飞机起落架测试报告

|  |  |
| --- | --- |
| 测试大纲 | /TestStand/飞机起落架测试大纲\_v1.0.0.0.docx |
| CSV激励文件 | /TestStand/LandingGear\_Stimulus\_v1.0.0.0.csv |
| CSV测试文件 | /TestStand/LandingGear\_Test\_v1.0.0.0.csv |
| TestStand测试序列 | /TestStand/Demo-VeriStandStep-TS2017.seq\_v1.0.0.0.seq |
| Word报告模板 | /TestStand/Word Report/LandingGearTestReportTemplate\_v1.1.0.0.dotx |

|  |  |
| --- | --- |
| 测试开始时间 | Friday, February 10, 2023, 11:33:41 |
| 测试结束时间 | Friday, February 10, 2023, 11:35:08 |
| 操作员 | administrator |
| UUT编号 | 1 |
| 测试结果 | Failed |

# 功能测试

## 激励给定

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | 阶段 | 激励文件标签 | 激励开始时间 System Time [s] | 激励结束时间 System Time [s] |
| 1 | 启动阶段 | #Startup | 248.4 | 263.9 |
| 2 | 测试阶段 | #Action | 264.1 | 327.7 |
| 3 | 停止阶段 | #Cleanup | 328.1 | 328.2 |

## 测试指标：N电机电流不超过0.4A

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| System Time [s] | N Motor Current [A] | Low Limit [A] | High Limit [A] | Test Result |
| 264.1 | -0.00410353 | -0.2 | 0.4 | Passed |
| 266.8 | 0.390161 | -0.2 | 0.4 | Passed |
| 269.2 | 0.389774 | -0.2 | 0.4 | Passed |
| 271.9 | 0.0348814 | -0.2 | 0.4 | Passed |
| 274.5 | -0.00413575 | -0.2 | 0.4 | Passed |
| 277.1 | -0.00407132 | -0.2 | 0.4 | Passed |
| 279.7 | -0.00420019 | -0.2 | 0.4 | Passed |
| 282.3 | -0.0218562 | -0.2 | 0.4 | Passed |
| 284.9 | -0.081848 | -0.2 | 0.4 | Passed |
| 287.4 | -0.00407132 | -0.2 | 0.4 | Passed |
| 290.2 | -0.00384578 | -0.2 | 0.4 | Passed |
| 292.7 | -0.00397466 | -0.2 | 0.4 | Passed |
| 295.4 | -0.00400688 | -0.2 | 0.4 | Passed |
| 297.9 | -0.00416797 | -0.2 | 0.4 | Passed |
| 300.5 | -0.00394244 | -0.2 | 0.4 | Passed |
| 303.1 | -0.00416797 | -0.2 | 0.4 | Passed |
| 305.7 | -0.00384578 | -0.2 | 0.4 | Passed |
| 308.3 | -0.00458682 | -0.2 | 0.4 | Passed |
| 310.9 | -0.00394244 | -0.2 | 0.4 | Passed |
| 313.6 | -0.00410353 | -0.2 | 0.4 | Passed |
| 316.2 | -0.00442572 | -0.2 | 0.4 | Passed |
| 318.9 | -0.00391022 | -0.2 | 0.4 | Passed |

## 测试指标：实际执行位置/角度与仿真数据误差不超过10%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| System Time  [s] | Simulated Position  [degree] | Actual Position  [degree] | Accuracy  [%] | Accuracy Limit  [%] | Test Result |
| 264.9 | 15.4935 | 15.5396 | -0.297646 | 10 | Passed |
| 267.4 | 56.6644 | 56.1601 | 0.890107 | 10 | Passed |
| 269.9 | 104.476 | 103.891 | 0.559361 | 10 | Passed |
| 272.6 | 139.006 | 138.998 | 0.00632587 | 10 | Passed |
| 275.2 | 139.006 | 139.003 | 0.00252314 | 10 | Passed |
| 277.7 | 139.006 | 138.998 | 0.0056795 | 10 | Passed |
| 280.4 | 138.058 | 138.618 | -0.405657 | 10 | Passed |
| 283.0 | 87.9696 | 88.5423 | -0.651084 | 10 | Passed |
| 285.5 | 40.1581 | 40.8139 | -1.63309 | 10 | Passed |
| 288.1 | 20.9956 | 21.0572 | -0.293351 | 10 | Passed |
| 290.8 | 20.9956 | 21.0574 | -0.294432 | 10 | Passed |
| 293.4 | 20.9956 | 21.0586 | -0.300411 | 10 | Passed |
| 296.1 | 20.9956 | 21.0592 | -0.302891 | 10 | Passed |
| 298.7 | 43.5732 | 40.8893 | 6.15946 | 10 | Passed |
| 301.3 | 91.3847 | 88.0162 | 3.68602 | 10 | Passed |
| 303.8 | 139.196 | 136.577 | 1.88143 | 10 | Passed |
| 306.4 | 140.904 | 141.736 | -0.590389 | 10 | Passed |
| 309.1 | 140.904 | 141.742 | -0.595292 | 10 | Passed |
| 311.7 | 140.904 | 141.749 | -0.60014 | 10 | Passed |
| 314.3 | 109.599 | 112.328 | -2.49078 | 10 | Passed |
| 317.0 | 58.353 | 61.1425 | -4.78045 | 10 | Passed |
| 319.6 | 15.6642 | 20.9815 | -33.9453 | 10 | Failed |

## 测试数据记录

