

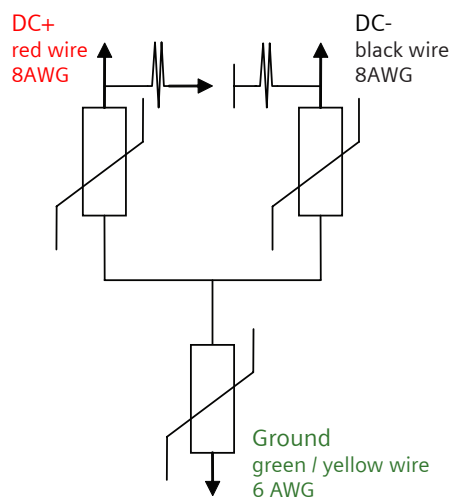
# TPS3 03 DC

## For DC Photovoltaic Applications

TPS3 03 DC is available in 300VDC, 600VDC and 1000VDC versions, which are designed to protect photovoltaic electrical systems. Typical PV installation would be on the DC solar panel side and also on the AC side of the inverter/ converter. AC voltage TPS3 03's are also available. SPDs are highly recommended when lightning activity is present to protect sensitive electrical photovoltaic components.

TPS3 03 DC is designed as a stand alone device in a NEMA 4X polycarbonate enclosure. Large block, thermally protected 50 kA MOVs are utilized. A green LED illuminates for diagnostic monitoring. TPS3 03 DC comes standard with a Tri-Mount installation kit which allows it to be Nipple, DIN-rail or Bracket mounted.

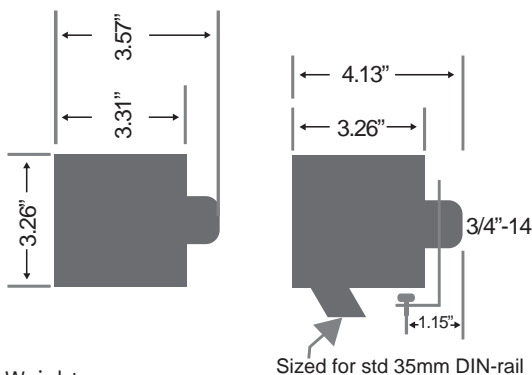
### Diagram



### Tri-Mount Installation Mounting Kit Included



### Dimensions



Weight:  
1.60 lbs (0.73kg)



Performance Data				
Siemens Part Number		TPS3M0305	TPS3R0305	TPS3P0305
Modes of Protection		DC+ – DC- , DC+ – Ground, DC- – Ground		
Nominal Network Voltage	$U_n$	300VDC	600VDC	1000VDC
Technology		Large Block, Thermally Protected 50kA MOVs		
Maximum Continuous Operating Voltage DC	$U_c$	425VDC	760VDC	1180VDC
Maximum Surge Current (8/20 $\mu$ s)	$I_{max}$	50kA	50kA	50kA
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20kA	20kA	10kA
Voltage Protection Level (3kA 8/20 $\mu$ s)	$U_p$	<600V	<1800V	<2500V
Operating Temperature		-40°C + 65°C		
Response Time	$t_A$	<1ns		
Installation mounting method		DIN Rail, Nipple or Bracket		
Enclosure Material		NEMA 4X Polycarbonate		
Wiring (red = + , black = - , green / yellow = gnd)		Pre-wired w/3'(~1m) of 8AWG + 6AWG Ground Conductor		
Diagnostic circuit		Low Consumption LED Indicator		
Safety Disconnectors		Thermal/Overcurrent Protection; Arc-Breaking Slide Gate		
UL Listing		UL 1449 Listed as Type 1 SPD as a DC SPD for PV and other types of DC applications		
Warranty		5 Years		

**Siemens Industry, Inc.**

5400 Triangle Parkway  
Norcross, GA 30092

888-333-3545  
info.us@siemens.com

Order No. RPFL-S303DC-0716

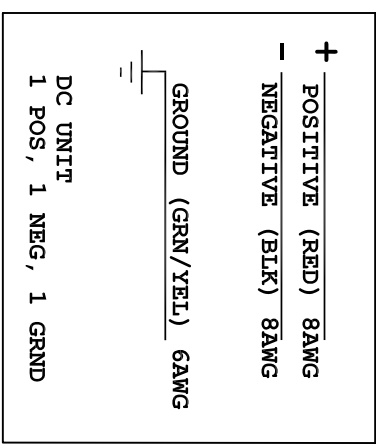
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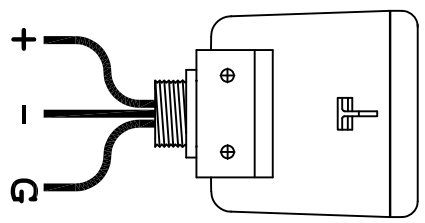
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FIGURE 1



