHz

Block diagram:-



Derating Curve:-



Static Characteristic:-

