



Test Report Product Development

Braganca-Paulista Electrical Components Test Laboratory
RUA AMPERE 304 Dist. Indl I BRAGANCA PAULISTA SAO PAULO BRAZIL 12929-570

Report Title: FUSE AND RELAY BOX ASSY IEC
Report Number: RL140559
Revision: O
Date Issued: 06 ago 2014

Execution: Jesus Preto
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Requestor: Natanael Santos
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Disposition of Samples: Retain in Lab

List of Part Numbers: 2819051-1

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Scope/Abstract and Conclusions

Purpose

Design Validation Phase 1 according to attached DVP&R.

Summary

Samples met requirements except Connector Test - GMW-3191 (For connector 2w).

1. RESULTS

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|----------|-------------------|--|--|-----|------|-----|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|
| Group 0 - Cross Section Inspection | A summary of each component's condition shall be documented and reported to the GM ENV SME or CVE. GM Engineering will evaluate the reports and decide as to the necessity of corrective action. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 0 - Visual Inspection and Dissection | There shall be no corrosion, discoloration, cracks, etc., which could affect the functionality of the part. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 0 - Thermal Cycle Profile Development | N/A | Definition of cycle Temperature x current - This definition occurred in accordance between General Motors and TE. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 0 - Vibration Transmissibility Demonstration | Item 6.8 GMW 3172 (Rev. Nov/2012). | Samples met requirements. Please see Magneti Marelli's test report Nr. DFI013/14. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 1 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | Initial measurements. Samples numbers 1 and 6. Samples met requirements. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,012</td><td>7,051</td><td>7,091</td></tr> <tr><td>F7</td><td>4,261</td><td>4,454</td><td>4,647</td></tr> <tr><td>F10</td><td>6,456</td><td>6,550</td><td>6,644</td></tr> <tr><td>F11</td><td>62,386</td><td>62,645</td><td>62,905</td></tr> <tr><td>F12</td><td>12,856</td><td>12,906</td><td>12,956</td></tr> <tr><td>F13</td><td>8,205</td><td>8,282</td><td>8,358</td></tr> <tr><td>F14</td><td>11,808</td><td>11,902</td><td>11,996</td></tr> <tr><td>F15</td><td>15,247</td><td>15,573</td><td>15,899</td></tr> <tr><td>F16</td><td>7,931</td><td>8,172</td><td>8,413</td></tr> <tr><td>F17</td><td>4,097</td><td>4,116</td><td>4,135</td></tr> <tr><td>F19</td><td>4,039</td><td>4,053</td><td>4,067</td></tr> <tr><td>F20</td><td>8,061</td><td>8,110</td><td>8,159</td></tr> <tr><td>F22</td><td>4,310</td><td>5,630</td><td>6,950</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,012 | 7,051 | 7,091 | F7 | 4,261 | 4,454 | 4,647 | F10 | 6,456 | 6,550 | 6,644 | F11 | 62,386 | 62,645 | 62,905 | F12 | 12,856 | 12,906 | 12,956 | F13 | 8,205 | 8,282 | 8,358 | F14 | 11,808 | 11,902 | 11,996 | F15 | 15,247 | 15,573 | 15,899 | F16 | 7,931 | 8,172 | 8,413 | F17 | 4,097 | 4,116 | 4,135 | F19 | 4,039 | 4,053 | 4,067 | F20 | 8,061 | 8,110 | 8,159 | F22 | 4,310 | 5,630 | 6,950 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,012 | 7,051 | 7,091 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,261 | 4,454 | 4,647 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,456 | 6,550 | 6,644 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 62,386 | 62,645 | 62,905 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 12,856 | 12,906 | 12,956 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,205 | 8,282 | 8,358 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,808 | 11,902 | 11,996 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 15,247 | 15,573 | 15,899 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 7,931 | 8,172 | 8,413 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,097 | 4,116 | 4,135 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,039 | 4,053 | 4,067 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 8,061 | 8,110 | 8,159 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,310 | 5,630 | 6,950 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | |
|--|---|--|-------------------|--------|--------|
| | | Position | Voltage Drop [mV] | | |
| | | | Min | Aver | Max |
| | | F25 | 12,010 | 13,614 | 15,219 |
| | | F26 | 8,161 | 8,184 | 8,207 |
| | | F28 | 15,120 | 15,131 | 15,143 |
| | | F30 | 21,328 | 21,805 | 22,283 |
| | | F31 | 11,602 | 11,715 | 11,828 |
| | | F33 | 15,818 | 15,898 | 15,979 |
| | | F34 | 15,217 | 15,558 | 15,899 |
| | | F35 | 7,140 | 7,246 | 7,353 |
| | | F37 | 15,736 | 15,816 | 15,897 |
| | | F39 | 14,797 | 14,900 | 15,003 |
| | | F40 | 15,320 | 15,615 | 15,910 |
| | | F54 | 13,557 | 13,666 | 13,775 |
| Group 1 - High Temperature Degradation | Functional Status Classification shall be A. | Samples met requirements. | | | |
| Group 1 - Mechanical Shock - Pothole 25G | Functional Status Classification shall be A. Additionally, during the Visual Inspection and Dissection – DRBTR, there shall be no evidence of structural damage to the component. | Samples met requirements. Please see Magneti Marelli's test report Nr. DFI013/14. | | | |
| Group 1 - Vibration with Thermal Cycling (For Car sprung Masses) | Functional Status Classification shall be A. Additionally, during the Visual Inspection and Dissection – DRBTR, there shall be no evidence of structural damage to the component. | Samples met requirements. Please see Magneti Marelli's test report Nr. DFI013/14. | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|----------|-------------------|--|--|-----|------|-----|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|
| Group 1 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | Final measurements. Samples numbers 1 and 6. Samples met requirements. <table border="1" data-bbox="785 461 1214 1547"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,394</td><td>7,574</td><td>7,755</td></tr> <tr><td>F7</td><td>4,554</td><td>4,685</td><td>4,816</td></tr> <tr><td>F10</td><td>6,710</td><td>7,089</td><td>7,467</td></tr> <tr><td>F11</td><td>62,331</td><td>62,647</td><td>62,963</td></tr> <tr><td>F12</td><td>14,036</td><td>14,091</td><td>14,147</td></tr> <tr><td>F13</td><td>8,720</td><td>8,755</td><td>8,791</td></tr> <tr><td>F14</td><td>12,057</td><td>12,150</td><td>12,243</td></tr> <tr><td>F15</td><td>16,922</td><td>17,079</td><td>17,236</td></tr> <tr><td>F16</td><td>8,329</td><td>8,498</td><td>8,668</td></tr> <tr><td>F17</td><td>4,392</td><td>4,466</td><td>4,541</td></tr> <tr><td>F19</td><td>4,454</td><td>4,464</td><td>4,475</td></tr> <tr><td>F20</td><td>8,266</td><td>8,535</td><td>8,804</td></tr> <tr><td>F22</td><td>4,692</td><td>4,753</td><td>4,815</td></tr> <tr><td>F25</td><td>12,210</td><td>12,302</td><td>12,395</td></tr> <tr><td>F26</td><td>8,278</td><td>8,330</td><td>8,383</td></tr> <tr><td>F28</td><td>15,405</td><td>15,447</td><td>15,489</td></tr> <tr><td>F30</td><td>25,794</td><td>25,876</td><td>25,959</td></tr> <tr><td>F31</td><td>11,832</td><td>12,210</td><td>12,588</td></tr> <tr><td>F33</td><td>17,006</td><td>17,060</td><td>17,115</td></tr> <tr><td>F34</td><td>16,922</td><td>17,081</td><td>17,241</td></tr> <tr><td>F35</td><td>8,617</td><td>8,643</td><td>8,670</td></tr> <tr><td>F37</td><td>16,890</td><td>16,927</td><td>16,965</td></tr> <tr><td>F39</td><td>15,865</td><td>16,043</td><td>16,221</td></tr> <tr><td>F40</td><td>16,220</td><td>16,574</td><td>16,928</td></tr> <tr><td>F54</td><td>15,598</td><td>15,764</td><td>15,930</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,394 | 7,574 | 7,755 | F7 | 4,554 | 4,685 | 4,816 | F10 | 6,710 | 7,089 | 7,467 | F11 | 62,331 | 62,647 | 62,963 | F12 | 14,036 | 14,091 | 14,147 | F13 | 8,720 | 8,755 | 8,791 | F14 | 12,057 | 12,150 | 12,243 | F15 | 16,922 | 17,079 | 17,236 | F16 | 8,329 | 8,498 | 8,668 | F17 | 4,392 | 4,466 | 4,541 | F19 | 4,454 | 4,464 | 4,475 | F20 | 8,266 | 8,535 | 8,804 | F22 | 4,692 | 4,753 | 4,815 | F25 | 12,210 | 12,302 | 12,395 | F26 | 8,278 | 8,330 | 8,383 | F28 | 15,405 | 15,447 | 15,489 | F30 | 25,794 | 25,876 | 25,959 | F31 | 11,832 | 12,210 | 12,588 | F33 | 17,006 | 17,060 | 17,115 | F34 | 16,922 | 17,081 | 17,241 | F35 | 8,617 | 8,643 | 8,670 | F37 | 16,890 | 16,927 | 16,965 | F39 | 15,865 | 16,043 | 16,221 | F40 | 16,220 | 16,574 | 16,928 | F54 | 15,598 | 15,764 | 15,930 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,394 | 7,574 | 7,755 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,554 | 4,685 | 4,816 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,710 | 7,089 | 7,467 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 62,331 | 62,647 | 62,963 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 14,036 | 14,091 | 14,147 