


120 Watt, 48 Volt, Three Phase Input
Single Output, DIN RAIL Power Supply

UNIT CODE	DESCRIPTION
DRH 120-48	120 Watt, 48 Volt, Three Phase Input, Single Output, DIN RAIL Power Supply

SPECIFICATIONS		
AC Input	Output	Approvals
Three-Phase (340~550VAC Input Range)	+48VDC @ 0~2.5A	

Features at a Glance:

Three-Phase AC 340 ~ 550V wide range input
Quite efficient (86%) and low power dissipation
Protections: Short circuit / Overload /
Over voltage / Over temperature

Fixed Switching at 70KHz

LED indication for power on

Quiet - Cooling by natural (free air) convection

Operational Temperature range: -20 ~ +60°C

Installed on DIN rail TS35 / 7.5 or 15

100% full load burn-in test

Safety standards: UL60950-1 approved,
IEC60950-1 CB approved by SIQ

EMC: EN61000-6-2 (EN50082-2) industrial immunity
(See following pages for full EMC details)

Certificates: CUL / CB / CE

MTBF hours: 178.7 K hrs. *MIL-HDBK-217F (25°C)*

Case: 921A

Weight: 1.65 Lbs. (0.75 Kgs)

Dimensions: 2.57" W x 4.9" H x 3.93" D
65.5 x 125.2 x 100mm (W*H*D)

3 year warranty

Compact Alternative: [C-WDR 120W-48V](#)



DRH 120 fulfills requirements for low wattage, Three-Phase applications in an economical, industrial DIN rail power unit that's efficient (85%) and quiet.

Can be operated at the full load of 120W at ambient temperatures up to +50°C (or up to +60°C with some power derating). Standard features include protections for short-circuit, overload, over voltage, over temperature and LED indication for power on.

Suitable applications include general telecom, factory automation, electro-mechanical, IT, security, data communications and control panel applications, and any 3-phase installations with fan-less or low noise requirements.

Pricing	1 ~ 9	\$ 119.00
	10+	\$ 99.50
	25+	\$ 87.70

Pollock Industries, Inc., PO Box 1003, White River, VT 05001
toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com



120W Single Output Industrial DIN RAIL Power Supply

DRH-120 series



■ Features :

- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 or 15
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- Fixed switching frequency at 70KHz
- 3 years warranty



