





# POLLOCK INDUSTRIES

Technical Data Sheet

120W 48V Single Output  
DIN RAIL Power Supply

UNIT CODE	DESCRIPTION
DIN RP 120-48	120 Watt, 48 Volt, Single Output DIN RAIL Power Supply

SPECIFICATIONS		
AC Input	Output	Approvals
Selectable by Switch 88~264VAC or 176~264VAC	+48VDC @ 0 ~ 2.5A	   

## Features at a Glance:

Low cost, high reliability

UL 508 (industrial control equipment) approved

Fan-less cooling by natural (free air) convection

Working temp range: -10~+60 °C (see derating curve)

Short circuit, over load, over voltage and over temperature protected

Soft-start circuit - limiting AC surge current

International AC input range

100% full load burn in test

Installed on DIN rail TS35 / 7.5 or 15

Fixed switching frequency at 55KHz

LED indication for power on

Safety standards: UL508, UL60950-1, TUV EN60950-1

EMC standards: Compliance to EN55011, EN55022 (CISPR22) Class B, EN61000-3-2,-3; ENV50204; EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2) Heavy Industry Level, Criteria A

MTBF hours: 432.1K hrs min. *MIL-HDBK-217F (25°C)*

Case: 921A

Weight: 1.7 lbs (0.79 Kgs)

Dimensions: 2.57W x 3.93H x 3.93D inches  
65.5W x 125.2H x 100D mm

3 year warranty



The DIN RP-120 series are an economical industrial DIN rail power supply with AC input range selectable by switch and works world-wide. Standard features include short circuit, overload, over voltage and over temperature protections.

What we like about this series is that they work with fan-less natural convection cooling in ambients up to +60°C (140°F). This significantly increases the reliability and lifetime of the power supply.

Typically used factory automation, IT, security, data communications, control panels and electro-mechanical apps.

Pricing:	1 ~ 9	\$ 129.50
	10+	97.35
	25+	89.70

Pollock Industries, Inc., PO Box 1003, White River, VT 05001  
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# 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

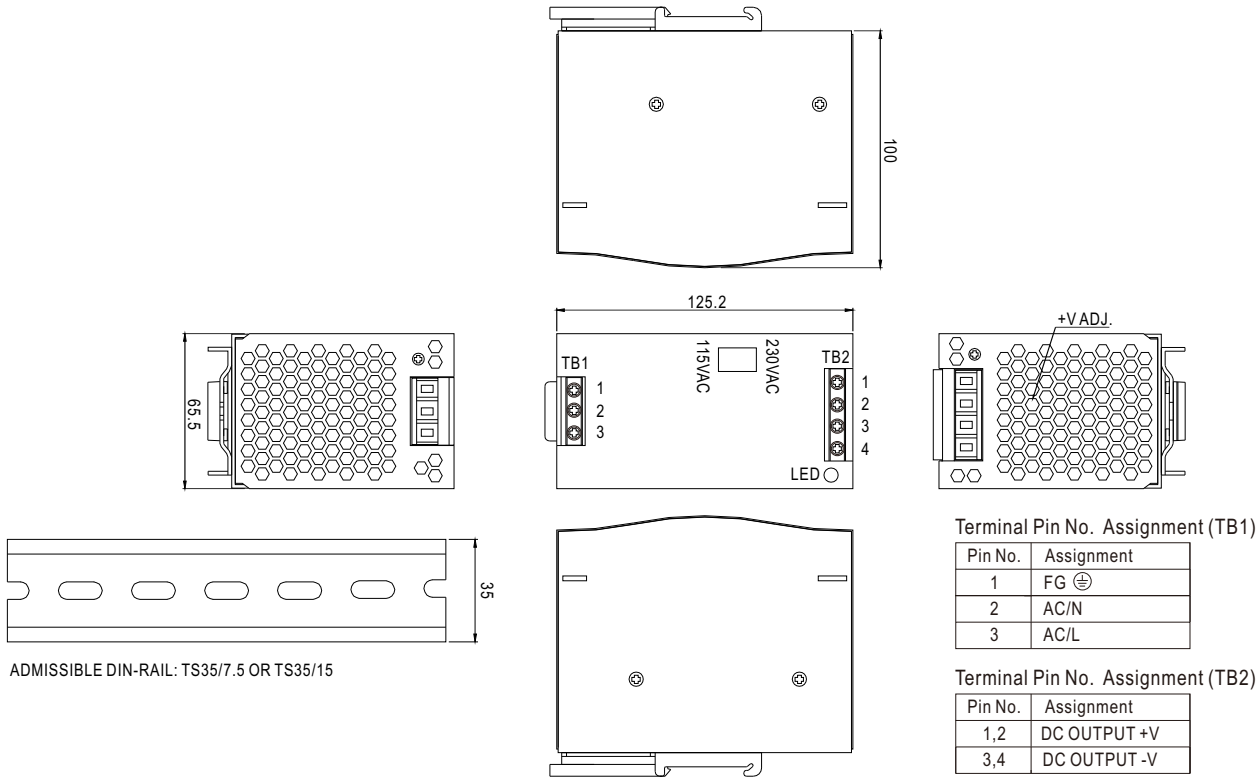
MODEL	DR-120-12	DR-120-24	DR-120-48	
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	10A	5A	2.5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A
	RATED POWER	120W	120W	120W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 53V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±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
	OVER TEMPERATURE	85°C ±5°C (TSW1)		90°C ±5°C(TSW1)
		90°C ±5°C(TSW1)		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to "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; Mounting: Compliance to IEC60068-2-6		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, UL60950-1, TUV EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    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		
	EMC EMISSION	Compliance to EN55011,EN55022 (CISPR22) Class B, EN61000-3-2,-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A		
OTHERS	MTBF	432.1Khrs min.    MIL-HDBK-217F (25°C)		
	DIMENSION	65.5*125.2*100mm (W*H*D)		
	PACKING	0.79Kg; 20pcs/16.5Kg/1.29CUFT		
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> </ol>			