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,720 | 8,755 | 8,791 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 12,057 | 12,150 | 12,243 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 16,922 | 17,079 | 17,236 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,329 | 8,498 | 8,668 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,392 | 4,466 | 4,541 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,454 | 4,464 | 4,475 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 8,266 | 8,535 | 8,804 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,692 | 4,753 | 4,815 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 12,210 | 12,302 | 12,395 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 8,278 | 8,330 | 8,383 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 15,405 | 15,447 | 15,489 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 25,794 | 25,876 | 25,959 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,832 | 12,210 | 12,588 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 17,006 | 17,060 | 17,115 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F34 | 16,922 | 17,081 | 17,241 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 8,617 | 8,643 | 8,670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 16,890 | 16,927 | 16,965 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 15,865 | 16,043 | 16,221 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 16,220 | 16,574 | 16,928 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F54 | 15,598 | 15,764 | 15,930 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 1 - Visual Inspection and Dissection | There shall be no corrosion, discoloration, cracks, etc., which could affect the functionality of the part. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|----------|-------------------|--|--|--|-----|------|-----|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|
| Group 2 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | Initial measurements. Samples numbers 3 to 6. Samples met requirements. <table border="1" data-bbox="785 461 1241 1668"> <thead> <tr> <th data-bbox="785 461 911 506">Position</th> <th colspan="3" data-bbox="916 461 1241 506">Voltage Drop [mV]</th> </tr> <tr> <th data-bbox="785 512 911 546"></th> <th data-bbox="916 512 1007 546">Min</th> <th data-bbox="1011 512 1102 546">Aver</th> <th data-bbox="1107 512 1241 546">Max</th> </tr> </thead> <tbody> <tr><td>F01</td><td>7,087</td><td>7,421</td><td>7,599</td></tr> <tr><td>F03</td><td>13,800</td><td>17,853</td><td>25,436</td></tr> <tr><td>F06</td><td>14,436</td><td>19,570</td><td>31,384</td></tr> <tr><td>F07</td><td>4,340</td><td>4,597</td><td>4,856</td></tr> <tr><td>F10</td><td>6,617</td><td>6,777</td><td>6,996</td></tr> <tr><td>F11</td><td>60,252</td><td>60,831</td><td>61,403</td></tr> <tr><td>F12</td><td>12,964</td><td>13,487</td><td>14,006</td></tr> <tr><td>F13</td><td>8,192</td><td>8,385</td><td>8,512</td></tr> <tr><td>F14</td><td>11,685</td><td>11,851</td><td>12,137</td></tr> <tr><td>F15</td><td>15,592</td><td>18,347</td><td>22,393</td></tr> <tr><td>F16</td><td>8,147</td><td>8,264</td><td>8,445</td></tr> <tr><td>F17</td><td>4,170</td><td>4,485</td><td>4,735</td></tr> <tr><td>F19</td><td>4,040</td><td>4,311</td><td>4,633</td></tr> <tr><td>F20</td><td>8,355</td><td>8,778</td><td>9,698</td></tr> <tr><td>F22</td><td>4,522</td><td>4,683</td><td>4,906</td></tr> <tr><td>F25</td><td>11,408</td><td>11,571</td><td>11,736</td></tr> <tr><td>F26</td><td>8,286</td><td>8,392</td><td>8,662</td></tr> <tr><td>F28</td><td>14,993</td><td>15,159</td><td>15,259</td></tr> <tr><td>F29</td><td>6,621</td><td>6,893</td><td>7,246</td></tr> <tr><td>F30</td><td>20,119</td><td>22,310</td><td>26,118</td></tr> <tr><td>F31</td><td>11,456</td><td>11,555</td><td>11,711</td></tr> <tr><td>F32</td><td>6,766</td><td>6,919</td><td>7,074</td></tr> <tr><td>F33</td><td>15,947</td><td>17,380</td><td>20,762</td></tr> <tr><td>F35</td><td>6,787</td><td>6,879</td><td>7,046</td></tr> <tr><td>F37</td><td>15,515</td><td>16,042</td><td>16,305</td></tr> <tr><td>F39</td><td>14,970</td><td>15,491</td><td>16,135</td></tr> <tr><td>F40</td><td>15,419</td><td>16,021</td><td>16,317</td></tr> <tr><td>F53</td><td>2,670</td><td>2,965</td><td>3,522</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | | Min | Aver | Max | F01 | 7,087 | 7,421 | 7,599 | F03 | 13,800 | 17,853 | 25,436 | F06 | 14,436 | 19,570 | 31,384 | F07 | 4,340 | 4,597 | 4,856 | F10 | 6,617 | 6,777 | 6,996 | F11 | 60,252 | 60,831 | 61,403 | F12 | 12,964 | 13,487 | 14,006 | F13 | 8,192 | 8,385 | 8,512 | F14 | 11,685 | 11,851 | 12,137 | F15 | 15,592 | 18,347 | 22,393 | F16 | 8,147 | 8,264 | 8,445 | F17 | 4,170 | 4,485 | 4,735 | F19 | 4,040 | 4,311 | 4,633 | F20 | 8,355 | 8,778 | 9,698 | F22 | 4,522 | 4,683 | 4,906 | F25 | 11,408 | 11,571 | 11,736 | F26 | 8,286 | 8,392 | 8,662 | F28 | 14,993 | 15,159 | 15,259 | F29 | 6,621 | 6,893 | 7,246 | F30 | 20,119 | 22,310 | 26,118 | F31 | 11,456 | 11,555 | 11,711 | F32 | 6,766 | 6,919 | 7,074 | F33 | 15,947 | 17,380 | 20,762 | F35 | 6,787 | 6,879 | 7,046 | F37 | 15,515 | 16,042 | 16,305 | F39 | 14,970 | 15,491 | 16,135 | F40 | 15,419 | 16,021 | 16,317 | F53 | 2,670 | 2,965 | 3,522 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F01 | 7,087 | 7,421 | 7,599 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F03 | 13,800 | 17,853 | 25,436 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F06 | 14,436 | 19,570 | 31,384 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F07 | 4,340 | 4,597 | 4,856 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,617 | 6,777 | 6,996 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 60,252 | 60,831 | 61,403 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 12,964 | 13,487 | 14,006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,192 | 8,385 | 8,512 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,685 | 11,851 | 12,137 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 15,592 | 18,347 | 22,393 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,147 | 8,264 | 8,445 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,170 | 4,485 | 4,735 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,040 | 4,311 | 4,633 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 8,355 | 8,778 | 9,698 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,522 | 4,683 | 4,906 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 11,408 | 11,571 | 11,736 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 8,286 | 8,392 | 8,662 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 14,993 | 15,159 | 15,259 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F29 | 6,621 | 6,893 | 7,246 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 20,119 | 22,310 | 26,118 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,456 | 11,555 | 11,711 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F32 | 6,766 | 6,919 | 7,074 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 15,947 | 17,380 | 20,762 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 6,787 | 6,879 | 7,046 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 15,515 | 16,042 | 16,305 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 14,970 | 15,491 | 16,135 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 15,419 | 16,021 | 16,317 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F53 | 2,670 | 2,965 | 3,522 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 2 - Thermal Shock (Air-To-Air) | Functional Status Classification shall be C. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|----------|-------------------|--|--|-----|------|-----|-----|--------|--------|--------|-----|---------|---------|---------|-----|---------|---------|---------|-----|--------|--------|--------|-----|--------|--------|--------|-----|---------|---------|---------|-----|---------|---------|---------|-----|--------|--------|--------|-----|---------|---------|---------|-----|---------|---------|---------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|---------|-----|--------|--------|--------|-----|---------|---------|---------|-----|--------|--------|--------|-----|---------|---------|---------|-----|--------|--------|--------|-----|---------|---------|---------|-----|---------|---------|---------|-----|--------|--------|--------|-----|---------|---------|---------|-----|--------|--------|---------|-----|---------|---------|---------|-----|---------|---------|---------|-----|---------|---------|---------|-----|--------|--------|--------|
