# Earth Loop Impedance Test - Circuit Breaker

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| SN | Device Name | Location | Facility Area | Earthing Configuration | Type of Circuit Location | Device Rating (A) | Device Make | Device Type | Device Sensitivity (mA) | No. of Phases | Trip Curve |
| 1 | MCB-1 | LT panel | LT Panel Room | TN |  | 63 | ABB | MCB |  | 3 | D |
| 2 | MCB-2 | DB | Office Area | TN |  | 32 | Schneider | MCB |  | 1 | B |
| 3 | MCB-3 | DB | Workshop | TT |  | 16 | Siemens | MCB |  | 3 | C |
| 4 | MCB-4 | DB | Workshop | TT |  | 25 | Siemens | MCB |  | 3 | C |
| 5 | RCD-1 | LT panel | LT Panel Room | TN |  | 40 | ABB | RCCB | 100.0 | 3 | G |
| 6 | RCD-2 | DB | Office Area | TT |  | 63 | Schneider | RCCB | 300.0 | 3 | G |
| 7 | MCCB-1 | DB | Workshop | TN | Final | 25 | Siemens | MCCB |  | 3 | IEC Very Inverse |
| 8 | MCCB-2 | LT panel | LT Panel Room | TT | Distribution | 40 | Siemens | MCCB |  | 3 | IEC Long-Time Inverse |
| 9 | MCCB-3 | DB | Workshop | TN | Final | 63 | ABB | MCCB |  | 3 | IEC Very Inverse |
| 10 | MCCB-4 | LT panel | LT Panel Room | TT | Distribution | 100 | Schneider | MCCB |  | 3 | IEC Extremely Inverse |
| 11 | ACB-1 | DB | Office Area | TN | Final | 630 | Siemens | ACB |  | 3 | IEC Ultra Inverse |
| 12 | ACB-2 | DB | Workshop | TT | Distribution | 800 | Siemens | ACB |  | 3 | IEEE Moderately Inverse |
| 13 | ACB-3 | DB | Office Area | TN | Distribution | 1000 | ABB | ACB |  | 3 | IEEE Very Inverse |
| 14 | ACB-4 | DB | Workshop | TT | Distribution | 1250 | Schneider | ACB |  | 3 | IEEE Extremely Inverse |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SN | Device Name | Device Rating (A) | Device Type | No. of Phases | V\_LN | V\_LE | V\_NE | L1-ELI | L2-ELI | L3-ELI | Psc (kA) | Suggested Max ELI (Ω) | Result |
| 1 | MCB-1 | 63 | MCB | 3 | 240 | 240 | 1 | 3.6 | 3.64 | 3.63 | 0.066 | 0.12 | Fail |
| 2 | MCB-2 | 32 | MCB | 1 | 236 | 236 | 0 | 0.56 | nan | nan | 0.421 | 0.96 | Pass |
| 3 | MCB-3 | 16 | MCB | 3 | 238 | 238 | 1 | 1.56 | 1.49 | 0.62 | 0.195 | 0.96 | Fail |
| 4 | MCB-4 | 25 | MCB | 3 | 238 | 238 | 1 | 0.56 | 0.49 | 0.6 | 0.425 | 0.61 | Pass |
| 5 | RCD-1 | 40 | RCCB | 3 | 240 | 240 | 1 | 2500.0 | 2000.0 | 2350.0 | 0.000105 | 2400.00 | Fail |
| 6 | RCD-2 | 63 | RCCB | 3 | 240 | 240 | 1 | 150.0 | 102.0 | 114.0 | 0.00197 | 166.67 | Pass |
| 7 | MCCB-1 | 25 | MCCB | 3 | 240 | 240 | 1 | 0.27 | 0.26 | 0.25 | 0.92 | 0.28 | Pass |
| 8 | MCCB-2 | 40 | MCCB | 3 | 240 | 240 | 1 | 0.03 | 0.06 | 0.01 | 7.2 | 0.05 | Fail |
| 9 | MCCB-3 | 63 | MCCB | 3 | 240 | 240 | 1 | 0.1 | 0.09 | 0.08 | 2.67 | 0.11 | Pass |
| 10 | MCCB-4 | 100 | MCCB | 3 | 240 | 240 | 1 | 0.11 | 0.09 | 0.15 | 2.06 | 0.12 | Fail |
| 11 | ACB-1 | 630 | ACB | 3 | 240 | 240 | 1 | 0.02 | 0.01 | 0.02 | 12.0 | 0.03 | Pass |
| 12 | ACB-2 | 800 | ACB | 3 | 240 | 240 | 1 | 0.05 | 0.3 | 0.1 | 1.6 | 0.04 | Fail |
| 13 | ACB-3 | 1000 | ACB | 3 | 240 | 240 | 1 | 0.09 | 0.08 | 0.05 | 3.27 | 0.10 | Pass |
| 14 | ACB-4 | 1250 | ACB | 3 | 240 | 240 | 1 | 0.01 | 0.05 | 0.03 | 8.0 | 0.02 | Fail |

ELI TEST

