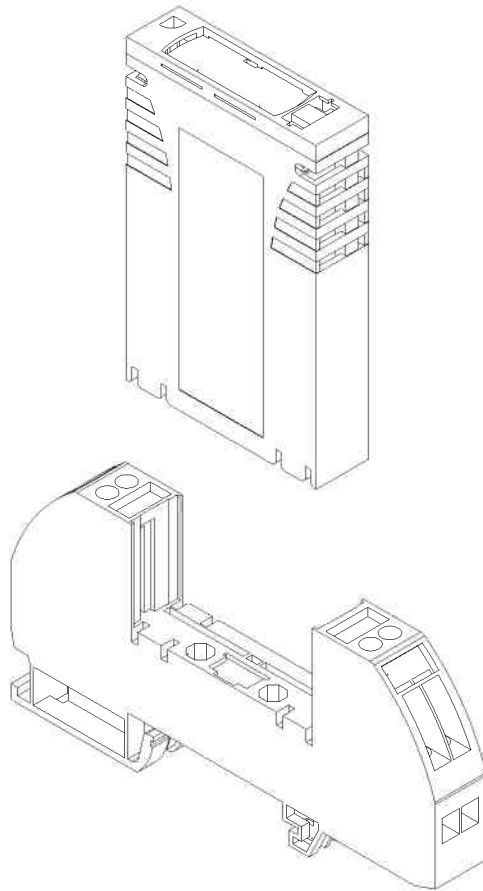


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CHANGES SHALL ONLY BE
INCORPORATED AS DIRECTED BY THE
DESIGN ACTIVITY.

REVISIONS

LTR	DESCRIPTION	ECO NUM.	DATE	APPROVED
O	PRODUCTION RELEASE		1/08/03	DWR
A	ADDED DRDC 70 TO SPEC	5133	2/10/04	CDD
B	HAZARDOUS LOCATIONS CERTIFICATION – CLASS 1 DIV 2 APPROVAL	8689	3/15/10	MPD



UNLESS
OTHERWISE
SPECIFIED DIM.
IN INCHES
BEFORE
PLATING

DRAWN:
DWR

DATE
1/08/03

CHECKED:
BJK

1/15/03

ENGR. APPD:
JDW

1/15/03

PROJ. APPD:
DWR

1/15/03

MATERIAL:

N/A

APPROVED:

TRANSECTOR®
SUPERIOR SURGE SUPPRESSION

TITLE:

Product Specification
DRDC Series

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RIGHTS THERETO

SIZE
A

CAGE
30992

DRAWING NUMBER
1400-477

REV
B

SCALE = N/A

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SUPPRESSOR PERFORMANCE SPECIFICATIONS

DRDC 7 (1101-678)

DRDC 12 (1101-679)

DRDC 24 (1101-680)

DRDC 48 (1101-681)

DRDC 70 (1101-724)

1. **GENERAL DESCRIPTION:** The DRDC Series Din-Rail surge suppressors are modular, high-speed, high-current, solid-state devices designed to protect electronic equipment and systems from transient overvoltages. The suppressor limits the magnitude of transient overvoltages that may occur on low voltage DC power lines, 4-20mA current loops or low frequency data lines. Data lines that benefit from DRDC suppression include: Ethernet, RS-485/232, Profibus, Foundation Fieldbus, DH+ or DeviceNet.

The DRDC Series surge suppressors utilize only silicon avalanche suppression diodes (SASD). The suppressor provides continuous, bipolar protection and automatically resets after a surge event with no degradation to its protection capabilities.

The suppressor includes a removable module with a base that mounts on standard 35mm DIN (EN5022) rail. The suppressor size and form factor allows for convenient replacement of existing terminal blocks. The suppressor connects in a series (pass-through) configuration, the screw terminals accept two wire pairs (28 - 12AWG), and the device is rated for up to 10A of continuous current. Note: The DRDC surge suppressor **REQUIRES** that the DIN rail have a low impedance path to Earth ground.

The DRDC Series suppressors are approved for hazardous locations that require a rating of **Class1 Division 2, Groups A, B, C, D.**

2. ELECTRICAL SERVICE:

- 2.1. Input/Output Connection 28-12AWG Screw Terminal
- 2.2. Configuration 2 pair / 4 wire
- 2.3. Protection Modes L-G
- 2.4. Pass-Through Current (Max.) 10A
- 2.5. Maximum Continuous Operating Voltage
 - 2.5.1. DRDC-7 13VDC
 - 2.5.2. DRDC-12 16VDC
 - 2.5.3. DRDC-24 32VDC
 - 2.5.4. DRDC-48 64VDC
 - 2.5.5. DRDC-70 118VDC

3. ELECTRICAL PERFORMANCE:

- 3.1. Response Time (All Models) 5 ns (Max)
- 3.2. Voltage Protection Level
 - 3.2.1. Maximum Vpl Tested to IEEE/ANSI C62.41 10/1000µs Long Wave
 - 3.2.1.1. DRDC-7 20Vpk @ 164A
 - 3.2.1.2. DRDC-12 25Vpk @ 134A
 - 3.2.1.3. DRDC-24 50Vpk @ 134A
 - 3.2.1.4. DRDC-48 100Vpk @ 134A
 - 3.2.1.5. DRDC-70 165Vpk @ 66A

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3.2.2. Maximum Vpl Tested to IEEE/ANSI C62.41 8/20µs Combination Wave

3.2.2.1. DRDC-7	25Vpk @ 1400A
3.2.2.2. DRDC-12	30Vpk @ 1200A
3.2.2.3. DRDC-24	60Vpk @ 1200A
3.2.2.4. DRDC-48	120Vpk @ 1200A
3.2.2.5. DRDC-70	185Vpk @ 600A

4. CERTIFICATIONS:

4.1. UL 498B, excluding DRDC-70

4.2. Hazardous Locations; FM Approvals Class I Division 2 US, Canada and EU

4.3. Labeling Requirements

4.3.1. Main Product Label

Transtector

10701 Airport Drive, Hayden ID 83835

DRDC-(voltage) 1101-xxx



AEx/Ex nA IIC T4 Tamb = -40°C to +65°C
Class 1, Division 2, Groups A, B, C, D;
T4A Tamb = -40°C to +65°C



II 3 G Ex nA IIC
T4 Tamb = -40°C to +65°C
FM10ATEX0002X.

The DRDC-(voltage) shall be installed in an enclosure which provides an ingress protection rating of at least IP54.

4.3.2. Secondary Label

Serial Number

Date Code (year of construction)

5. ENVIRONMENTAL:

5.1. Storage/Operating Temperature -40°C to +65°C

5.2. Relative Humidity..... 95%

6. MECHANICAL:

6.1. Dimensions[100] H x [12,5] W x [100] L

6.2. Weight (Max.)..... 2 Oz.

Note: Din-Rail must be connected to a solid earth ground for proper suppressor operation.

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