|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LEADLAG - in case of AC INPUT( SINE WAVE )** | | | | | | |
| **Various Detected Faults in LEADLAG in the presence of faults with deviations (5% – 15%) & (20%-47%)** | | | | | | |
| **Injected Faults** | **=500, = 0.0420**  **Optimal Order – 18th** | | **=1000, = 0.0420**  **Optimal Order – 18th** | | **=2000, = 0.0420**  **Optimal Order – 18th** | |
| **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** | **No. of Coefficients Out of Bound** | **Fault Detection Status** |
| **R1 12%↑** | 113 | **√** | 73 | **√** | 64 | **√** |
| **R1 8% ↓** | 1 | **√** | 0 | **X** | 0 | **X** |
| **R2 9% ↑** | 0 | **X** | 0 | **X** | 0 | **X** |
| **R2 6%↓** | 0 | **X** | 0 | **X** | 0 | **X** |
| **R3 10% ↑** | 71 | **√** | 57 | **√** | 38 | **√** |
| **R3 7%↓** | 0 | **X** | 0 | **X** | 0 | **X** |
| **C1 13%↑** | 0 | **X** | 0 | **X** | 0 | **X** |
| **C1 15%↓** | 3 | **√** | 3 | **√** | 3 | **√** |
| **C2 11% ↑** | 0 | **X** | 0 | **X** | 0 | **X** |
| **C2 14%↓** | 10 | **√** | 7 | **√** | 6 | **√** |
| **R1 20%↑** | 163 | **√** | 156 | **√** | 153 | **√** |
| **R1 30% ↓** | 183 | **√** | 183 | **√** | 183 | **√** |
| **R2 32% ↑** | 34 | **√** | 33 | **√** | 32 | **√** |
| **R2 40% ↓** | 104 | **√** | 93 | **√** | 89 | **√** |
| **R3 25% ↑** | 174 | **√** | 173 | **√** | 172 | **√** |
| **R3 45%↓** | 185 | **√** | 184 | **√** | 183 | **√** |
| **C1 42%↑** | 17 | **√** | 14 | **√** | 13 | **√** |
| **C1 25% ↓** | 15 | **√** | 14 | **√** | 12 | **√** |
| **C2 35% ↑** | 38 | **√** | 33 | **√** | 31 | **√** |
| **C2 47% ↓** | 140 | **√** | 135 | **√** | 132 | **√** |