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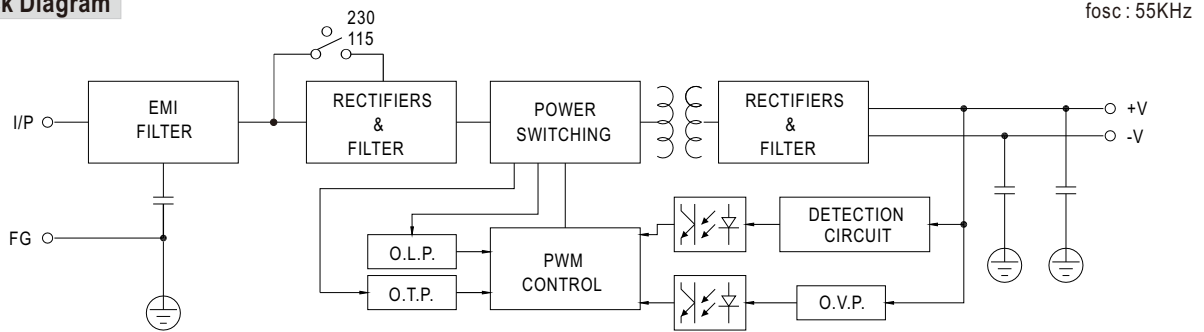
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**Mechanical Specification**

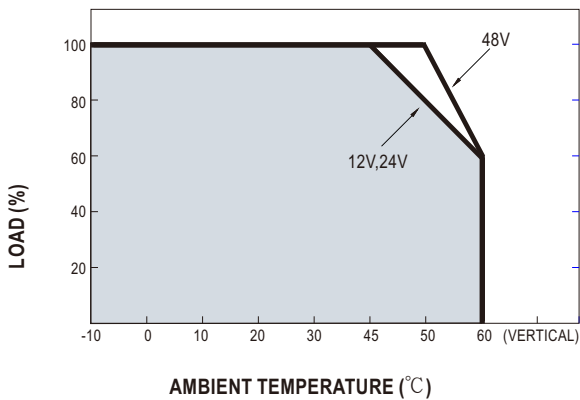
Case No. 921A Unit:mm



**Block Diagram**



**Derating Curve**



**Static Characteristics (24V)**

