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|   | FDOT Traffic Engineering Research Laboratory (TERL) Surge Protective Device (SPD) at Point of Use Compliance Matrix | By signing this form, the applicant declares that he/she has read and understands the provisions of Sections 620 and 996 of the FDOT *Standard Specifications for Road and Bridge Construction* and all implemented modifications. The requirements listed on this matrix are derived from Sections 620 and 996, and are the basis for determining a product’s compliance and its acceptability for use on Florida’s roads. |  |

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| Date: | Click here to enter a date. | Applicant’s Name (print): |  |
| Manufacturer: |       |  |       |
| Item, Model No.: |       | Signature: |       |

|  |  | **\*\* Greyed out rows in table below are for TERL use only \*\*** |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID No** | **Section** | **Requirement** | **Item Comply? (Yes/No/NA)** | **Comments(Applicant must provide information as indicated)** | **TERL Evaluation Method** |
| 1 | 996-1.1 | SPD is permanently marked with manufacturer name or trademark, part number, and date of manufacture or serial number. |  | *Applicant may provide comments in this field.* | Physical Inspection |
|  |  | TERL Test Cases (Steps): SPD002 (Step 1) |       |       | Init.:       |
| 2 | 996-4.2.3 | SPD is rated at 15 or 20 amps load. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 1) |       |       | Init.:       |
| 3 |  | SPD is configured with receptacles. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review and Physical Inspection |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 2), SPD002 (Step2) |       |       | Init.:       |
| 4 |  | SPD has internal fuse protection. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 3) |       |       | Init.:       |
| 5 |  | SPD provides common mode (L+N-G) protection. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 4) |       |       | Init.:       |
| 6 |  | SPD nominal operating voltage is 120VAC. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 5) |       |       | Init.:       |
| 7 |  | SPD clamping voltage is between 150-200V. |  | *Provide a first or third-party test report that demonstrates the device meets this requirement. The test report must be less than 5 years old and meet the requirements of FDOT Product Certification Handbook (PCH), section 7.2.* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 6) |       |       | Init.:       |
| 8 |  | SPD surge capacity is 20kA per mode (8x20 μs) or greater. |  | *Provide a first or third-party test report that demonstrates the device meets this requirement. The test report must be less than 5 years old and meet the requirements of FDOT PCH, section 7.2.* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 7) |       |       | Init.:       |
| 9 |   | SPD maximum let-through voltage is <550 Vpk. |  | *Provide a first or third-party test report that demonstrates the device meets this requirement. The test report must be less than 5 years old and meet the requirements of FDOT PCH, section 7.2.* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 8) |       |       | Init.:       |
| 10 | 996-4.2.5 | All parts are made of corrosion-resistant materials, such as plastic, stainless steel, anodized aluminum, brass, or gold-plated metal. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review and Physical Inspection |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 9), SPD002 (Step 3) |       |       | Init.:       |
| 11 | 996-4.2.6 | SPD operates properly during and after being subjected to the temperature and humidity test described in NEMA TS 2, Section 2.2.7, and the vibration and shock tests described in NEMA TS 2-2021, Sections 2.2.8., and 2.2.9. |  | *Provide a first or third-party test report that demonstrates the device meets this requirement. The test report must be less than 5 years old and meet the requirements of FDOT PCH, section 7.2.* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 10) |       |       | Init.:       |
| 12 | 620-2.7.2 | SPD is intended for installation at the point that devices receive 120V power and connected in series with the circuits. |  | *Provide product literature, specifications, user manual, or similar information that indicates compliance. (Indicate specific configurations by model number or series).* | Document Review |
|  |  |  |  | *Indicate location of requested information in submittal.* |  |
|  |  | TERL Test Cases (Steps): SPD001 (Steps 11, 12) |       |       | Init.:       |
| 13 | 620-2.7.4 | SPD has a manufacturer’s warranty covering defects for a minimum of 2 years from the date of final acceptance.  |  | *Provide a statement of conformance in this field.* | Compliance Matrix Review |
|  |  | TERL Test Cases (Steps): SPD001 (Step 13) |       |       | Init.:       |
| 14 |  | If the SPD, including any component of the unit, should fail during the warranty period, the entire SPD will be replaced by the manufacturer at no cost to the Department or maintaining agency. |  | *Provide a statement of conformance in this field.* | Compliance Matrix Review  |
|  |  | TERL Test Cases (Steps): SPD001 (Step 14) |       |       | Init.:       |

**Document History for:**

**Surge Protective Device (SPD) at Point of Use Compliance Matrix**

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| Rev | Description | Authored and Checked | Reviewed | Approved | Approval Date | Rev More Stringent? |
| 1.0 | New CM to correspond with specification content move from Section 785 to 620. This CM updates and replaces previous CM-785-2.2-02. Revised document approver title. | R. MeyerK. Moser | J. Morgan | J. Morgan | 10/27/2014 | No |
| 2.0 | Added NRTL listing. | W. Geitz | M. DeWittJ. Morgan | D. Vollmer | 01/30/2020 | Yes |
| 3.0 | Moved from 620 to 996-4. | W. Geitz | M. DeWittC. Raimer | D. Vollmer | 08/31/2021 | No |
| 4.0 | Added warranty information. | W. Geitz | M. DeWittC. Raimer | D. Vollmer | 12/29/2021 | No |
| 5.0 | Added test cases and steps. | P. Blaiklock | W. Geitz | D. Vollmer | 03/02/2023 | No |
| 6.0 | Updated to latest FA dates of 9-13-23 and 12-1-23 for specs 620 and 996, respectively. | W. Geitz | L. Audisio | D. Vollmer | 01/08/2024 | No |