| Group 2 - Power Temperature Cycle (PTC) | Functional Status Classification shall be A. | Final measurements after Thermal shock and PTC tests. Samples numbers 3 to 6. Samples met requirements. <table border="1" data-bbox="785 488 1241 1691" style="margin-top: 10px;"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F01</td><td>7,6473</td><td>8,2764</td><td>8,8323</td></tr> <tr><td>F03</td><td>14,5281</td><td>17,2832</td><td>19,0225</td></tr> <tr><td>F06</td><td>14,8990</td><td>36,2675</td><td>90,8249</td></tr> <tr><td>F07</td><td>5,1530</td><td>5,6632</td><td>6,7812</td></tr> <tr><td>F10</td><td>7,2892</td><td>7,9240</td><td>8,4646</td></tr> <tr><td>F11</td><td>58,6699</td><td>60,3325</td><td>61,7804</td></tr> <tr><td>F12</td><td>13,0191</td><td>14,0614</td><td>14,7150</td></tr> <tr><td>F13</td><td>8,8358</td><td>9,2933</td><td>9,7723</td></tr> <tr><td>F14</td><td>11,6069</td><td>12,3456</td><td>13,5601</td></tr> <tr><td>F15</td><td>21,0459</td><td>28,3471</td><td>46,9880</td></tr> <tr><td>F16</td><td>8,2899</td><td>8,9179</td><td>9,6126</td></tr> <tr><td>F17</td><td>4,5826</td><td>5,7785</td><td>6,6294</td></tr> <tr><td>F19</td><td>4,2914</td><td>4,9772</td><td>6,3901</td></tr> <tr><td>F20</td><td>8,5632</td><td>9,2194</td><td>10,3002</td></tr> <tr><td>F22</td><td>4,6442</td><td>4,8573</td><td>5,0710</td></tr> <tr><td>F25</td><td>11,4305</td><td>11,6207</td><td>11,7766</td></tr> <tr><td>F26</td><td>8,2649</td><td>8,5113</td><td>8,7730</td></tr> <tr><td>F28</td><td>14,8441</td><td>15,1064</td><td>15,4112</td></tr> <tr><td>F29</td><td>6,8573</td><td>7,5417</td><td>8,0444</td></tr> <tr><td>F30</td><td>19,8301</td><td>25,2862</td><td>34,0974</td></tr> <tr><td>F31</td><td>11,5747</td><td>11,7569</td><td>11,8287</td></tr> <tr><td>F32</td><td>6,6764</td><td>7,2036</td><td>7,7548</td></tr> <tr><td>F33</td><td>15,2848</td><td>18,0585</td><td>24,5456</td></tr> <tr><td>F35</td><td>7,8278</td><td>9,3137</td><td>10,9144</td></tr> <tr><td>F37</td><td>15,2860</td><td>15,7533</td><td>16,3611</td></tr> <tr><td>F39</td><td>14,5403</td><td>15,1064</td><td>16,0114</td></tr> <tr><td>F40</td><td>15,2568</td><td>15,6283</td><td>16,1030</td></tr> <tr><td>F53</td><td>2,7123</td><td>3,3357</td><td>4,7155</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F01 | 7,6473 | 8,2764 | 8,8323 | F03 | 14,5281 | 17,2832 | 19,0225 | F06 | 14,8990 | 36,2675 | 90,8249 | F07 | 5,1530 | 5,6632 | 6,7812 | F10 | 7,2892 | 7,9240 | 8,4646 | F11 | 58,6699 | 60,3325 | 61,7804 | F12 | 13,0191 | 14,0614 | 14,7150 | F13 | 8,8358 | 9,2933 | 9,7723 | F14 | 11,6069 | 12,3456 | 13,5601 | F15 | 21,0459 | 28,3471 | 46,9880 | F16 | 8,2899 | 8,9179 | 9,6126 | F17 | 4,5826 | 5,7785 | 6,6294 | F19 | 4,2914 | 4,9772 | 6,3901 | F20 | 8,5632 | 9,2194 | 10,3002 | F22 | 4,6442 | 4,8573 | 5,0710 | F25 | 11,4305 | 11,6207 | 11,7766 | F26 | 8,2649 | 8,5113 | 8,7730 | F28 | 14,8441 | 15,1064 | 15,4112 | F29 | 6,8573 | 7,5417 | 8,0444 | F30 | 19,8301 | 25,2862 | 34,0974 | F31 | 11,5747 | 11,7569 | 11,8287 | F32 | 6,6764 | 7,2036 | 7,7548 | F33 | 15,2848 | 18,0585 | 24,5456 | F35 | 7,8278 | 9,3137 | 10,9144 | F37 | 15,2860 | 15,7533 | 16,3611 | F39 | 14,5403 | 15,1064 | 16,0114 | F40 | 15,2568 | 15,6283 | 16,1030 | F53 | 2,7123 | 3,3357 | 4,7155 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F01 | 7,6473 | 8,2764 | 8,8323 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F03 | 14,5281 | 17,2832 | 19,0225 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F06 | 14,8990 | 36,2675 | 90,8249 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F07 | 5,1530 | 5,6632 | 6,7812 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 7,2892 | 7,9240 | 8,4646 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 58,6699 | 60,3325 | 61,7804 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 13,0191 | 14,0614 | 14,7150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,8358 | 9,2933 | 9,7723 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,6069 | 12,3456 | 13,5601 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 21,0459 | 28,3471 | 46,9880 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,2899 | 8,9179 | 9,6126 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,5826 | 5,7785 | 6,6294 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,2914 | 4,9772 | 6,3901 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 8,5632 | 9,2194 | 10,3002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,6442 | 4,8573 | 5,0710 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 11,4305 | 11,6207 | 11,7766 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 8,2649 | 8,5113 | 8,7730 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 14,8441 | 15,1064 | 15,4112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F29 | 6,8573 | 7,5417 | 8,0444 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 19,8301 | 25,2862 | 34,0974 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,5747 | 11,7569 | 11,8287 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F32 | 6,6764 | 7,2036 | 7,7548 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 15,2848 | 18,0585 | 24,5456 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 7,8278 | 9,3137 | 10,9144 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 15,2860 | 15,7533 | 16,3611 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 14,5403 | 15,1064 | 16,0114 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 15,2568 | 15,6283 | 16,1030 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F53 | 2,7123 | 3,3357 | 4,7155 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|----------|-------------------|--------|--|-----|------|-----|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|
| Group 3 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | Initial measurements. Samples numbers 7 to 9. Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,153</td><td>7,381</td><td>7,540</td></tr> <tr><td>F7</td><td>4,266</td><td>4,470</td><td>4,714</td></tr> <tr><td>F10</td><td>6,610</td><td>6,736</td><td>6,934</td></tr> <tr><td>F11</td><td>59,720</td><td>61,884</td><td>64,729</td></tr> <tr><td>F12</td><td>13,121</td><td>14,018</td><td>15,396</td></tr> <tr><td>F13</td><td>8,045</td><td>8,199</td><td>8,345</td></tr> <tr><td>F14</td><td>11,713</td><td>11,917</td><td>12,121</td></tr> <tr><td>F15</td><td>15,552</td><td>16,146</td><td>16,831</td></tr> <tr><td>F16</td><td>8,007</td><td>8,228</td><td>8,399</td></tr> <tr><td>F17</td><td>4,107</td><td>4,148</td><td>4,203</td></tr> <tr><td>F19</td><td>4,025</td><td>4,455</td><td>4,807</td></tr> <tr><td>F20</td><td>8,166</td><td>8,211</td><td>8,293</td></tr> <tr><td>F22</td><td>4,322</td><td>4,469</td><td>4,749</td></tr> <tr><td>F25</td><td>11,541</td><td>11,757</td><td>12,036</td></tr> <tr><td>F26</td><td>8,003</td><td>8,152</td><td>8,246</td></tr> <tr><td>F28</td><td>15,103</td><td>20,114</td><td>30,123</td></tr> <tr><td>F30</td><td>21,425</td><td>22,338</td><td>23,083</td></tr> <tr><td>F31</td><td>11,576</td><td>11,773</td><td>11,926</td></tr> <tr><td>F33</td><td>15,678</td><td>16,151</td><td>16,470</td></tr> <tr><td>F34</td><td>15,572</td><td>16,340</td><td>16,831</td></tr> <tr><td>F35</td><td>6,549</td><td>6,993</td><td>7,272</td></tr> <tr><td>F37</td><td>15,795</td><td>16,045</td><td>16,312</td></tr> <tr><td>F39</td><td>15,116</td><td>15,239</td><td>15,408</td></tr> <tr><td>F40</td><td>15,843</td><td>16,278</td><td>16,598</td></tr> <tr><td>F54</td><td>3,808</td><td>4,041</td><td>4,158</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,153 | 7,381 | 7,540 | F7 | 4,266 | 4,470 | 4,714 | F10 | 6,610 | 6,736 | 6,934 | F11 | 59,720 | 61,884 | 64,729 | F12 | 13,121 | 14,018 | 15,396 | F13 | 8,045 | 8,199 | 8,345 | F14 | 11,713 | 11,917 | 12,121 | F15 | 15,552 | 16,146 | 16,831 | F16 | 8,007 | 8,228 | 8,399 | F17 | 4,107 | 4,148 | 4,203 | F19 | 4,025 | 4,455 | 4,807 | F20 | 8,166 | 8,211 | 8,293 | F22 | 4,322 | 4,469 | 4,749 | F25 | 11,541 | 11,757 | 12,036 | F26 | 8,003 | 8,152 | 8,246 | F28 | 15,103 | 20,114 | 30,123 | F30 | 21,425 | 22,338 | 23,083 | F31 | 11,576 | 11,773 | 11,926 | F33 | 15,678 | 16,151 | 16,470 | F34 | 15,572 | 16,340 | 16,831 | F35 | 6,549 | 6,993 | 7,272 | F37 | 15,795 | 16,045 | 16,312 | F39 | 15,116 | 15,239 | 15,408 | F40 | 15,843 | 16,278 | 16,598 | F54 | 3,808 | 4,041 | 4,158 |
