

# POWER SUPPLY WARRANTY EXTENSION

## Extending Power Supply Warranty to 5 Years Unconditional

### TRABTECH

Application Note

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#### General Description

Increasing uptime begins with a high-quality power supply from Phoenix Contact. Reducing vulnerability to surges further increases uptime and extends the life expectancy of the power supply. Phoenix Contact's TRABTECH surge suppression devices protect the power supply from damaging surges, increasing uptime.






Any damage that occurs is contained within the surge protection device (SPD). The modular design allows the damaged plug to be replaced without shutting the power supply down. Additionally, the unit can be connected to a remote monitoring system to notify the operator of module damage.
















Phoenix Contact extends the warranties offered on the MINI, STEP, QUINT, and TRIO power supplies to 5 years unconditional when using Phoenix Contact's recommended surge protection solution.




#### Product Selection

The following tables simplify the TRABTECH product selection process. In the appropriate table, find your power supply (PS) and scan to the right to locate the recommended TRABTECH protection.

Example: When purchasing a MINI-PS100-240AC/10-15DC/8 for 120 V AC single-phase power input, a PT 2-PE/S-120AC (Order No. 2856812) provides surge protection and extends the standard warranty to 5 years unconditional.

	Part No.	Article Description	Recommended SPD for:	
			120 V AC Input	230 V AC Input
 <b>MINI Power 1-Phase Input</b>	2866983	MINI-SYS-PS-100-240AC/24DC/1.5	 <b>Plug and Header PT 2-PE/S-120AC</b> Part No. 2856812   <b>Replacement Plug PT 2-PE/S-120AC-ST</b> Part No. 2839334	 <b>Plug and Header PT 2-PE/S-230AC</b> Part No. 2858357   <b>Replacement Plug PT 2-PE/S-230AC-ST</b> Part No. 2839347
	2866297	MINI-PS-100-240AC/10-15DC/8		
	2866336	MINI-PS-100-240AC/24DC/C2LPS		
	2938756	MINI-PS-100-240AC/10-15DC/2		
	2938837	MINI-PS-100-240AC/24DC/4		
	2938730	MINI-PS-100-240AC/24DC/2		
	2866446	MINI-PS-100-240AC/24DC/1.3		
	2938840	MINI-PS-100-240AC/24DC/1		
	2938743	MINI-PS-100-240AC/2X15DC/1		
	2938714	MINI-PS-100-240AC/5DC/3		

	Part No.	Article Description	Recommended SPD for:	
			120 V AC Input	230 V AC Input
 <p>STEP Power 1-Phase Input</p>	2868635	STEP-PS/1AC/24DC/0.75	 Plug and Header <b>PT 2-PE/S-120AC</b> Part No. 2856812   Replacement Plug <b>PT 2-PE/S-120AC-ST</b> Part No. 2839334	 Plug and Header <b>PT 2-PE/S-230AC</b> Part No. 2858357   Replacement Plug <b>PT 2-PE/S-230AC-ST</b> Part No. 2839347
	2868648	STEP-PS/1AC/24DC/1.75		
	2868651	STEP-PS/1AC/24DC/2.5		
	2868664	STEP-PS/1AC/24DC/4.2		
	2868567	STEP-PS/1AC/12DC/1.5		
	2868570	STEP-PS/1AC/12DC/3		
	2868583	STEP-PS/1AC/12DC/5		
	2868541	STEP-PS/1AC/5DC/6.5		
	2868619	STEP-PS/1AC/15DC/4		
	2868680	STEP-PS/1AC/48DC/2		
 <p>TRIO Power 1-Phase Input</p>	2866475	TRIO-PS/1AC/12DC/5	 Plug and Header <b>PT 2-PE/S-120AC</b> Part No. 2856812   Replacement Plug <b>PT 2-PE/S-120AC-ST</b> Part No. 2839334	 Plug and Header <b>PT 2-PE/S-230AC</b> Part No. 2858357   Replacement Plug <b>PT 2-PE/S-230AC-ST</b> Part No. 2839347
	2866488	TRIO-PS/1AC/12DC/10		
	2866268	TRIO-PS/1AC/24DC/2.5		
	2866310	TRIO-PS/1AC/24DC/5		
	2866323	TRIO-PS/1AC/24DC/10		
	2866381	TRIO-PS/1AC/24DC/20		
	2866491	TRIO-PS/1AC/48DC/5		
	2866501	TRIO-PS/1AC/48DC/10		
 <p>Quint G2 and Quint SFB 1-Phase Input</p>	2938578	QUINT-PS-100-240AC/24DC/2.5	 Plug and Header <b>PT 2-PE/S-120AC</b> Part No. 2856812   Replacement Plug <b>PT 2-PE/S-120AC-ST</b> Part No. 2839334	 Plug and Header <b>PT 2-PE/S-230AC</b> Part No. 2858357   Replacement Plug <b>PT 2-PE/S-230AC-ST</b> Part No. 2839347
	2938581	QUINT-PS-100-240AC/24DC/5		
	2938604	QUINT-PS-100-240AC/24DC/10		
	2938853	QUINT-PS-100-240AC/24DC/5/EX		
	2866255	QUINT-PS-100-240AC/48DC/5		
	2938866	QUINT-PS-100-240AC/24DC/10/EX		
	2938248	QUINT-PS-100-240AC/48DC/10		
	2938620	QUINT-PS-100-240AC/24DC/20		
	2938811	QUINT-PS-100-240AC/12DC/10		
	2938976	QUINT-PS-100-240AC/48DC/20		
	2938879	QUINT-PS-100-240AC/24DC/40		
	2866679	QUINT-PS-1AC/48DC/5		
	2866682	QUINT-PS-1AC/48DC/10		
	2866747	QUINT-PS-1AC/24DC/3.5		
	2866750	QUINT-PS-1AC/24DC/5		
	2866763	QUINT-PS-1AC/24DC/10		
	2866776	QUINT-PS-1AC/24DC/20		
	2866718	QUINT-PS-1AC/12DC/15		
2866721	QUINT-PS-1AC/12DC/20			

