


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

UNIT CODE	DESCRIPTION
TDR 240-48	240 Watt, 48 Volt, Three Phase, Single Output, DIN RAIL Power Supply

SPECIFICATIONS		
AC Input	Output	Approvals
Three-Phase (340~550VAC Input Range)	+48VDC @ 0~5A	

## Features at a Glance:

Three-Phase AC 340 ~ 550V wide range input  
High efficiency 89% and low power dissipation  
Protections: Short circuit / Over load /  
Over voltage / Over temperature

Fixed Switching at 70KHz  
LED indication for power on  
Quiet - Cooling by natural (free air) convection  
Operational Temperature range: -20 ~ +70°C  
Installed on DIN rail TS35 / 7.5 or 15  
100% full load burn-in test

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

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

Certificates: UL / CUL / TUV / CB / CE

MTBF hours: 114.6 K hrs. *MIL-HDBK-217F (25°C)*

Case: 922A

Weight: 2.86 Lbs. (1.3 Kgs)

Dimensions: 4.94" W x 4.9" H x 3.93" D  
125.5 x 125.2 x 100mm (W\*H\*D)

3 year warranty



**TDR 240 meets the requirements for a lower wattage, 3-phase DIN Rail Power supply in an economical, industrial (UL508), power unit that's efficient (89%) and quiet.**

**Can be operated at the full load of 240W at ambient temperatures up to +60°C (or up to +70°C with some power derating). Standard features include protections for short-circuit, overload, over voltage, and over temperature. LED indication for power on.**

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

Pricing	1 ~ 9	\$ 169.00
	10+	\$ 149.50
	25+	\$ 127.70

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



■ Features :

- Three-Phase AC 340 ~ 550V wide range input
- High efficiency 89% and low dissipation
- 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
- UL 508(industrial control equipment)approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- Fixed switching frequency at 70KHz
- 3 years warranty