| | | Position | | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F1 | 7,153 | 7,381 | 7,540 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F7 | 4,266 | 4,470 | 4,714 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F10 | 6,610 | 6,736 | 6,934 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F11 | 59,720 | 61,884 | 64,729 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F12 | 13,121 | 14,018 | 15,396 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F13 | 8,045 | 8,199 | 8,345 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F14 | 11,713 | 11,917 | 12,121 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F15 | 15,552 | 16,146 | 16,831 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F16 | 8,007 | 8,228 | 8,399 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F17 | 4,107 | 4,148 | 4,203 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F19 | 4,025 | 4,455 | 4,807 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F20 | 8,166 | 8,211 | 8,293 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F22 | 4,322 | 4,469 | 4,749 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F25 | 11,541 | 11,757 | 12,036 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F26 | 8,003 | 8,152 | 8,246 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F28 | 15,103 | 20,114 | 30,123 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 21,425 | 22,338 | 23,083 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,576 | 11,773 | 11,926 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 15,678 | 16,151 | 16,470 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F34 | 15,572 | 16,340 | 16,831 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 6,549 | 6,993 | 7,272 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 15,795 | 16,045 | 16,312 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 15,116 | 15,239 | 15,408 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 15,843 | 16,278 | 16,598 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F54 | 3,808 | 4,041 | 4,158 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 3 - Dust Test | Functional Status Classification shall be C. | Samples met requirements. Please see Federal Mogul's test report Nr.12664. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 3 - Water Test | Functional Status Classification shall be A. | Samples met requirements. Please see TUV Rheinland do Brasil test report Nr. 1407- AEX – 01/13. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|----------|-------------------|--|--|-----|------|-----|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|
| Group 3 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | Final measurements. Samples numbers 7 to 9. Samples met requirements. <table border="1" data-bbox="786 465 1241 1552"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,439</td><td>7,842</td><td>8,436</td></tr> <tr><td>F7</td><td>4,728</td><td>4,777</td><td>4,831</td></tr> <tr><td>F10</td><td>6,658</td><td>6,874</td><td>7,128</td></tr> <tr><td>F11</td><td>60,896</td><td>62,795</td><td>65,874</td></tr> <tr><td>F12</td><td>12,595</td><td>13,647</td><td>14,501</td></tr> <tr><td>F13</td><td>8,275</td><td>8,540</td><td>8,900</td></tr> <tr><td>F14</td><td>11,956</td><td>12,186</td><td>12,483</td></tr> <tr><td>F15</td><td>16,007</td><td>16,099</td><td>16,160</td></tr> <tr><td>F16</td><td>8,161</td><td>8,470</td><td>8,786</td></tr> <tr><td>F17</td><td>4,165</td><td>4,395</td><td>4,797</td></tr> <tr><td>F19</td><td>4,391</td><td>4,892</td><td>5,299</td></tr> <tr><td>F20</td><td>8,325</td><td>8,424</td><td>8,572</td></tr> <tr><td>F22</td><td>4,517</td><td>4,668</td><td>4,826</td></tr> <tr><td>F25</td><td>11,801</td><td>11,995</td><td>12,218</td></tr> <tr><td>F26</td><td>8,207</td><td>8,349</td><td>8,468</td></tr> <tr><td>F28</td><td>15,443</td><td>15,507</td><td>15,606</td></tr> <tr><td>F30</td><td>22,212</td><td>22,553</td><td>22,792</td></tr> <tr><td>F31</td><td>11,801</td><td>12,094</td><td>12,425</td></tr> <tr><td>F33</td><td>16,623</td><td>17,047</td><td>17,773</td></tr> <tr><td>F34</td><td>16,007</td><td>16,375</td><td>16,960</td></tr> <tr><td>F35</td><td>6,796</td><td>7,017</td><td>7,199</td></tr> <tr><td>F37</td><td>16,363</td><td>16,717</td><td>17,292</td></tr> <tr><td>F39</td><td>15,566</td><td>16,110</td><td>16,403</td></tr> <tr><td>F40</td><td>16,765</td><td>17,018</td><td>17,454</td></tr> <tr><td>F54</td><td>3,438</td><td>3,930</td><td>4,323</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,439 | 7,842 | 8,436 | F7 | 4,728 | 4,777 | 4,831 | F10 | 6,658 | 6,874 | 7,128 | F11 | 60,896 | 62,795 | 65,874 | F12 | 12,595 | 13,647 | 14,501 | F13 | 8,275 | 8,540 | 8,900 | F14 | 11,956 | 12,186 | 12,483 | F15 | 16,007 | 16,099 | 16,160 | F16 | 8,161 | 8,470 | 8,786 | F17 | 4,165 | 4,395 | 4,797 | F19 | 4,391 | 4,892 | 5,299 | F20 | 8,325 | 8,424 | 8,572 | F22 | 4,517 | 4,668 | 4,826 | F25 | 11,801 | 11,995 | 12,218 | F26 | 8,207 | 8,349 | 8,468 | F28 | 15,443 | 15,507 | 15,606 | F30 | 22,212 | 22,553 | 22,792 | F31 | 11,801 | 12,094 | 12,425 | F33 | 16,623 | 17,047 | 17,773 | F34 | 16,007 | 16,375 | 16,960 | F35 | 6,796 | 7,017 | 7,199 | F37 | 16,363 | 16,717 | 17,292 | F39 | 15,566 | 16,110 | 16,403 | F40 | 16,765 | 17,018 | 17,454 | F54 | 3,438 | 3,930 | 4,323 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,439 | 7,842 | 8,436 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,728 | 4,777 | 4,831 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,658 | 6,874 | 7,128 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 60,896 | 62,795 | 65,874 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 12,595 | 13,647 | 14,501 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,275 | 8,540 | 8,900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,956 | 12,186 | 12,483 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 16,007 | 16,099 | 16,160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,161 | 8,470 | 8,786 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,165 | 4,395 | 4,797 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,391 | 4,892 | 5,299 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 8,325 | 8,424 | 8,572 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,517 | 4,668 | 4,826 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 11,801 | 11,995 | 12,218 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 8,207 | 8,349 | 8,468 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 15,443 | 15,507 | 15,606 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 22,212 | 22,553 | 22,792 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,801 | 12,094 | 12,425 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 16,623 | 17,047 | 17,773 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F34 | 16,007 | 16,375 | 16,960 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 6,796 | 7,017 | 7,199 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 16,363 | 16,717 | 17,292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 15,566 | 16,110 | 16,403 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 16,765 | 17,018 | 17,454 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F54 | 3,438 | 3,930 | 4,323 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 3 - Visual Inspection and Dissection | There shall be no corrosion, discoloration, cracks, etc., which could affect the functionality of the part. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|----------|-------------------|--|--|-----|------|-----|----|-------|-------|-------|----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|
| Group 6 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | <p>Samples met requirements. Samples numbers 10 to 18.</p> <table border="1" data-bbox="785 434 1241 1518"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,049</td><td>7,235</td><td>7,558</td></tr> <tr><td>F7</td><td>4,312</td><td>4,449</td><td>4,697</td></tr> <tr><td>F10</td><td>6,403</td><td>6,685</td><td>6,982</td></tr> <tr><td>F11</td><td>59,298</td><td>61,896</td><td>64,814</td></tr> <tr><td>F12</td><td>13,042</td><td>13,300</td><td>13,659</td></tr> <tr><td>F13</td><td>8,197</td><td>8,403</td><td>9,063</td></tr> <tr><td>F14</td><td>11,788</td><td>12,009</td><td>12,336</td></tr> <tr><td>F15</td><td>15,500</td><td>16,422</td><td>17,264</td></tr> <tr><td>F16</td><td>8,123</td><td>8,276</td><td>8,710</td></tr> <tr><td>F17</td><td>4,050</td><td>4,174</td><td>4,373</td></tr> <tr><td>F19</td><td>4,067</td><td>4,306</td><td>4,737</td></tr> <tr><td>F20</td><td>7,926</td><td>8,115</td><td>8,242</td></tr> <tr><td>F22</td><td>4,314</td><td>4,453</td><td>4,695</td></tr> <tr><td>F25</td><td>11,682</td><td>11,921</td><td>12,136</td></tr> <tr><td>F26</td><td>7,919</td><td>8,124</td><td>8,384</td></tr> <tr><td>F28</td><td>15,076</td><td>15,400</td><td>17,161</td></tr> <tr><td>F30</td><td>16,906</td><td>20,865</td><td>22,941</td></tr> <tr><td>F31</td><td>11,553</td><td>11,780</td><td>11,990</td></tr> <tr><td>F33</td><td>15,418</td><td>15,999</td><td>16,326</td></tr> <tr><td>F34</td><td>15,500</td><td>16,432</td><td>17,264</td></tr> <tr><td>F35</td><td>6,747</td><td>7,356</td><td>8,097</td></tr> <tr><td>F37</td><td>15,661</td><td>15,988</td><td>16,372</td></tr> <tr><td>F39</td><td>14,556</td><td>15,066</td><td>15,454</td></tr> <tr><td>F40</td><td>15,716</td><td>16,019</td><td>16,318</td></tr> <tr><td>F54</td><td>3,410</td><td>4,129</td><td>4,831</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,049 | 7,235 | 7,558 | F7 | 4,312 | 4,449 | 4,697 | F10 | 6,403 | 6,685 | 6,982 | F11 | 59,298 | 61,896 | 64,814 | F12 | 13,042 | 13,300 | 13,659 | F13 | 8,197 | 8,403 | 9,063 | F14 | 11,788 | 12,009 | 12,336 | F15 | 15,500 | 16,422 | 17,264 | F16 | 8,123 | 8,276 | 8,710 | F17 | 4,050 | 4,174 | 4,373 | F19 | 4,067 | 4,306 | 4,737 | F20 | 