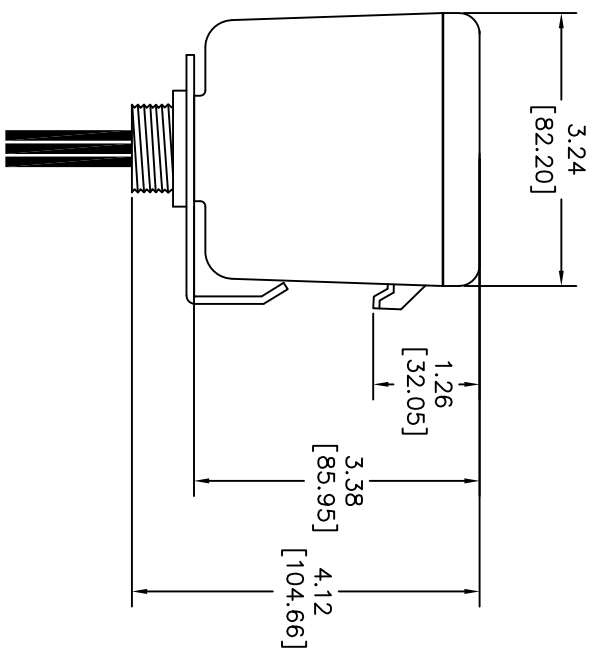
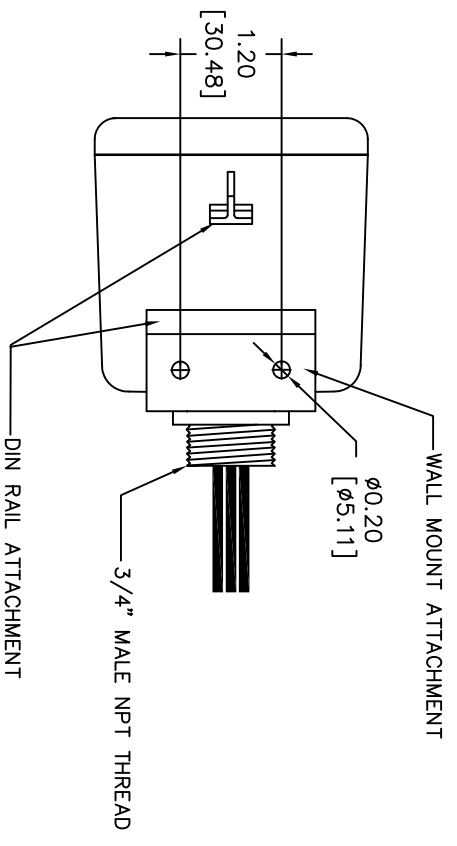
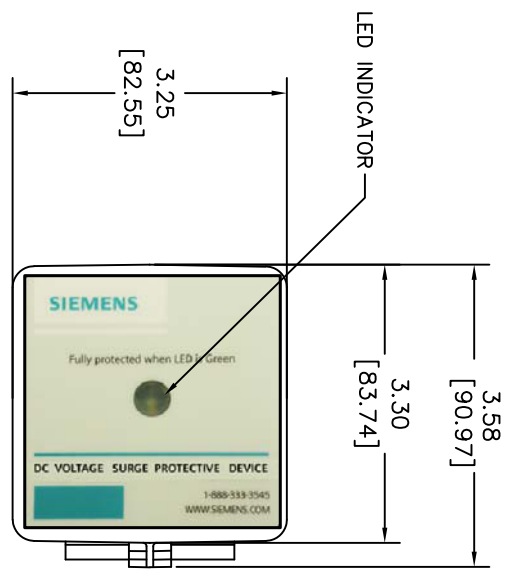
CUSTOMER CONNECTIONS PER FIGURES AT LEFT



MODEL	SERVICE VOLTAGE	FIGURE
TPS3MO305	300VDC, + - G	1
TPS3RO305	600VDC, + - G	1
TPS3PO305	1000VDC, + - G	1

Rev	C.N.	Date
△ - Denotes latest changes. □ - Critical dimension.		
Revision history table with columns: REVISION, DATE, BY, CHECKED, APPROVED, and COMMENTS.		
Confidential - Property of Siemens Industry, Inc. TPS3-03 DC SERIES ELECTRICAL		
Dwg. No. 43D-TPS3-03-DC-E SIZE NONE SHEET 1 of 1		

**SURGE PROTECTIVE DEVICE (SPD)  
WEIGHTS & DIMENSIONS  
NEMA RATING: 4X NON METALLIC**



**ENCLOSURE SPECS.:**  
 DESC: NON-METALLIC ENCLOSURE  
 DIM: 3.30"H x 3.25"W x 3.38"D  
 MAT: POLYCARBONATE (V2 & F1)  
 FINISH: GRAY  
 NEMA RATING: 4X  
 DEVICE WEIGHT: 1.6 LBS. (0.72 KG.)

Rev	C.N.	Date
1		
<input checked="" type="checkbox"/> Denotes latest changes. <input type="checkbox"/> Critical dimension.		
Revision History Date Description 10/20/11 1.000 Initial release drawing		
Confidential - Property of <b>Siemens Industry, Inc.</b>		
TPS3-03 DC SERIES 50K NEMA: 4X		
43D-TPS3-03-DC-4XM NONE		
SHEET 1 OF 1		