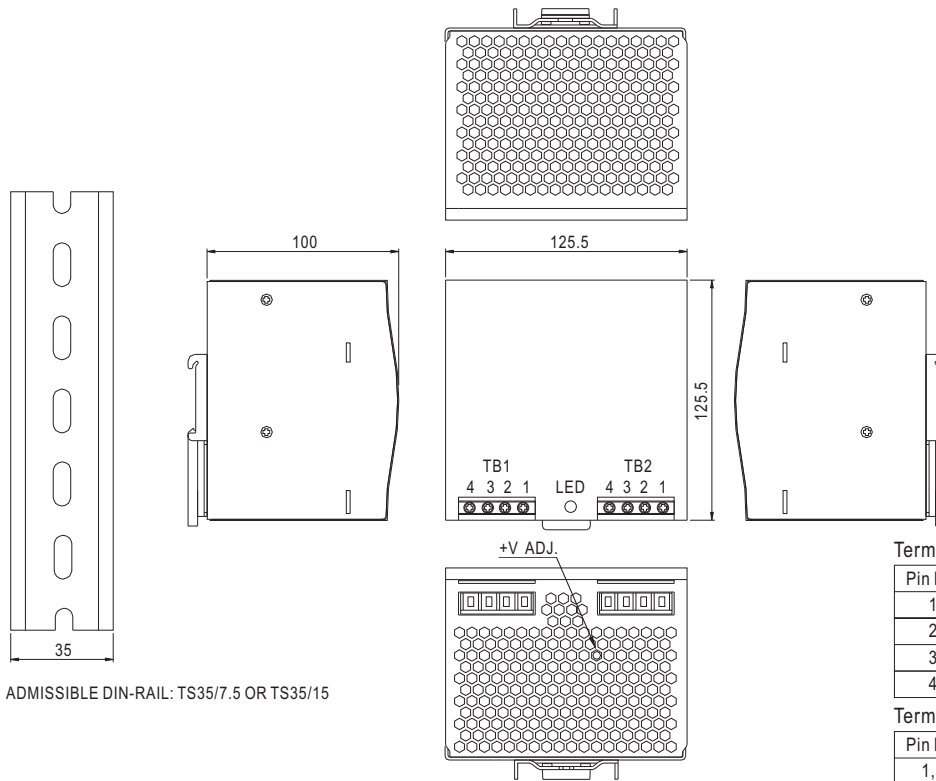
**SPECIFICATION**

MODEL		DRT-240-24	DRT-240-48
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	10A	5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A
	RATED POWER	240W	240W
	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	1200ms, 40ms, 20ms/400VAC      800ms, 40ms, 40ms/500VAC at full load		
INPUT	VOLTAGE RANGE Note.5	Three-Phase 340 ~ 550VAC (Dual phase operation possible)      480 ~ 780VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	89%	
	AC CURRENT	0.95A/400VAC      0.75A/500VAC	
	INRUSH CURRENT (max.)	COLD START 50A	
	LEAKAGE CURRENT	<3.5mA / 530VAC	
PROTECTION	OVERLOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed	
	OVER VOLTAGE	30 ~ 36V	59 ~ 66V
	OVER TEMPERATURE	100°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 ~ +70°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	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 (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	114.6K hrs min.    MIL-HDBK-217F (25°C)	
	DIMENSION	125.5*125.2*100mm (W*H*D)	
	PACKING	1.3Kg; 12pcs/16.6Kg/1.29CUFT	
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 400VAC 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> <li>5. Dual phase operation: derating of 20% is required.</li> </ol>		

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

Case No. 922A Unit:mm

**Mechanical Specification**



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

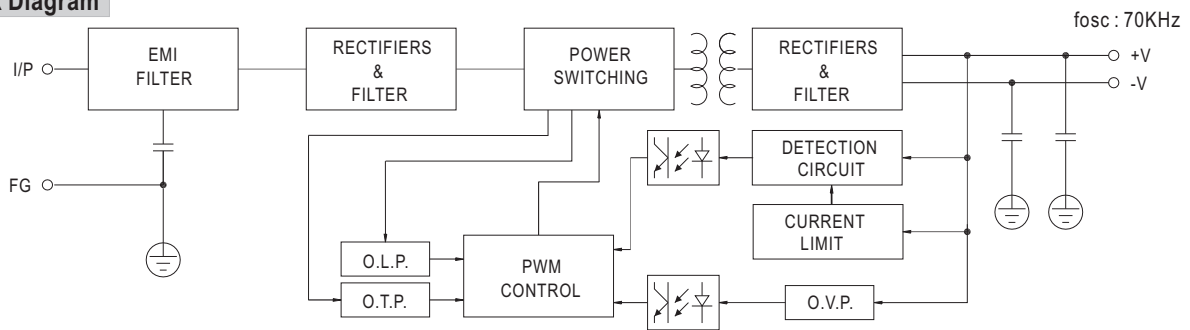
**Terminal Pin No. Assignment (TB1)**

Pin No.	Assignment
1	FG ⊕
2	AC/L3
3	AC/L2
4	AC/L1

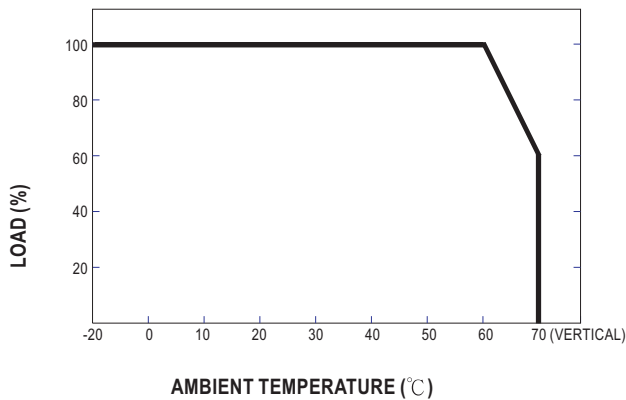
**Terminal Pin No. Assignment (TB2)**

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

**Block Diagram**



**Derating Curve**



**Static Characteristics**