7,926 | 8,115 | 8,242 | F22 | 4,314 | 4,453 | 4,695 | F25 | 11,682 | 11,921 | 12,136 | F26 | 7,919 | 8,124 | 8,384 | F28 | 15,076 | 15,400 | 17,161 | F30 | 16,906 | 20,865 | 22,941 | F31 | 11,553 | 11,780 | 11,990 | F33 | 15,418 | 15,999 | 16,326 | F34 | 15,500 | 16,432 | 17,264 | F35 | 6,747 | 7,356 | 8,097 | F37 | 15,661 | 15,988 | 16,372 | F39 | 14,556 | 15,066 | 15,454 | F40 | 15,716 | 16,019 | 16,318 | F54 | 3,410 | 4,129 | 4,831 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,049 | 7,235 | 7,558 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,312 | 4,449 | 4,697 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,403 | 6,685 | 6,982 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 59,298 | 61,896 | 64,814 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 13,042 | 13,300 | 13,659 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,197 | 8,403 | 9,063 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,788 | 12,009 | 12,336 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 15,500 | 16,422 | 17,264 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,123 | 8,276 | 8,710 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,050 | 4,174 | 4,373 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,067 | 4,306 | 4,737 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 7,926 | 8,115 | 8,242 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,314 | 4,453 | 4,695 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 11,682 | 11,921 | 12,136 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 7,919 | 8,124 | 8,384 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 15,076 | 15,400 | 17,161 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 16,906 | 20,865 | 22,941 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,553 | 11,780 | 11,990 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 15,418 | 15,999 | 16,326 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F34 | 15,500 | 16,432 | 17,264 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 6,747 | 7,356 | 8,097 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 15,661 | 15,988 | 16,372 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 14,556 | 15,066 | 15,454 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 15,716 | 16,019 | 16,318 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F54 | 3,410 | 4,129 | 4,831 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 6 - Over Load - Fuse Protected Circuits | Functional Status Classification shall be A. Additionally, during the Visual Inspection and Dissection – DRBTR, there shall be no evidence of discoloration and melting due to overheating. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | |
|---|---|---|----------------------------|
| Group 6 - Insulation Resistance | Functional Status Classification shall be C. The insulation resistance shall be > 10 M Ω. | Samples met requirements. Samples numbers 10 to 18. | |
| | | Way selected | Insulation resistance [GΩ] |
| | | Busbar A between ways 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48. | > 50 |
| | | BusBar B between ways 2, 3, 6, 7, 10, 11, 14, 15, 18, 19, 22, 23, 26, 27, 30, 31, 34, 35, 38, 39, 42, 43, 46, 47, 50, 52, 54, 56. | > 50 |
| | | Ways 2, 4, 5, 7, 10, 12, 13, 15, 18, 20, 21, 23, 26, 28, 29, 31, 34, 36, 37, 39, 42, 44, 45, 47, 50, 51, 54, 55 between ways 1, 3, 6, 8, 9, 11, 14, 16, 17, 19, 22, 24, 25, 27, 30, 32, 33, 35, 38, 40, 41, 43, 46, 48, 49, 52, 53, 56. | > 50 |
| | | Ways 70, 75, 83, 88, 93 between ways 67, 69, 71, 72, 74, 76, 82, 84, 86, 87, 89, 91, 92, 94, 96. | > 50 |
| Ways 97, 99, 102, 104, 105 between ways 98, 100, 101, 103, 106. | >50 | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--|------------------|---|--|-----|--|---|---|----|------|------|----|------|------|----|------|------|----|------|------|-----|------|------|--------------|------|------|-------------|------|------|-------------|------|------|
| Group 6 - Connector Test - GMW-3191 (For connector 2w) | Terminal Push-out Force. Normal condition > 90 N. | <p>Samples didn't meet requirements for this item.</p> <table border="1" data-bbox="785 432 1358 925"> <thead> <tr> <th rowspan="3">Connector Sample</th> <th colspan="2">Terminal push out force in normal condition [N]</th> </tr> <tr> <th colspan="2">Way</th> </tr> <tr> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>C6</td> <td>70,0</td> <td>56,5</td> </tr> <tr> <td>C7</td> <td>77,0</td> <td>64,0</td> </tr> <tr> <td>C8</td> <td>73,5</td> <td>79,0</td> </tr> <tr> <td>C9</td> <td>68,5</td> <td>70,5</td> </tr> <tr> <td>C10</td> <td>76,5</td> <td>73,5</td> </tr> <tr> <td>Aver.</td> <td>73,1</td> <td>68,7</td> </tr> <tr> <td>Max.</td> <td>77,0</td> <td>79,0</td> </tr> <tr> <td>Min.</td> <td>68,5</td> <td>56,5</td> </tr> </tbody> </table> | Connector Sample | Terminal push out force in normal condition [N] | | Way | | 1 | 2 | C6 | 70,0 | 56,5 | C7 | 77,0 | 64,0 | C8 | 73,5 | 79,0 | C9 | 68,5 | 70,5 | C10 | 76,5 | 73,5 | Aver. | 73,1 | 68,7 | Max. | 77,0 | 79,0 | Min. | 68,5 | 56,5 |
| | Connector Sample | Terminal push out force in normal condition [N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Way | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C6 | 70,0 | 56,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C7 | 77,0 | 64,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C8 | 73,5 | 79,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C9 | 68,5 | 70,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C10 | 76,5 | 73,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aver. | 73,1 | 68,7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. | 77,0 | 79,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Min. | 68,5 | 56,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Push-out Force. After exposure to temperature and humidity > 110N. | <p>Samples didn't meet requirements for this item.</p> <table border="1" data-bbox="785 1135 1484 1628"> <thead> <tr> <th rowspan="3">Connector Sample</th> <th colspan="2">Terminal push out force after exposure to temp and humidity [N]</th> </tr> <tr> <th colspan="2">Way</th> </tr> <tr> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>C1</td> <td>79,0</td> <td>70,5</td> </tr> <tr> <td>C2</td> <td>80,5</td> <td>75,5</td> </tr> <tr> <td>C3</td> <td>73,5</td> <td>74,0</td> </tr> <tr> <td>C4</td> <td>77,0</td> <td>91,0</td> </tr> <tr> <td>C5</td> <td>94,0</td> <td>87,0</td> </tr> <tr> <td>Aver.</td> <td>80,8</td> <td>79,6</td> </tr> <tr> <td>Max.</td> <td>94,0</td> <td>91,0</td> </tr> <tr> <td>Min.</td> <td>73,5</td> <td>70,5</td> </tr> </tbody> </table> | Connector Sample | Terminal push out force after exposure to temp and humidity [N] | | Way | | 1 | 2 | C1 | 79,0 | 70,5 | C2 | 80,5 | 75,5 | C3 | 73,5 | 74,0 | C4 | 77,0 | 91,0 | C5 | 94,0 | 87,0 | Aver. | 80,8 | 79,6 | Max. | 94,0 | 91,0 | Min. | 73,5 | 70,5 |
| Connector Sample | Terminal push out force after exposure to temp and humidity [N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Way | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C1 | 79,0 | 70,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C2 | 80,5 | 75,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C3 | 73,5 | 74,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C4 | 77,0 | 91,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C5 | 94,0 | 87,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aver. | 80,8 | 79,6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. | 94,0 | 91,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Min. | 73,5 | 70,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|--|-----------------------------------|--|--------|-----------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|------|-----|-------|-----|-------|-----|-------|-------------|------|--------------|-------|-------------|-------|
| | Connector-to-Connector Engagement Force < 75N. | <p>Samples met requirements for this item.</p> <table border="1" data-bbox="785 432 1168 1097"> <thead> <tr> <th colspan="2" data-bbox="785 432 1168 510">Connector-to-Connector Engagement</th> </tr> <tr> <th data-bbox="785 510 954 555">Sample</th> <th data-bbox="954 510 1168 555">Force [N]</th> </tr> </thead> <tbody> <tr><td>C31</td><td>58,5</td></tr> <tr><td>C32</td><td>56,5</td></tr> <tr><td>C33</td><td>53,0</td></tr> <tr><td>C34</td><td>46,0</td></tr> <tr><td>C35</td><td>64,5</td></tr> <tr><td>C36</td><td>66,0</td></tr> <tr><td>C37</td><td>55,5</td></tr> <tr><td>C38</td><td>56,0</td></tr> <tr><td>C39</td><td>41,0</td></tr> <tr><td>C40</td><td>47,5</td></tr> <tr><td>Min.</td><td>41,0</td></tr> <tr><td>Aver.</td><td>54,5</td></tr> <tr><td>Max.</td><td>66,0</td></tr> </tbody> </table> | Connector-to-Connector Engagement | | Sample | Force [N] | C31 | 58,5 | C32 | 56,5 | C33 | 53,0 | C34 | 46,0 | C35 | 64,5 | C36 | 66,0 | C37 | 55,5 | C38 | 56,0 | C39 | 41,0 | C40 | 47,5 | Min. | 41,0 | Aver. | 54,5 | Max. | 66,0 |
