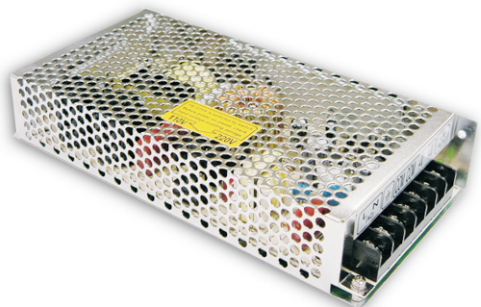




## 145W Single Output Switching Power Supply

## S-145 series



## ■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- LED indicator for power on
- Made in China for low cost
- High reliability
- 1 year warranty

## SPECIFICATION

MODEL	S-145-5	S-145-7.5	S-145-12	S-145-15	S-145-24	S-145-27	S-145-48	
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	27V	48V
	RATED CURRENT	25A	18A	12A	9.6A	6A	5.3A	3A
	CURRENT RANGE	0 ~ 25A(30A max.)	0 ~ 18A(21A max.)	0 ~ 12A(14A max.)	0 ~ 9.6A(11A max.)	0 ~ 6A(7A max.)	0 ~ 5.3A	0 ~ 3A
	RATED POWER	125W	135W	144W	144W	144W	143.1W	144W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	6 ~ 8.3V	10.6 ~ 13.2V	13.2 ~ 16.5V	21 ~ 28V	24.5 ~ 29.5V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	100ms, 50ms at full load						
HOLD UP TIME (Typ.)	24ms at full load							
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC selected by switch			248 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	78%	80.5%	80.5%	81%	83.5%	85%	83.5%
	AC CURRENT (Typ.)	2.6A/115VAC		1.3A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 32A						
LEAKAGE CURRENT	<3.5mA / 240VAC							
PROTECTION	OVERLOAD	125 ~ 165% rated output power Protection type : Shut down o/p voltage, re-power on to recover						
	OVER VOLTAGE	5.6 ~ 6.8V	8.6 ~ 10V	13.8 ~ 16.2V	17.3 ~ 20.3V	29 ~ 32V	31.05 ~ 36.45V	55.2 ~ 64.8V
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)						
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes						
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1012						
	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°C / 70% RH						
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B						
OTHERS	EMS IMMUNITY	Compliance to IEC801-2,3,4, light industry level, criteria A						
	MTBF	286.7K hrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	199*98*38mm (L*W*H)						
NOTE	PACKING	0.71Kg; 30pcs/22.5Kg/1.22CUFT						
		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.						

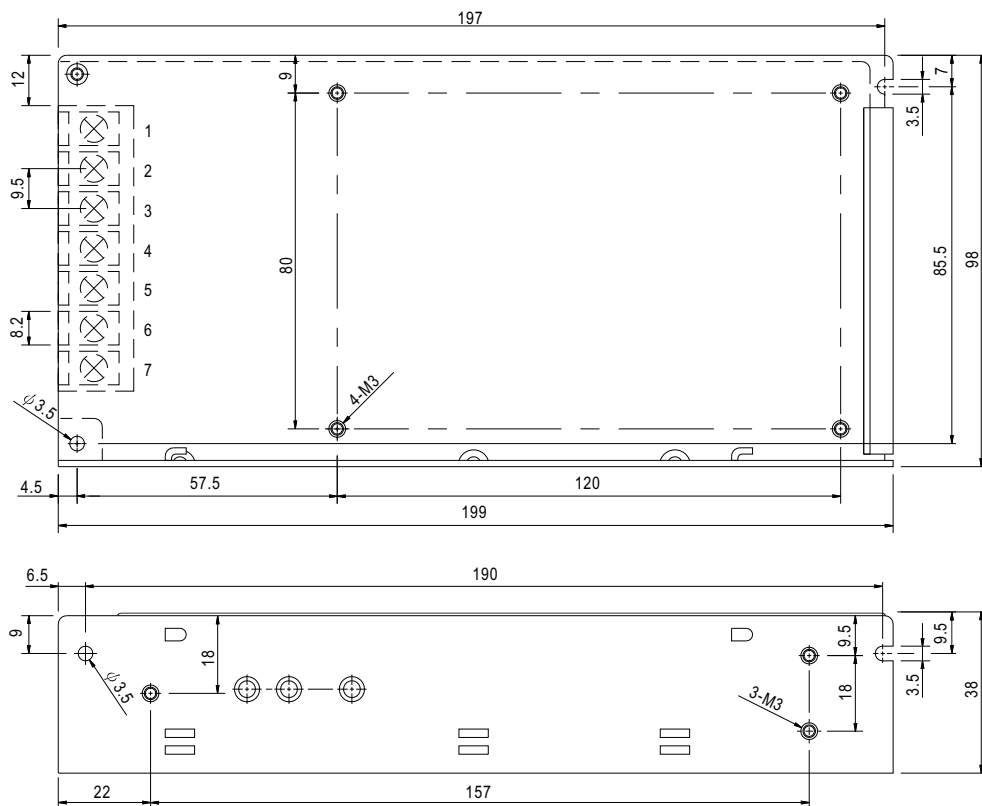


145W Single Output Switching Power Supply

S-145 series

**Mechanical Specification**

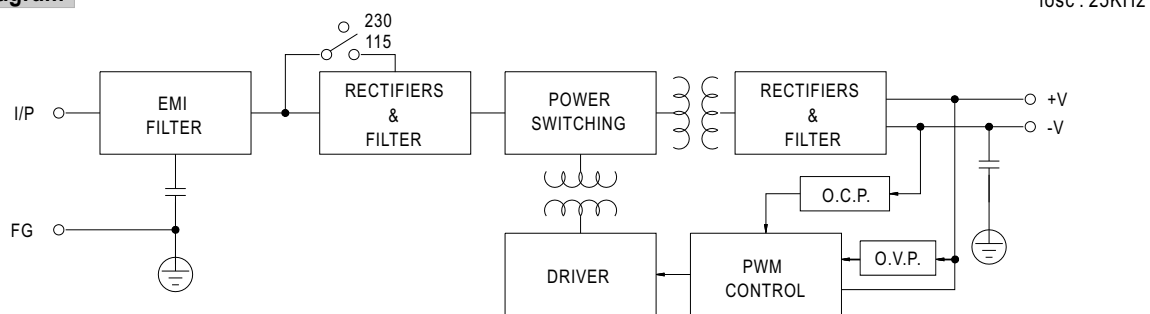
Case No. 902 Unit:mm



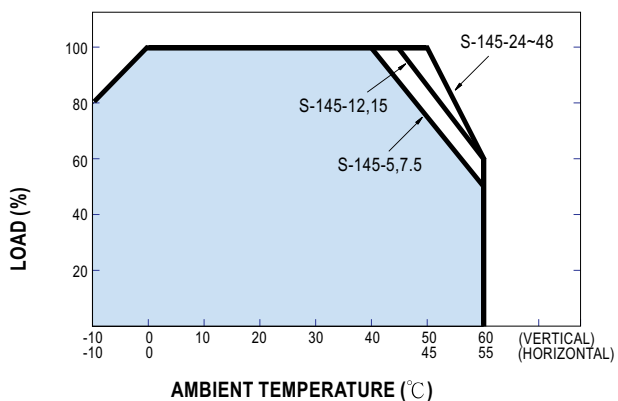
Terminal Pin No. Assignment

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

**Block Diagram**



**Derating Curve**



**Static Characteristics (24V)**

