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REVISIONS				
LTR	DESCRIPTION	ECN	DATE	APPROVED
B	CLARIFIED SPECIFICATION		6/18/99	
C	UPDATE LABELS	10205	10/25/11	MTH
D	REMOVE OBSOLETE REFERENCE	11832	7/2/13	MTH



DRAWN	JAH	DATE	12/22/98	 10701 Airport Drive, Hayden, ID 83835, USA +1.208.772.8515 FAX +1.208.762.6034 ©2009 Transtector Systems, Inc. All rights reserved. 800.882.9110 www.transtector.com												
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ENG APPD				TITLE Product Specification DR Series AC Surge Protection												
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AC SURGE PROTECTION

Part Number	Description
1101-346	DR-120 21j
1101-347	DR-240 21j
1101-347-1	DR-240 70j

GENERAL DESCRIPTION

The DR Series are DIN rail mounted AC surge suppression devices with replaceable suppression modules used to protect electronic equipment and systems from transient over-voltages. The DR Series offers bipolar bi-directional Silicon Avalanche Suppressor Diode technology, and is installed in parallel with the load. The replaceable suppression module may be removed from the base without interrupting power to the protected circuit, and features visual status indication. The DIN base offers WAGO Cage Clamp connections, and allows the ability to power a remote lamp or relay (Not included).

TECHNICAL DATA

1.0 ELECTRICAL:

1.1.	Tested to	ANSI/IEEE C62.45 2002, C62.41 2002 Location Category B
1.2.	Technology	SASD
1.3.	Frequency Range	50/60 Hz
1.4.	Nominal Operating Voltage	
1.4.1.	DR-120.....	120 Vac
1.4.2.	DR-240.....	240 Vac
1.5.	Maximum Continuous Operating Voltage	
1.5.1.	DR-120.....	140 Vac
1.5.2.	DR-240.....	280 Vac
1.6.	Nominal Surge Current (8x20µs)	
1.6.1.	21j	700 A
1.6.2.	70j	2500 A
1.7.	Power Dissipation (8x20µs)	
1.7.1.	DR-120	700 A
1.7.2.	DR-120-1	1500 A
1.7.3.	DR-240	100 A
1.7.4.	DR-240-1	600 A
1.8.	Voltage Protection Level V_{pl}	
1.8.1.	DR-120	220 V
1.8.2.	DR-240	440 V
1.9.	Maximum Continuous Operating Current	20 A
1.10.	Response Time	< 5 ns
1.11.	Status Indication	LED (Green = Good, Off = Replace)
1.12.	Remote Status Indication.....	Connections for remote status circuit (R and N)
1.13.	Maximum Rating For Remote Status Circuit	
1.13.1.	DR-120.....	120 Vac, 3A
1.13.2.	DR-240.....	240 Vac, 3A

2.0 MECHANICAL

- 2.1. DIN Base with Removable Module
 - 2.1.1. Dimensions (H x W x D)3.5" x 0.9" x 2.9" (89 mm x 23 mm x 74 mm)
 - 2.1.2. Weight (Max)2.9 oz (82 g)
 - 2.1.3. Wire Size #28 AWG to #12 AWG (0.08 mm² to 4 mm²)
 - 2.1.4. Stripping Length 0.25" (7 mm)
 - 2.1.5. Connection TypeWAGO Cage Clamp

3.0 ENVIRONMENTAL

- 3.1. Operating Temperature-40°C to +85°C
- 3.2. Storage Temperature-40°C to +85°C
- 3.3. Humidity ≤ 95% Non Condensing
- 3.4. Housing Inflammability Rating UL94 V-0

STRUCTURE

Refer to Figure 1 for minimum mechanical mounting requirements.