| Connector-to-Connector Engagement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample | Force [N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C31 | 58,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C32 | 56,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C33 | 53,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C34 | 46,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C35 | 64,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C36 | 66,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C37 | 55,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C38 | 56,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C39 | 41,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C40 | 47,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Min. | 41,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aver. | 54,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. | 66,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Locked Connector Disengagement Force > 120N. | <p>Samples didn't meet requirements for this item</p> <table border="1" data-bbox="785 1216 1168 1881"> <thead> <tr> <th colspan="2" data-bbox="785 1216 1168 1294">Locked Connector Disengagement</th> </tr> <tr> <th data-bbox="785 1294 954 1339">Sample</th> <th data-bbox="954 1294 1168 1339">Force [N]</th> </tr> </thead> <tbody> <tr><td>C31</td><td>132,5</td></tr> <tr><td>C32</td><td>164,5</td></tr> <tr><td>C33</td><td>112,5</td></tr> <tr><td>C34</td><td>114,0</td></tr> <tr><td>C35</td><td>126,5</td></tr> <tr><td>C36</td><td>145,0</td></tr> <tr><td>C37</td><td>98,0</td></tr> <tr><td>C38</td><td>110,0</td></tr> <tr><td>C39</td><td>102,0</td></tr> <tr><td>C40</td><td>102,5</td></tr> <tr><td>Min.</td><td>98,0</td></tr> <tr><td>Aver.</td><td>120,8</td></tr> <tr><td>Max.</td><td>164,5</td></tr> </tbody> </table> | Locked Connector Disengagement | | Sample | Force [N] | C31 | 132,5 | C32 | 164,5 | C33 | 112,5 | C34 | 114,0 | C35 | 126,5 | C36 | 145,0 | C37 | 98,0 | C38 | 110,0 | C39 | 102,0 | C40 | 102,5 | Min. | 98,0 | Aver. | 120,8 | Max. | 164,5 |
| Locked Connector Disengagement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample | Force [N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C31 | 132,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C32 | 164,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C33 | 112,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C34 | 114,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C35 | 126,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C36 | 145,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C37 | 98,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C38 | 110,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C39 | 102,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C40 | 102,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Min. | 98,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aver. | 120,8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. | 164,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|----------------------------------|-------------------|--------|-----------|-----|------|-----|------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|------|--------|--------|--------|------|-------------|--------|--------------|------|-------------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|-------|-------|-------|-----|--------|--------|--------|-----|-------|-------|-------|
| | Unlocked Connector Disengagement Force < 100N. | <p>Samples met requirements for this item</p> <table border="1" data-bbox="785 434 1168 1102"> <thead> <tr> <th colspan="2" data-bbox="785 434 1168 517">Unlocked Connector Disengagement</th> </tr> <tr> <th data-bbox="785 517 954 562">Sample</th> <th data-bbox="954 517 1168 562">Force [N]</th> </tr> </thead> <tbody> <tr><td data-bbox="785 562 954 607">C41</td><td data-bbox="954 562 1168 607">23,5</td></tr> <tr><td data-bbox="785 607 954 651">C42</td><td data-bbox="954 607 1168 651">24,0</td></tr> <tr><td data-bbox="785 651 954 696">C43</td><td data-bbox="954 651 1168 696">22,0</td></tr> <tr><td data-bbox="785 696 954 741">C44</td><td data-bbox="954 696 1168 741">17,0</td></tr> <tr><td data-bbox="785 741 954 786">C45</td><td data-bbox="954 741 1168 786">26,5</td></tr> <tr><td data-bbox="785 786 954 831">C46</td><td data-bbox="954 786 1168 831">27,5</td></tr> <tr><td data-bbox="785 831 954 875">C47</td><td data-bbox="954 831 1168 875">21,0</td></tr> <tr><td data-bbox="785 875 954 920">C48</td><td data-bbox="954 875 1168 920">23,5</td></tr> <tr><td data-bbox="785 920 954 965">C49</td><td data-bbox="954 920 1168 965">20,5</td></tr> <tr><td data-bbox="785 965 954 1010">C50</td><td data-bbox="954 965 1168 1010">25,0</td></tr> <tr><td data-bbox="785 1010 954 1055">Min.</td><td data-bbox="954 1010 1168 1055">17,0</td></tr> <tr><td data-bbox="785 1055 954 1099">Aver.</td><td data-bbox="954 1055 1168 1099">23,1</td></tr> <tr><td data-bbox="785 1099 954 1144">Max.</td><td data-bbox="954 1099 1168 1144">27,5</td></tr> </tbody> </table> | Unlocked Connector Disengagement | | Sample | Force [N] | C41 | 23,5 | C42 | 24,0 | C43 | 22,0 | C44 | 17,0 | C45 | 26,5 | C46 | 27,5 | C47 | 21,0 | C48 | 23,5 | C49 | 20,5 | C50 | 25,0 | Min. | 17,0 | Aver. | 23,1 | Max. | 27,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unlocked Connector Disengagement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample | Force [N] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C41 | 23,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C42 | 24,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C43 | 22,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C44 | 17,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C45 | 26,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C46 | 27,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C47 | 21,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C48 | 23,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C49 | 20,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C50 | 25,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Min. | 17,0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aver. | 23,1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. | 27,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 7 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | <p>Initial measurements. Samples numbers 19 to 27. Samples met requirements.</p> <table border="1" data-bbox="785 1234 1262 1908"> <thead> <tr> <th data-bbox="785 1234 911 1279" rowspan="2">Position</th> <th colspan="3" data-bbox="911 1234 1262 1279">Voltage Drop [mV]</th> </tr> <tr> <th data-bbox="911 1279 1023 1323">Min</th> <th data-bbox="1023 1279 1134 1323">Aver</th> <th data-bbox="1134 1279 1262 1323">Max</th> </tr> </thead> <tbody> <tr><td data-bbox="785 1323 911 1368">F1</td><td data-bbox="911 1323 1023 1368">7,102</td><td data-bbox="1023 1323 1134 1368">7,381</td><td data-bbox="1134 1323 1262 1368">7,892</td></tr> <tr><td data-bbox="785 1368 911 1413">F7</td><td data-bbox="911 1368 1023 1413">4,284</td><td data-bbox="1023 1368 1134 1413">4,497</td><td data-bbox="1134 1368 1262 1413">4,881</td></tr> <tr><td data-bbox="785 1413 911 1458">F10</td><td data-bbox="911 1413 1023 1458">6,560</td><td data-bbox="1023 1413 1134 1458">6,639</td><td data-bbox="1134 1413 1262 1458">6,725</td></tr> <tr><td data-bbox="785 1458 911 1503">F11</td><td data-bbox="911 1458 1023 1503">60,355</td><td data-bbox="1023 1458 1134 1503">62,520</td><td data-bbox="1134 1458 1262 1503">64,715</td></tr> <tr><td data-bbox="785 1503 911 1547">F12</td><td data-bbox="911 1503 1023 1547">12,981</td><td data-bbox="1023 1503 1134 1547">13,276</td><td data-bbox="1134 1503 1262 1547">13,560</td></tr> <tr><td data-bbox="785 1547 911 1592">F13</td><td data-bbox="911 1547 1023 1592">8,124</td><td data-bbox="1023 1547 1134 1592">8,273</td><td data-bbox="1134 1547 1262 1592">8,427</td></tr> <tr><td data-bbox="785 1592 911 1637">F14</td><td data-bbox="911 1592 1023 1637">11,922</td><td data-bbox="1023 1592 1134 1637">13,126</td><td data-bbox="1134 1592 1262 1637">22,179</td></tr> <tr><td data-bbox="785 1637 911 1682">F15</td><td data-bbox="911 1637 1023 1682">15,883</td><td data-bbox="1023 1637 1134 1682">16,209</td><td data-bbox="1134 1637 1262 1682">16,594</td></tr> <tr><td data-bbox="785 1682 911 1727">F16</td><td data-bbox="911 1682 1023 1727">8,176</td><td data-bbox="1023 1682 1134 1727">8,278</td><td data-bbox="1134 1682 1262 1727">8,370</td></tr> <tr><td data-bbox="785 1727 911 1771">F17</td><td data-bbox="911 1727 1023 1771">4,081</td><td data-bbox="1023 1727 1134 1771">4,238</td><td data-bbox="1134 1727 1262 1771">4,622</td></tr> <tr><td data-bbox="785 1771 911 1816">F19</td><td data-bbox="911 1771 1023 1816">4,085</td><td data-bbox="1023 1771 1134 1816">4,260</td><td data-bbox="1134 