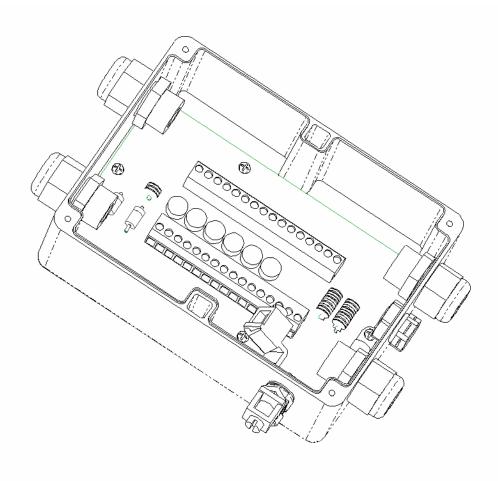
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| REVISIONS | | | | | | | | |
|-----------|----------------------|----------|----------|----------|--|--|--|--|
| LTR | DESCRIPTION | ECO NUM. | DATE | APPROVED | | | | |
| 0 | PRODUCTION RELEASE | | 8/07/02 | DWR | | | | |
| Α | CONVERT MAPS TO ALPU | 4690 | 10/25/02 | JEB | | | | |
| | | | | | | | | |
| | | | | | | | | |



| UNLESS OTHERWISE SPECIFIED DIM. IN INCHES BEFORE PLATING | DRAWN: DWR | 8/07/02 | | TD | <i>/</i> U | CTECTA | D* | |
|--|--|---------|--------------------------|---------------|------------|--------------------------|------------------------|----------|
| | CHECKED: CDD | 8/9/02 | | | | <u> </u> | 2 | |
| | ENGR. APPD: MLH | 8/9/02 | | 5 6 | Y P E S | 188 SHRGE SUP. | <i>P # E 8 S D N</i> | |
| MATERIAL: | PROJ. APPD: BM | 8/9/02 | TITLE: | | | _PU 3E48D | | |
| NOTED | APPROVED: | | Transtector PN: 1101-649 | | | | | |
| | NOTICE: THE INFORMATION AND DESIGN CONTAINED HEREIN IS THE PROPERTY OF TRANSTECTOR SYSTEMS. WHO RESERVES ALL | | SIZE A | CAGE 30992 | | DRAWING NUMBER 1400-4 | | REV A |
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SURGE SUPPRESSOR Model: ALPU 3E48D

1. GENERAL DESCRIPTION: The ALPU 3E48D surge suppressor is a high-speed, high-current solid state device designed to protect (3) Ethernet CAT-5 lines and (1) 48 VDC line. The ALPU 3E48D uses only silicon avalanche suppression diodes (SASD). It connects to the service in a pass through configuration. The input and output Ethernet connections terminate at two "screw type" terminal blocks. The input and output 48 VDC connections terminate at two screw terminal blocks. All wire harnesses pass into the suppressor housing via waterproof strain reliefs. The molded plastic enclosure is also waterproof, and features integrated mounting holes that are concealed by the cover and an integrated gasket plus a "Membrane Vent" to release any build-up of pressure and moisture due to cable wicking and enclosure heating.

2. PERFORMANCE REQUIREMENTS:

2.1. Electrical Service:

| 2.1.1.Ethernet | |
|---------------------------------------|-------------------------------|
| 2.1.1.1. Transfer rate | CAT-5, 10/100 Mb/s |
| 2.1.1.2. Configuration | 6 pair |
| 2.1.1.3. Input Connection | Screw-Term Block (24-16 AWG) |
| 2.1.1.3.1. Number of connector pos | sitions12 |
| 2.1.1.4. Protection Modes | Line to Line, Line to Ground |
| 2.1.1.5. Maximum Continuous Operating | Voltage20 VDC |
| 2.1.2.48 VDC | - |
| 2.1.2.1. Service Voltage | 48 VDC |
| 2.1.2.2. Configuration | 2 wire |
| 2.1.2.3. Input Connection | Screw-Term. Block (22-16 AWG) |
| 2.1.2.3.1. Number of connector pos | sitions2 |

2.2. Electrical Performance:

2.2.1.Ethernet

2.2.1.1. Testing:

| 2.2.1.1.1. Tested to IEEE/ANSI C62.41 10/1000 Long | g Wave |
|---|---------------|
| 2.2.1.1.1.1. lpk | 150 A peak |
| 2.2.1.2. Response Time (Max) | 5 nanoseconds |
| 2.2.1.3. Peak Power | 5000 Watts |
| 2.2.2.48 VDC | |
| 2.2.2.1. Testing: | |
| 2.2.2.1.1. Tested to IEEE 10/1000 Long Wave | |
| 2.2.2.1.1.1. lpk | 300 A peak |
| 2.2.2.2. Response Time (Max) | 5 nanoseconds |

2.3. Mechanical:

2.3.1.Enclosure Description: The suppressor is housed in a molded plastic enclosure that is 6.13" long, 4.5" wide and 2.5" tall. The enclosure mounts with #6 hardware.



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3. ENVIRONMENTAL:

3.1. Operating Temperature:-40°C to +80°C3.2. Storage Temperature:-40°C to +80°C3.3. Relative Humidity:100%(non-condensing)

4. MECHANICAL/INSTALLATION

- **4.1. Enclosure dimensions:** Specified above in Section 2.3.1.
- **4.2. Mounting data:** Mounting hardware provided in packaging supplies.
- 4.3. Wiring data
 - **4.3.1.**The ALPU 3E48D is designed to accept (4) multi-conductor cables with an outside diameter up to .370".



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