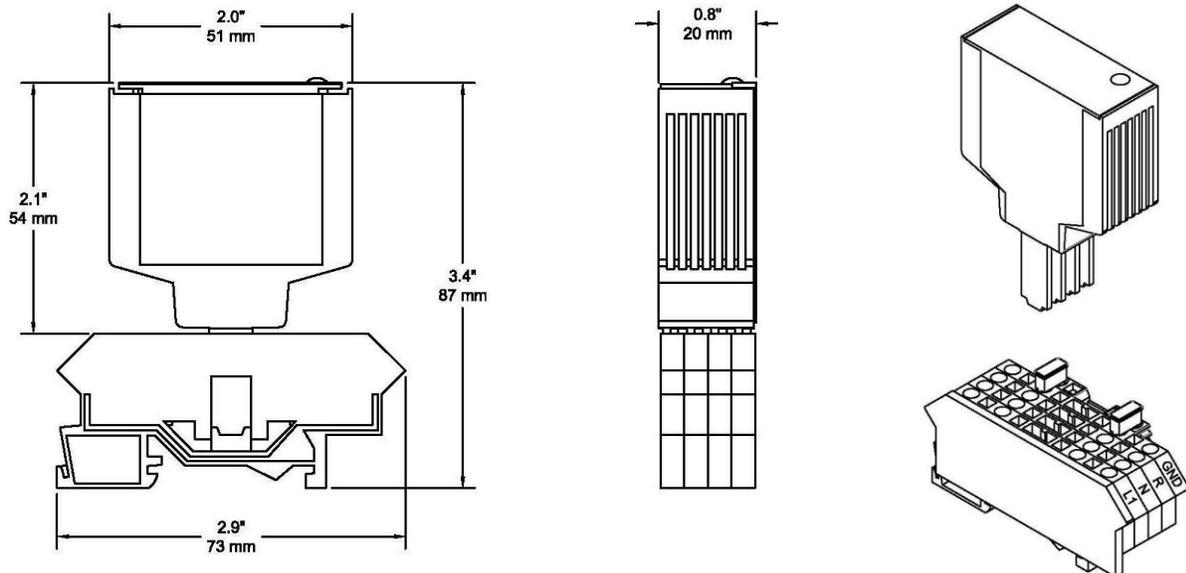


Figure 1 - Product Structure

INSTALLATION

The SPD should only be installed by a qualified electrical professional, observing all National and Local Electric Codes. Before installation, confirm that the SPD is rated for the voltage of the application. Shut off all power sources to prevent accidental electrical shock or injury. The capacity of the wire conductors must be sized according to the load, and should be insulated stranded copper up to #12 AWG (4 mm²) diameter. Keep all wires free of sharp bends and as short as possible. The maximum wire length should never exceed 18" (0.5 m). Refer to Figure 2 for proper location of power connections.

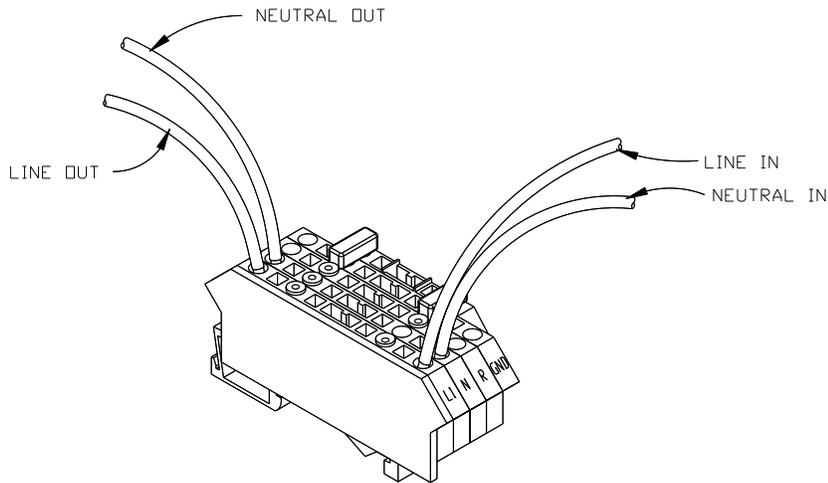


Figure 2 - DIN Base Showing Power Connections

REMOTE ANNUNCIATION

The DIN base offers connections to power an external lamp or relay to allow remote status monitoring of the SPD. Figure 3 shows the location of the connector points. The voltage supplied to the relay is the same as the SPD input line voltage. The relay connections are powered from the fuse side of the suppressor, so power will be removed from the relay circuit if the suppressor needs replacement or if the system power is turned off.

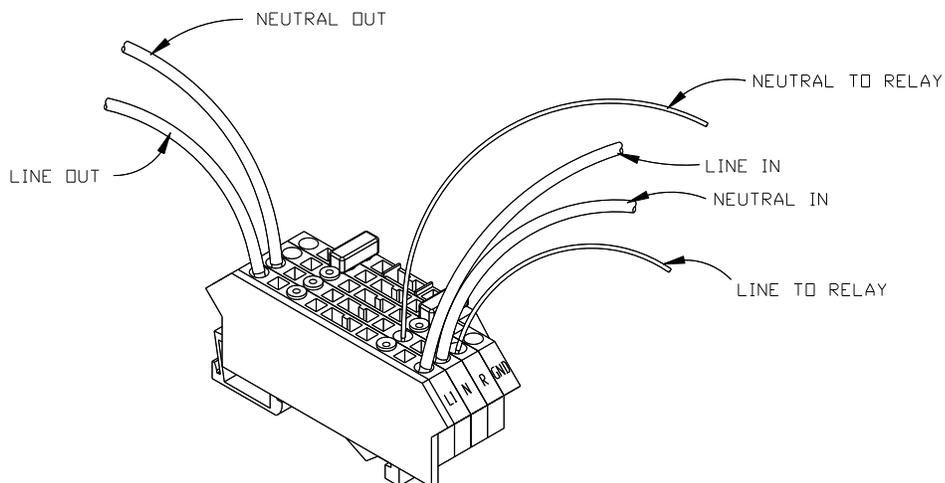


Figure 3 - DIN Base Showing Power And Remote Annunciation Connections

USAGE AND MAINTENANCE

The SPD should be scheduled for periodic inspection to ensure the SPD is operational and all wire connections are tight. If SPD is damaged, contact Transtector for replacement at +1.208.772.8515 or 1.800.882.9110, or online at www.protectiongroup.com.