1771 1262 1816">4,805</td></tr> <tr><td data-bbox="785 1816 911 1861">F20</td><td data-bbox="911 1816 1023 1861">7,987</td><td data-bbox="1023 1816 1134 1861">8,125</td><td data-bbox="1134 1816 1262 1861">8,297</td></tr> <tr><td data-bbox="785 1861 911 1906">F22</td><td data-bbox="911 1861 1023 1906">4,337</td><td data-bbox="1023 1861 1134 1906">4,470</td><td data-bbox="1134 1861 1262 1906">4,560</td></tr> <tr><td data-bbox="785 1906 911 1951">F25</td><td data-bbox="911 1906 1023 1951">11,742</td><td data-bbox="1023 1906 1134 1951">12,530</td><td data-bbox="1134 1906 1262 1951">17,068</td></tr> <tr><td data-bbox="785 1951 911 1995">F26</td><td data-bbox="911 1951 1023 1995">8,098</td><td data-bbox="1023 1951 1134 1995">8,348</td><td data-bbox="1134 1951 1262 1995">9,712</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,102 | 7,381 | 7,892 | F7 | 4,284 | 4,497 | 4,881 | F10 | 6,560 | 6,639 | 6,725 | F11 | 60,355 | 62,520 | 64,715 | F12 | 12,981 | 13,276 | 13,560 | F13 | 8,124 | 8,273 | 8,427 | F14 | 11,922 | 13,126 | 22,179 | F15 | 15,883 | 16,209 | 16,594 | F16 | 8,176 | 8,278 | 8,370 | F17 | 4,081 | 4,238 | 4,622 | F19 | 4,085 | 4,260 | 4,805 | F20 | 7,987 | 8,125 | 8,297 | F22 | 4,337 | 4,470 | 4,560 | F25 | 11,742 | 12,530 | 17,068 | F26 | 8,098 | 8,348 | 9,712 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,102 | 7,381 | 7,892 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,284 | 4,497 | 4,881 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,560 | 6,639 | 6,725 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 60,355 | 62,520 | 64,715 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 12,981 | 13,276 | 13,560 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,124 | 8,273 | 8,427 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,922 | 13,126 | 22,179 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 15,883 | 16,209 | 16,594 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,176 | 8,278 | 8,370 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,081 | 4,238 | 4,622 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 4,085 | 4,260 | 4,805 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F20 | 7,987 | 8,125 | 8,297 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F22 | 4,337 | 4,470 | 4,560 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F25 | 11,742 | 12,530 | 17,068 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F26 | 8,098 | 8,348 | 9,712 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|----------|-------------------|--|--|-----|------|-----|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|--------|--------|--------|-----|--------|--------|--------|-----|--------|--------|--------|-----|-------|-------|-------|-----|-------|-------|-------|
| | | <table border="1"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Min</th> </tr> </thead> <tbody> <tr><td>F28</td><td>15,078</td><td>15,231</td><td>15,528</td></tr> <tr><td>F30</td><td>20,729</td><td>21,721</td><td>24,924</td></tr> <tr><td>F31</td><td>11,689</td><td>11,853</td><td>12,232</td></tr> <tr><td>F33</td><td>15,858</td><td>16,184</td><td>16,736</td></tr> <tr><td>F34</td><td>15,863</td><td>16,400</td><td>17,842</td></tr> <tr><td>F35</td><td>6,537</td><td>7,512</td><td>8,521</td></tr> <tr><td>F37</td><td>15,826</td><td>16,061</td><td>16,501</td></tr> <tr><td>F39</td><td>14,902</td><td>15,146</td><td>15,660</td></tr> <tr><td>F40</td><td>15,738</td><td>16,054</td><td>16,450</td></tr> <tr><td>F54</td><td>3,200</td><td>3,858</td><td>4,762</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Min | F28 | 15,078 | 15,231 | 15,528 | F30 | 20,729 | 21,721 | 24,924 | F31 | 11,689 | 11,853 | 12,232 | F33 | 15,858 | 16,184 | 16,736 | F34 | 15,863 | 16,400 | 17,842 | F35 | 6,537 | 7,512 | 8,521 | F37 | 15,826 | 16,061 | 16,501 | F39 | 14,902 | 15,146 | 15,660 | F40 | 15,738 | 16,054 | 16,450 | F54 | 3,200 | 3,858 | 4,762 | | | | |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Min | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F28 | 15,078 | 15,231 | 15,528 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F30 | 20,729 | 21,721 | 24,924 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F31 | 11,689 | 11,853 | 12,232 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F33 | 15,858 | 16,184 | 16,736 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F34 | 15,863 | 16,400 | 17,842 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F35 | 6,537 | 7,512 | 8,521 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F37 | 15,826 | 16,061 | 16,501 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F39 | 14,902 | 15,146 | 15,660 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F40 | 15,738 | 16,054 | 16,450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F54 | 3,200 | 3,858 | 4,762 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 7 - Mechanical Shock Collision - 50G 11ms | Functional Status Classification shall be C. | Samples met requirements. Please see Magneti Marelli's test report Nr. Nr. DF1013/14. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 7 - Free Fall | The component shall pass the 5-Point Functional/Parametric Check at the end of the test. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 7 - Crush for Housing (Elbow Load) | Functional Status Classification shall be C. | Samples met requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group 7 - 5-Point Functional/Parametric Check (Voltage Drop) | Functional Status Classification shall be A. | <p>Final measurements. Samples numbers 19 to 27. Samples met requirements.</p> <table border="1"> <thead> <tr> <th rowspan="2">Position</th> <th colspan="3">Voltage Drop [mV]</th> </tr> <tr> <th>Min</th> <th>Aver</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>F1</td><td>7,286</td><td>7,497</td><td>7,727</td></tr> <tr><td>F7</td><td>4,315</td><td>4,551</td><td>5,099</td></tr> <tr><td>F10</td><td>6,674</td><td>6,865</td><td>7,703</td></tr> <tr><td>F11</td><td>60,501</td><td>62,920</td><td>65,422</td></tr> <tr><td>F12</td><td>13,613</td><td>14,392</td><td>16,670</td></tr> <tr><td>F13</td><td>8,231</td><td>8,384</td><td>8,551</td></tr> <tr><td>F14</td><td>11,994</td><td>12,097</td><td>12,206</td></tr> <tr><td>F15</td><td>15,750</td><td>16,292</td><td>17,266</td></tr> <tr><td>F16</td><td>8,304</td><td>8,384</td><td>8,490</td></tr> <tr><td>F17</td><td>4,144</td><td>4,424</td><td>5,327</td></tr> <tr><td>F19</td><td>2,804</td><td>4,704</td><td>8,478</td></tr> </tbody> </table> | Position | Voltage Drop [mV] | | | Min | Aver | Max | F1 | 7,286 | 7,497 | 7,727 | F7 | 4,315 | 4,551 | 5,099 | F10 | 6,674 | 6,865 | 7,703 | F11 | 60,501 | 62,920 | 65,422 | F12 | 13,613 | 14,392 | 16,670 | F13 | 8,231 | 8,384 | 8,551 | F14 | 11,994 | 12,097 | 12,206 | F15 | 15,750 | 16,292 | 17,266 | F16 | 8,304 | 8,384 | 8,490 | F17 | 4,144 | 4,424 | 5,327 | F19 | 2,804 | 4,704 | 8,478 |
| Position | Voltage Drop [mV] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Aver | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | 7,286 | 7,497 | 7,727 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F7 | 4,315 | 4,551 | 5,099 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F10 | 6,674 | 6,865 | 7,703 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F11 | 60,501 | 62,920 | 65,422 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F12 | 13,613 | 14,392 | 16,670 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F13 | 8,231 | 8,384 | 8,551 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F14 | 11,994 | 12,097 | 12,206 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F15 | 15,750 | 16,292 | 17,266 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F16 | 8,304 | 8,384 | 8,490 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F17 | 4,144 | 4,424 | 5,327 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F19 | 2,804 | 4,704 | 8,478 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Test Sequence/ Environment | Requirements | Results | | | |
|--|---|---------------------------|--------------------------|-------------|------------|
| | | Position | Voltage Drop [mV] | | |
| | | | Min | Aver | Min |
| | | F20 | 8,053 | 8,212 | 8,414 |
| | | F22 | 4,145 | 4,545 | 4,850 |
| | | F25 | 10,243 | 11,940 | 12,400 |
| | | F26 | 7,421 | 8,487 | 10,580 |
| | | F28 | 11,909 | 15,013 | 15,521 |
| | | F30 | 20,591 | 22,737 | 25,330 |
| | | F31 | 9,914 | 12,124 | 15,308 |
| | | F33 | 16,331 | 17,337 | 19,312 |
| | | F34 | 15,750 | 16,570 | 17,761 |
| | | F35 | 6,872 | 7,513 | 8,515 |
| | | F37 | 16,301 | 17,132 | 19,365 |
| | | F39 | 15,477 | 16,281 | 18,328 |
| | | F40 | 16,211 | 17,219 | 19,350 |
| | | F54 | 3,413 | 9,159 | 16,513 |
| Group 7 - Visual Inspection and Dissection | There shall be no corrosion, discoloration, cracks, etc., which could affect the functionality of the part. | Samples met requirements. | | | |