	Part No.	Article Description	Recommended SPD for:
			480 V AC 4-wire Input 400 V TN-C & 3-Phase + GND
 <p>TRIO, QUINT G2 and QUINT SFB Power 3-Phase Input</p>	2866462	TRIO-PS/3AC/24DC/5	 <p>Plugs and Header <b>VAL-CP-3C-350</b> Part No. 2859547</p>  <p>Replacement Plug <b>VAL-CP-350-ST</b> Part No. 2859602</p>
	2866459	TRIO-PS/3AC/24DC/10	
	2866394	TRIO-PS/3AC/24DC/20	
	2866404	TRIO-PS/3AC/24DC/40	
	2938646	QUINT-PS-3x400-500AC/24DC/40	
	2938594	QUINT-PS-3x400-500AC/24DC/5	
	2938617	QUINT-PS-3x400-500AC/24DC/10	
	2938633	QUINT-PS-3x400-500AC/24DC/30	
	2938219	QUINT-PS-3x400-500AC/48DC/10	
	2938222	QUINT-PS-3x400-500AC/48DC/20	
	2938727	QUINT-PS-3x400-500AC/24DC/20	
	2866734	QUINT-PS/3AC/24DC/5	
	2866705	QUINT-PS/3AC/24DC/10	
	2866792	QUINT-PS/3AC/24DC/20	

**Installation Instructions**

Grounding Guidelines:

When installing any electrical system, it is vital to have proper grounding. Grounding wire(s) should have sufficiently low impedance. This means low-gauge (large diameter) conductors should be used for a ground connection. Also, connections should be made with the shortest possible wires. Sharp bends (90°) in wires should be prevented when possible. Avoid coiling excess wires as this creates inductance and leads to poor grounding. It is better to shorten this wire and eliminate the excess.

Single-Phase Input

The MAINS-PLUGTRAB is wired in series with the protected power supply (Figure 1). In this case, the cable providing electrical power should be connected on the "IN" side. The cables leading to the protected equipment should be similarly connected to the "OUT" side of the base. It is important that the equipment ground is wired to terminal 4 of the base (Figure 2).

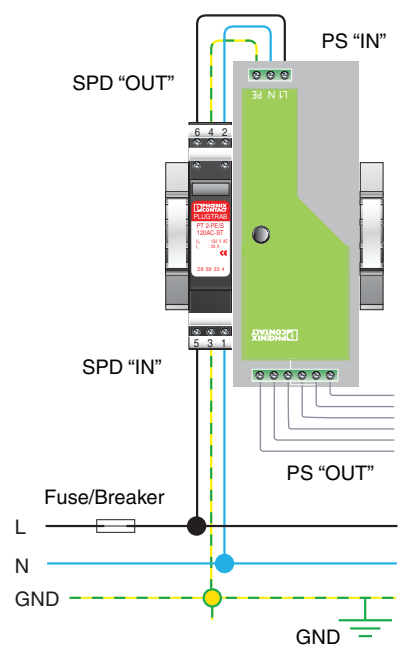


Figure 1. Single-Phase Installation

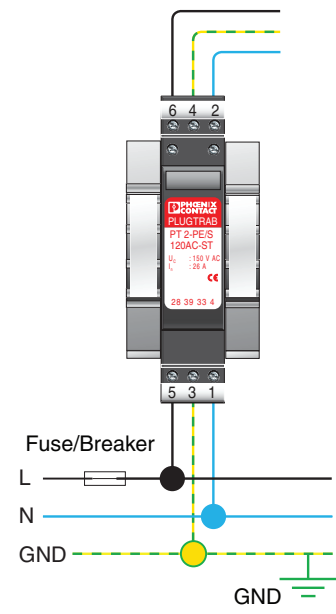


Figure 2. SPD Connection Detail

3-Phase Input

The VALVETRAB compact is wired in parallel with the power supply. In this case, both the cabling providing electrical power and the cables leading to the power supply should be connected to the same terminals.



All Phoenix Contact 3-phase power supplies have four input connections (L1, L2, L3, PE).

