120W Single Output Industrial DIN RAIL Power Supply DR-120 series



■ Features :

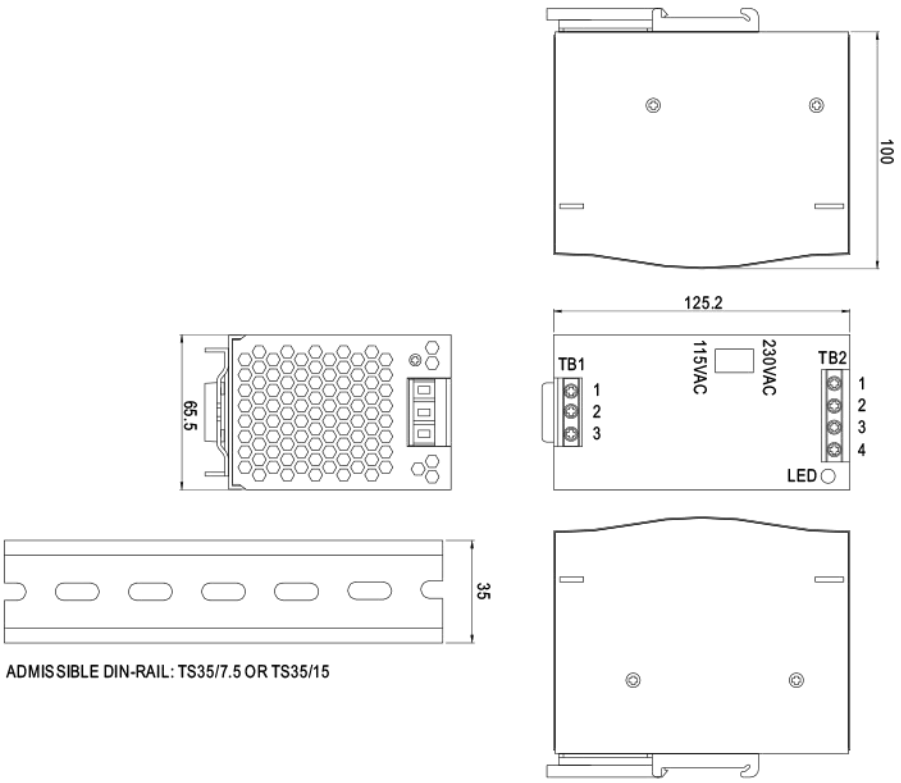
- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508(industrial control equipment)approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 55KHz
- 3 years warranty

SPECIFICATION

MODEL		DR-120-12	DR-120-24	DR-120-48
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	10A	5A	2.5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A
	RATED POWER	120W	120W	120W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 53V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	500ms, 70ms/230VAC 500ms, 70ms/115VAC at full load		
	HOLD UP TIME (Typ.)	36ms/230VAC 32ms/115VAC at full load		
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC by switch 248 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	80%	84%	85%
	AC CURRENT (Typ.)	2.6A/115VAC 1.6A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC		
	LEAKAGE CURRENT	<3.5mA / 240VAC		
PROTECTION	OVERLOAD	105 ~ 150% rated output power		
		Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	15 ~ 16.5V	29 ~ 33V	58 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	85℃±5℃ (TSW1)	90℃±5℃(TSW1)	90℃±5℃(TSW1)
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, UL60950-1, TUV EN60950-1, EAC TP TC 004 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020		
OTHERS	MTBF	432.1Khrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	65.5*125.2*100mm (W*H*D)		
	PACKING	0.79Kg; 20pcs/16.5Kg/1.29CUFT		
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. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).			

■ Mechanical Specification

Case No. 921A Unit:mm



Terminal Pin No. Assignment (TB1)

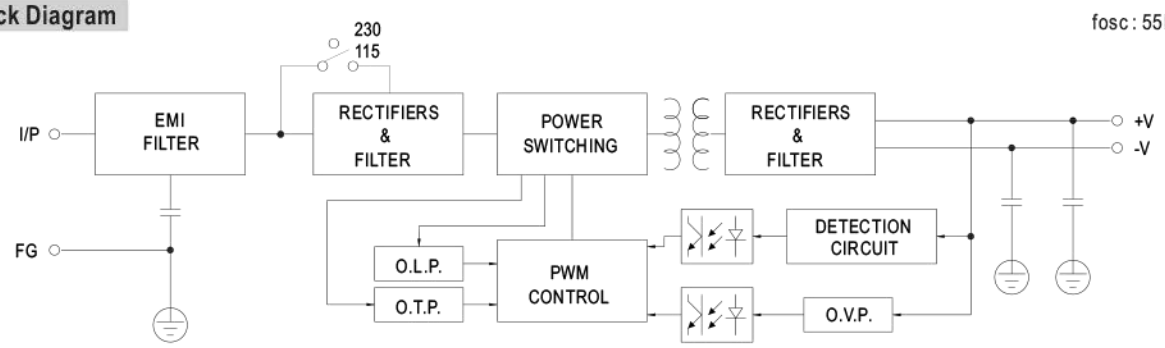
Pin No.	Assignment
1	FG ⏚
2	AC/N
3	AC/L

Terminal Pin No. Assignment (TB2)

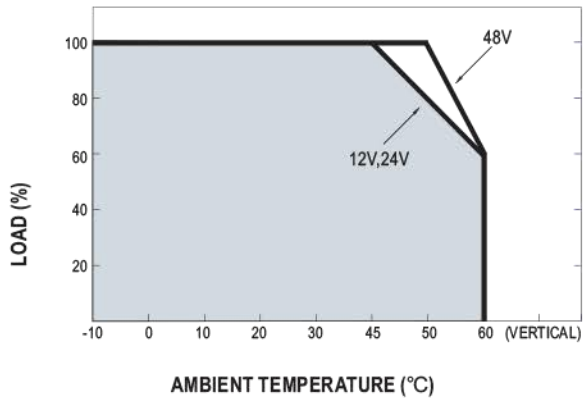
Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V

■ Block Diagram

fosc : 55KHz



■ Derating Curve



■ Static Characteristics (24V)