2. SAMPLE & WIRE DESCRIPTION

The Certification of Conformance (C of C), submitted with the test request, lacked the necessary information to verify the samples tested. Therefore the Test Lab cannot verify that the samples have been produced, inspected, and accepted as conforming to product drawing requirements, and made using the same core manufacturing processes and technologies as production or parts.

2.1. Group / Samples

| Group | Part Number | Rev. | Date Code | Sample Description | Quantity Tested |
|-------|-------------|------|-----------|--|-----------------|
| 0 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 1 to 3. | 3 |
| 1 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 1 and 2. | 2 |
| 2 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 4 to 6. | 4 |
| 3 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 7 to 9. | 3 |
| 6 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 10 to 18. | 9 |
| 6 | 2819052-1 | 1 | N/A* | 2 WAYS CONNECTOR Nr. C1 to C10 and C31 to C50. | 30 |
| 7 | 2819051-1 | 1 | N/A* | FUSE AND RELAY BOX ASSY IEC Samples numbers 19 to 27. | 9 |

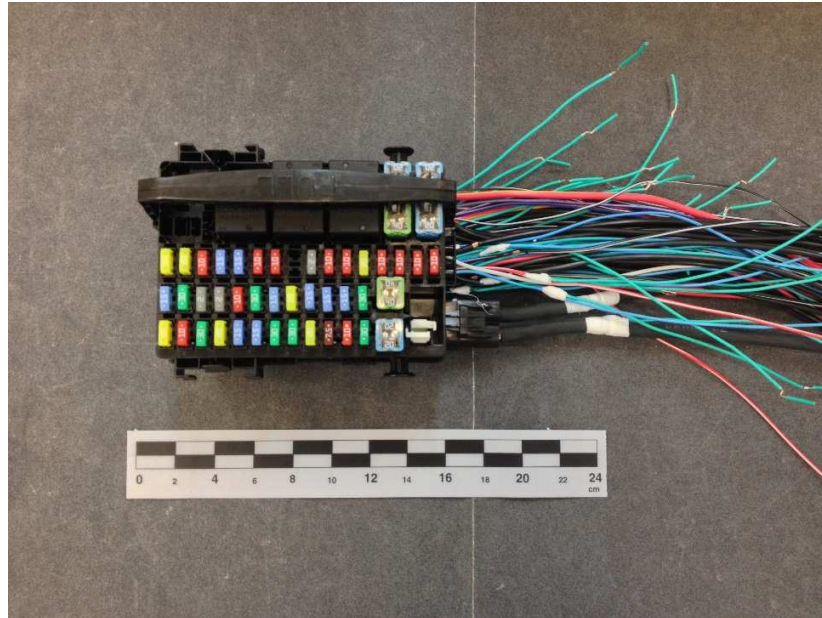
* Information either unavailable or not provided by requestor.

2.2. Wire Information

| Group Number | Wire Gage | Overall Diameter | Strand Diameter | Number of Strands |
|--------------|----------------------|------------------|-----------------|-------------------|
| All Groups | 0,35 mm ² | 1,3 | 0,18 | 12 |
| | 0,5 mm ² | 1,5 | 0,18 | 16 |
| | 0,75 mm ² | 1,8 | 0,18 | 24 |
| | 1 mm ² | 2 | 0,18 | 32 |
| | 1,5 mm ² | 2,3 | 0,23 | 28 |
| | 2,5 mm ² | 2,8 | 0,23 | 50 |
| | 4 mm ² | 3,5 | 0,28 | 56 |

3. SAMPLE PREPARATION

3.1. Sample identification



FUSE AND RELAY BOX ASSY IEC

4. TEST PROCEDURE

4.1. Cross Section Inspection

According to GMW 3172 (Rev. Nov/2012) item 6.6.

4.2. Visual Inspection and Dissection

According to GMW 3172 (Rev. Nov/2012) item 6.5.

4.3. Thermal Cycle Profile Development

According to GMW 3172 (Rev. Nov/2012) item 6.9.

4.4. Vibration Transmissibility Demonstration

According to GMW 3172 (Rev. Nov/2012) item 6.8. Test accomplished in Magneti Marelli's laboratory. Please see Magneti Marelli's test report Nr. DFI013/14.

4.5. 5-Point Functional/Parametric Check (Voltage Drop)

According to GMW 3172 (Rev. Nov/2012) item 6.1, measurements accomplished at room temperature using 1A. Circuits selected by TE engineering. The same circuits mentioned in the item Results.

4.6. High Temperature Degradation

According to GMW 3172 (Rev. Nov/2012) item 9.4.1. 500 hours. 85°C.

4.7. Thermal Shock (Air-To-Air)

According to GMW 3172 (Rev. Nov/2012) item 9.4.2. Test accomplished in TE USA Laboratory facilities.

4.8. Power Temperature Cycle (PTC)

According to GMW 3172 (Rev. Nov/2012) item 9.4.3. Test accomplished in TE USA Laboratory facilities.

4.9. Dust Test

According to GMW 3172 (Rev. Nov/2012) item 9.5.1. Test accomplished in Federal Mogul laboratory. Please see Federal Mogul's test report Nr. 12664.

4.10. Water Test

According to GMW 3172 (Rev. Nov/2012) item 9.5.2. Test accomplished in TUV Rheinland do Brasil test report Nr. 1407–AEX – 01/13.

4.11. Insulation Resistance

According to GMW 3172 (Rev. Nov/2012) item 9.2.16.

4.12. Connector Test - GMW-3191 (For connector 2w)

- Terminal Push-out Force -Item 4.5.2.5 GMW 3191.
- Connector-to-Connector Engagement Force – Item 4.2.8.2 GMW 3191.
- Locked Connector Disengagement Force – Item 4.2.18.5 GMW 3191.
- Unlocked Connector Disengagement Force – Item 4.2.19.5 GMW 3191.

4.13. Mechanical Shock Collision - 50G 11ms

According to GMW 3172 (Rev. Nov/2012) item 9.3.3. Test accomplished in Magneti Marelli's laboratory. Please see Magneti Marelli's test report Nr. DFI013/14.

4.14. Free Fall

According to GMW 3172 (Rev. Nov/2012) item 9.3.10.

4.15. Crush for Housing (Elbow Load)

According to GMW 3172 (Rev. Nov/2012) item 9.3.5.

4.16. Fretting Corrosion

According to GMW 3172 (Rev. Nov/2012) item 9.3.11. Test accomplished in Magneti Marelli's laboratory. Please see Magneti Marelli's test report Nr. DFI013/14.

4.17. Over Load - Fuse Protected Circuits

According to GMW 3172 (Rev. Nov/2012) item 9.2.15. The circuits F35, F36 and F54 was replaced for jumpers and test performed according the specification.

5. TEST EQUIPMENT

All equipment containing a calibration number is calibrated and traceable through TE to the National Institute of Standards and Technology (NIST).

| Instrument Description | Manufacturer | Model Number | Calibration Number | Purpose |
|-------------------------------|---------------------------|---------------------|---------------------------|---|
| Hypot | Associated Research, Inc. | 7650 | 93-339033-001 | Insulation Resistance |
| Dynamometer | Mecmesin | AFG 2500N | 92-339017-090 | - Connector Test - GMW-3191 (For connector 2w) - Crush for Housing (Elbow Load). |
| Oven | Fanem | 320E | 92-339031-1231 | - High Temperature Degradation. - Over load – fuse protect circuits. |
| DC Power Supply | GW Laboratory | GPR-1810 | 93-339033-726 | - 5-Point Functional/ Parametric Check (Voltage Drop) - Fretting Corrosion |
| Digital Multimeter | Hewlett Packard | 34401A | 93-339033-024 | - 5-Point Functional/ Parametric Check (Voltage Drop) - Fretting Corrosion |
| DC Power Supply | EMIPRO | EFBT 15-350 | - | Over Load - Fuse Protected Circuits |
| Humidity chamber | ACS | DCTC 1300 | 92-339032-009 | Connector Test - GMW-3191 (For connector 2w) |

6. APPROVALS

Approvals are secured electronically through the corporate document repository routing and approval system.

Testing & Report By: Jesus Preto, Laboratory Engineer

Reviewed & Approved By: Paulo Almeida, Laboratory Coordinator