100W Single Output Industrial DIN Rail Power Supply DR-100 series

Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- Isolation class II
- LED indicator for power on
- No load power consumption<1W
- 100% full load burn-in test
- 3 years warranty

SPECIFICATION

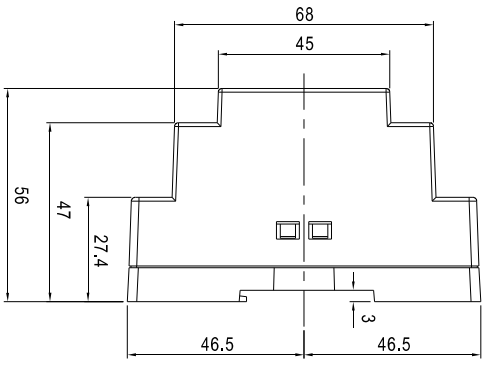
MODEL		DR-100-12	DR-100-15	DR-100-24
OUTPUT	DC VOLTAGE	12V	15V	24V
	RATED CURRENT	7.5A	6.5A	4.2A
	CURRENT RANGE	0 ~ 7.5A	0 ~ 6.5A	0 ~ 4.2A
	RATED POWER	90W	97.5W	100.8W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 15V	15 ~ 18V	24 ~ 29V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2700ms, 80ms/230VAC 2700ms, 80ms/115VAC at full load		
	HOLD UP TIME (Typ.)	50ms/230VAC 18ms/115VAC at full load		
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	87%	87%	89%
	AC CURRENT (Typ.)	3A/115VAC 1.6A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC 45A/230VAC		
PROTECTION	OVERLOAD Note.6	105 ~ 135% rated output power		
		Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	16 ~ 20V	19 ~ 23V	30 ~ 35V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	90℃ ±15℃ (RTH2) detect on heatsink of power transistor		
		Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)		
	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved, design refer to EN50178		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃ / 70% RH		
	EMC EMISSION	Compliance to EN61204-3, EN55022 Class B, EN61000-3-2,-3		
	EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A		
OTHERS	MTBF	486K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	100*93*56mm (W*H*D)		
	PACKING	0.35Kg; 36pcs/13.6Kg/0.89CUFT		

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. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
5. Harmonic current test @ 90% load.
6. Under short circuit or overload >150% conditions, output voltage may shut down for 5 sec. and then go into constant current protection mode.

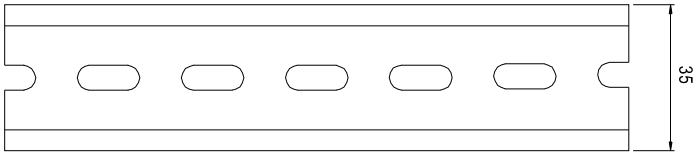
■ Mechanical Specification

Case No.970A Unit:mm

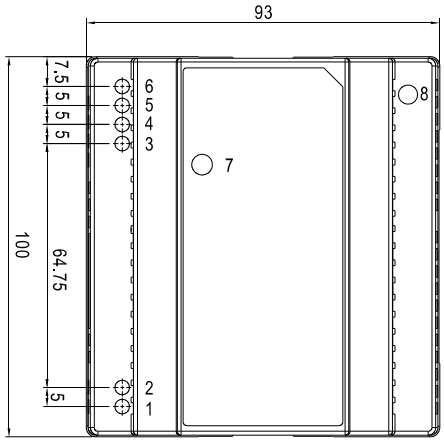


Terminal Pin No. Assignment

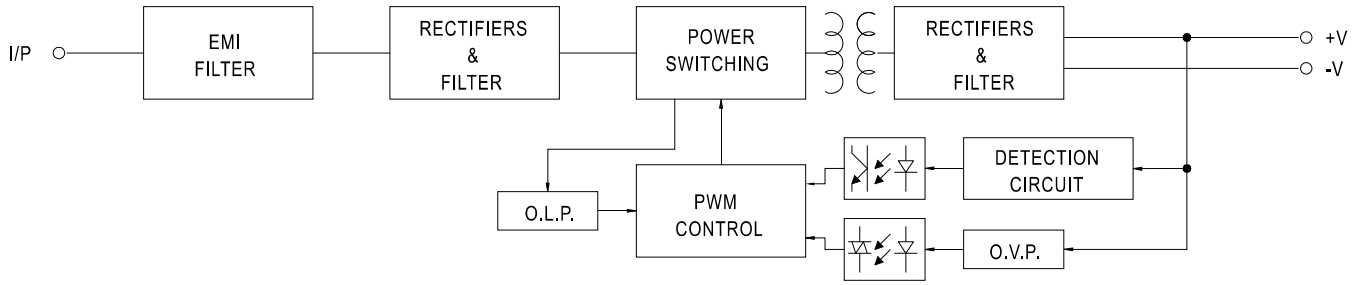
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5,6	-V
2	AC/N	7	LED
3,4	+V	8	+V ADJ.



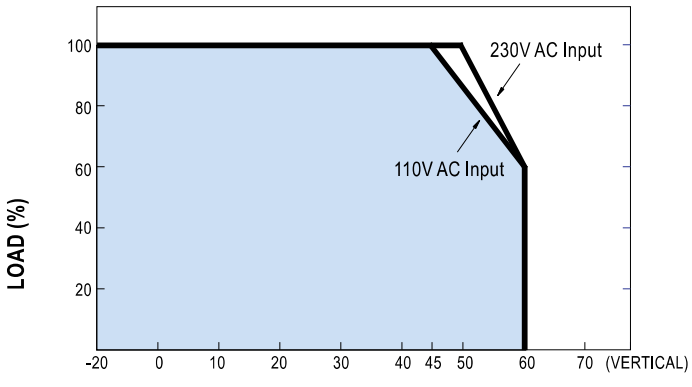
ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15



■ Block Diagram



■ Derating Curve VS Ambient Temperature



■ Output Derating VS Input Voltage