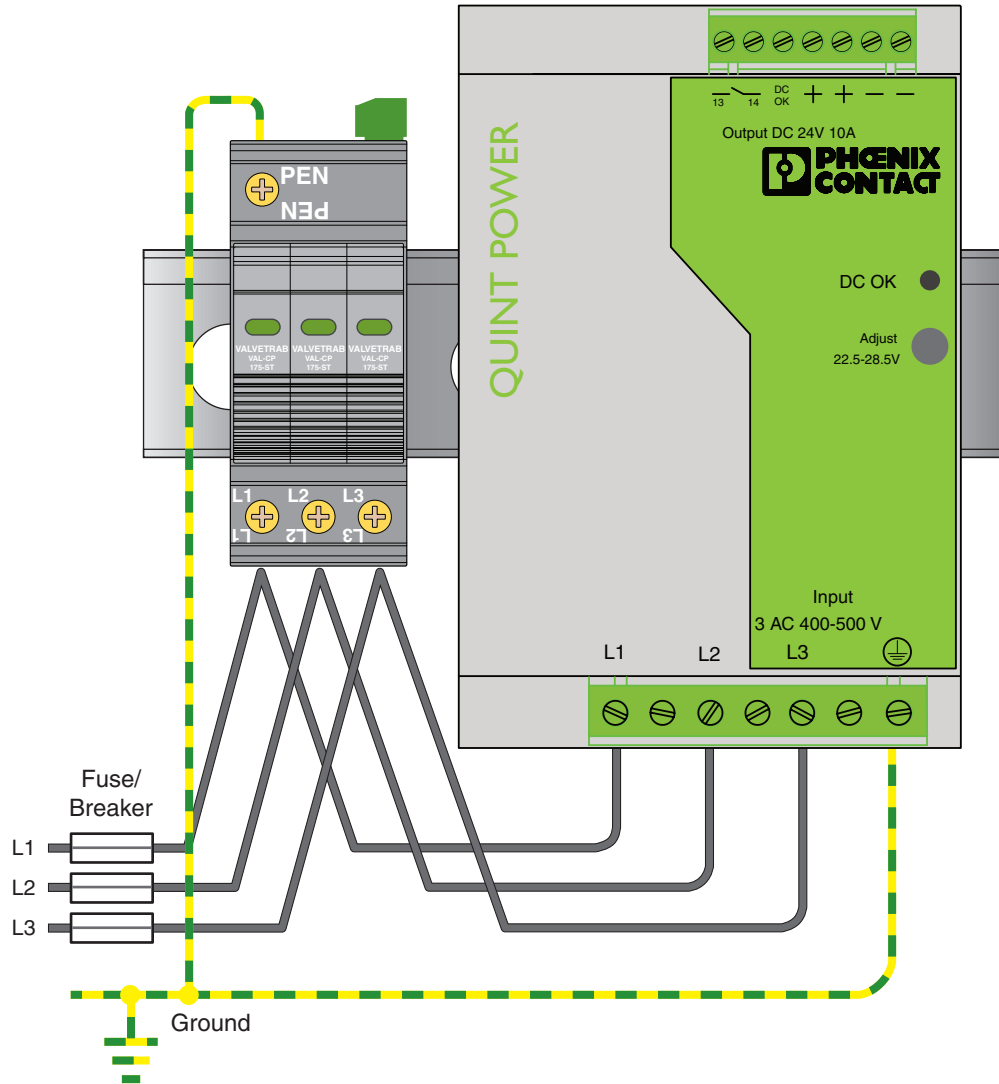


Figure 3. 4-wire, 3-Phase Installation

## **5 Year Extended Warranty**

### **QUINT, QUINT SFB, MINI, TRIO, and STEP**

Phoenix Contact, Inc. ("Phoenix") warrants that the QUINT Generation 2, QUINT SFB, MINI, TRIO and STEP power supplies (the "Product") purchased by a customer from Phoenix or its authorized distributor shall be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date of shipment. Furthermore, Phoenix warrants that the Product will not fail during that five (5) year period, provided that the Product is protected at the time of installation, and at all times thereafter, by the Phoenix-recommended TRABTECH surge suppression device.

Customer shall promptly notify Phoenix in writing of any Product failure or defect, with reasonable detail as to the nature of the failure or defect.

Notwithstanding anything else in this warranty to the contrary, the five (5) year warranty shall be voided in the following circumstances: failure to adhere to the terms of this warranty; misuse; improper operations; improper installation; improper maintenance; alteration or modification of the Product; damage to the Product resulting from an accident; or unusual degradation of the Product or parts due to an unsuitable installation environment.

No representation or other affirmation of facts, including but not limited to statements regarding capacity, suitability for use or performance of the Product, shall be or be deemed to be a warranty or representation by Phoenix for any purpose, nor give rise to any liability or obligation of Phoenix whatsoever.

Customer's sole and exclusive remedy in the event of breach of warranty, as set forth herein, is expressly limited to (1) the correction of the defect by adjustment, repair, modification, or replacement, or (2) issuance of a credit or refund of the purchase price for the defective Product at Phoenix's election and sole expense.

This warranty extends only to Products purchased by the customer from Phoenix's USA affiliate and its authorized USA distributors.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.