# Experimental Data

## Delta-Wye Transformer

### Voltage (V)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 206.63 | 119.3 | 207.85 | 120 |
| Primary 2 | 206.63 | 119.3 | 207.85 | 120 |
| Primary 3 | 203.34 | 117.4 | 207.85 | 120 |
| Secondary 1 | 101.84 | 58.8 | 103.92 | 60 |
| Secondary 2 | 98.21 | 56.7 | 103.92 | 60 |
| Secondary 3 | 98.03 | 56.6 | 103.92 | 60 |

### Current (A)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 0.1175 | 0.1175 |  |  |
| Primary 2 | 0.1170 | 0.1170 |  |  |
| Primary 3 | 0.2779 | 0.2779 |  |  |
| Secondary 1 | 0.0100 | 0.0100 |  |  |
| Secondary 2 | 0.367 | 0.367 |  |  |
| Secondary 3 | 0.367 | 0.367 |  |  |

### Miscellaneous

|  |  |  |
| --- | --- | --- |
| Measurement | Value | Ideal Value |
|  |  | 600 |
|  |  | 600 |
|  |  | 600 |
|  |  | 0.5 |
|  |  | 0.5 |
|  |  | 0.5 |
|  |  |  |
|  |  |  |

## Delta-Delta Transformer

### Voltage (V)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 118.0 | 118.0 | 120 | 120 |
| Primary 2 | 121.0 | 121.0 | 120 | 120 |
| Primary 3 | 117.0 | 117.0 | 120 | 120 |
| Secondary 1 | 59.4 | 59.4 | 60 | 60 |
| Secondary 2 | 59.7 | 59.7 | 60 | 60 |
| Secondary 3 | 59.9 | 59.9 | 60 | 60 |

### Current (A)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 0.1244 |  |  |  |
| Primary 2 | 0.1230 |  |  |  |
| Primary 3 | 0.1253 |  |  |  |
| Secondary 1 | 0.1735 |  |  |  |
| Secondary 2 | 0.1711 |  |  |  |
| Secondary 3 | 0.1695 |  |  |  |

### Miscellaneous

|  |  |  |
| --- | --- | --- |
| Measurement | Value | Ideal Value |
|  |  | 600 |
|  |  | 600 |
|  |  | 600 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Delta-Delta With Split Phase Transformer

### Voltage (V)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 120.2 | 120.2 | 120 | 120 |
| Primary 2 | 118.5 | 118.5 | 120 | 120 |
| Primary 3 | 119.1 | 119.1 | 120 | 120 |
|  | 114.3 | 114.3 | 120 | 120 |
|  | 113.7 | 113.7 | 120 | 120 |
|  | 116.0 | 116.0 | 120 | 120 |
|  | 55.9 | 55.9 | 60 | 60 |
|  | 57.1 | 57.1 | 60 | 60 |

### Current (A)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Line | Phase | Line (ideal) | Phase (ideal) |
| Primary 1 | 1.2 |  |  |  |
| Primary 2 | 1.2 |  |  |  |
| Primary 3 | 1.2 |  |  |  |
|  | 1.48 |  |  |  |
|  | 1.21 |  |  |  |
|  | 1.19 |  |  |  |
|  | 0.1941 |  |  |  |
|  | 0.1484 |  |  |  |

### Miscellaneous

|  |  |
| --- | --- |
| Measurement | Value |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Delta-Delta With Split Phase Transformer - Unbalanced Load

### Voltage (V)

|  |  |  |
| --- | --- | --- |
| Location | Line | Phase |
| Primary 1 |  | 120.9 |
| Primary 2 |  | 118.9 |
| Primary 3 |  | 2.4 |
|  |  | 3.5 |
|  |  | 4.2 |
|  |  | 115.1 |
|  |  | 56.9 |
|  |  | 60.6 |

### Current (A)

|  |  |  |
| --- | --- | --- |
| Location | Line | Phase |
| Primary 1 | 1.34 |  |
| Primary 2 | 0.0513 |  |
| Primary 3 | 1.46 |  |
|  | 0.78 |  |
|  | 1.26 |  |
|  | 0 |  |
|  | 1.28 |  |
|  | 0 |  |

### Miscellaneous

|  |  |
| --- | --- |
| Measurement | Value |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |