1. Loop Resistance Test:

R loop = R C.T + R LOAD + R LEAD ­

Calculated Burden = I2 \* R LOOP

* 1. R – Phase

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Core | Ratio | Burden (VA) | R C.T (Ω) | Measured  RLoad + Rlead(Ω) | Measured R loop(Ω) | Calculated Burden (VA) |
| CT1-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-2 | 2S1 – 2S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-3 | 3S1 – 3S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-2 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |
| CT2-3 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |

* 1. Y – Phase

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Core | Ratio | Burden (VA) | R C.T (Ω) | Measured  RLoad + Rlead(Ω) | Measured R loop(Ω) | Calculated Burden (VA) |
| CT1-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-2 | 2S1 – 2S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-3 | 3S1 – 3S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-2 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |
| CT2-3 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |

* 1. B – Phase

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Core | Ratio | Burden (VA) | R C.T (Ω) | Measured  RLoad + Rlead(Ω) | Measured R loop(Ω) | Calculated Burden (VA) |
| CT1-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-2 | 2S1 – 2S3 | 2000-3000/1A | -- |  |  |  |  |
| CT1-3 | 3S1 – 3S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-1 | 1S1 – 1S3 | 2000-3000/1A | -- |  |  |  |  |
| CT2-2 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |
| CT2-3 | 2S1 – 2S2 | 4000/1A | -- |  |  |  |  |

All temperatures at what resistance measured should be recorded and all resistances

referred to the value at 75° C.