SPECIFICATION

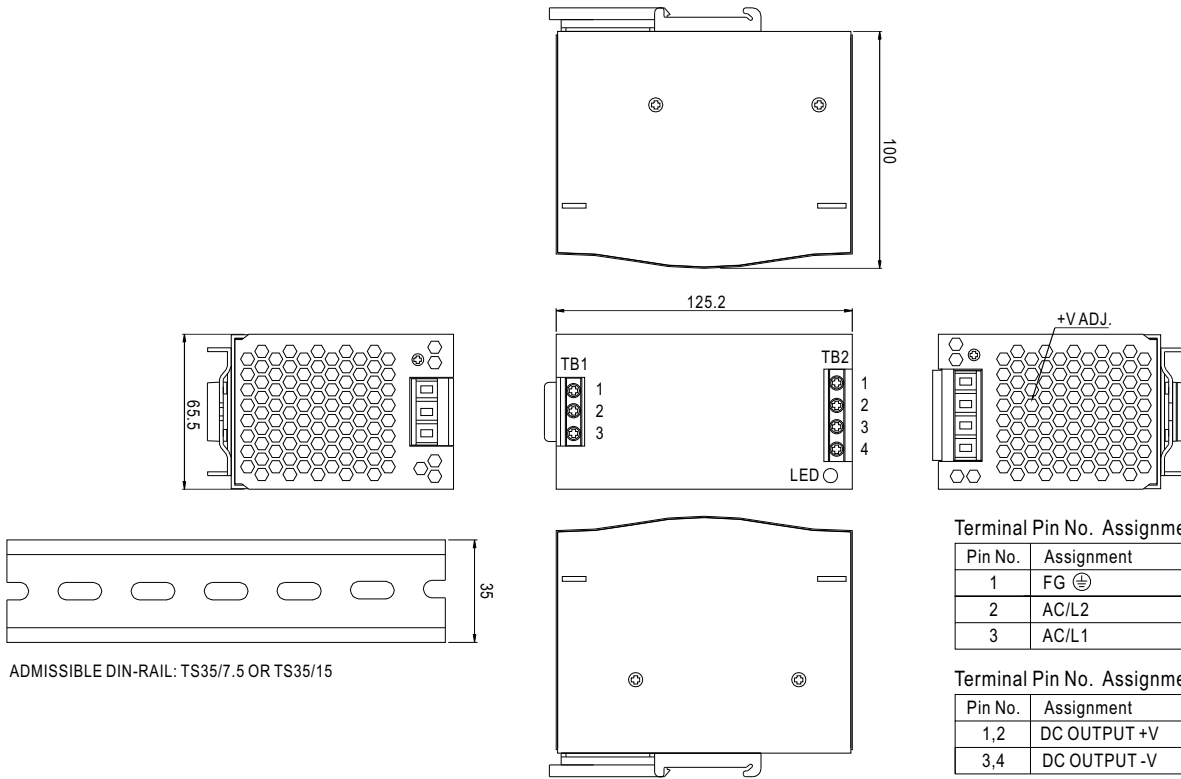
MODEL	DRH-120-24	DRH-120-48	
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	5A	2.5A
	CURRENT RANGE	0 ~ 5A	0 ~ 2.5A
	RATED POWER	120W	120W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%
SETUP, RISE, HOLD UP TIME	1700ms, 120ms, 16ms/400VAC 1000ms, 120ms, 30ms/500VAC at full load		
INPUT	VOLTAGE RANGE	340 ~ 550VAC 480 ~ 780VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	85%	86%
	AC CURRENT	0.65A/400VAC 0.6A/500VAC	
	INRUSH CURRENT (max.)	COLD START 50A	
	LEAKAGE CURRENT	<3.5mA / 530VAC	
PROTECTION	OVERLOAD	105 ~ 160% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	
	OVER VOLTAGE	30 ~ 36V	59 ~ 66V
	OVER TEMPERATURE	85°C ±5°C (TSW) detect on heatsink of power switch Protection type : Shut down o/p voltage, recovers automatically after temperature goes down	
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting clip: Compliance to IEC60068-2-6	
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1 approved, IEC60950-1 CB approved by SIQ	
	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 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, criteria A	
OTHERS	MTBF	178.7Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	65.5*125.2*100mm (W*H*D)	
	PACKING	0.75Kg; 20pcs/16Kg/1.29CUFT	
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 400VAC 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. 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. 		

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

toll-free 1-866-665-5434 (603) 888-2467 sales@electracool.com

Mechanical Specification

Case No.921A Unit:mm



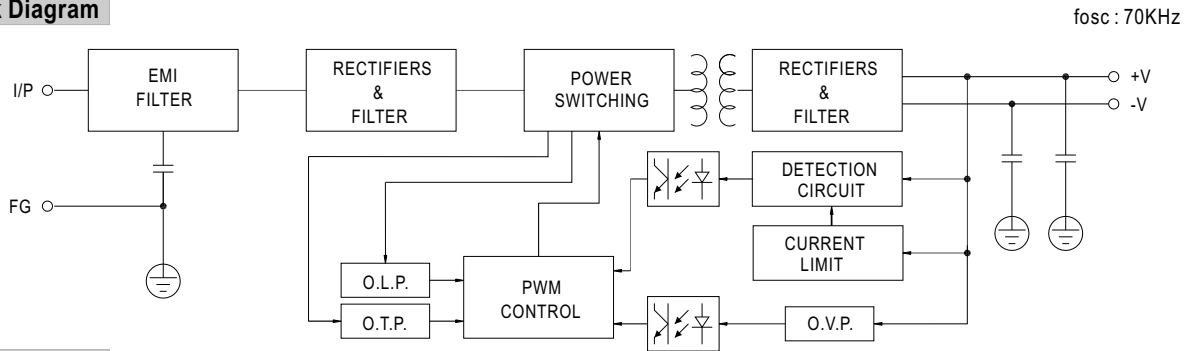
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG ⊕
2	AC/L2
3	AC/L1

Terminal Pin No. Assignment (TB2)

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

Block Diagram



Derating Curve

