## **Two Phase Isolation Transformer**



Sect. 1.14



Electrostatic shield between primary and secondary windings provides cleaner output voltage and helps to reduce spikes and transients. Copper windings connect to connector terminations equipped with NEMA standard holes for compression style or ring terminals. Relative humidity 91%, Class F Class 155°C - 311°F insulation system with 95°C temperature rise at full load and a maximum ambient of 50°C.

| GENERAL SPECIFICATION |   |                              |  |  |
|-----------------------|---|------------------------------|--|--|
| Nr.                   | Description                               | Proposed                     |  |  |
| 1                     | Rated power                               | 150VA                        |  |  |
| 2                     | Rated primary voltage                     | 380-415-440VAC (2wire)       |  |  |
| 3                     | Rated secondary voltage at no-load        | 24.7VAC (with 3% regulation) |  |  |
| 4                     | Secondary voltage at rated power at 0.8PF | 24VAC                        |  |  |
| 5                     | Rated frequency                           | 50/60Hz                      |  |  |

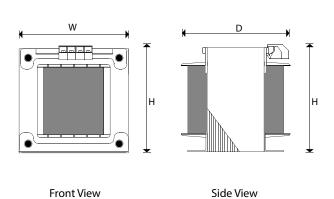


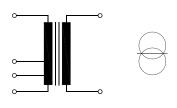
Transformer standerd is IEC 60076, natural air cooled varnish impregnated isolation transformer with double wounded windings. Mode of operation is individual. Highest Voltages of transformer windings are 1.1/3KV and 1.11KV to 12KV insulation at primary and secondary side

Model # BIT-150

| ENVIRONMENTAL CONDITIONS |                               |                      |  |  |
|--------------------------|-------------------------------|----------------------|--|--|
| Nr.                      | Description Proposed          |                      |  |  |
| 1                        | Place of installation         | Indoor               |  |  |
| 2                        | Altitude                      | 900m above sea level |  |  |
| 3                        | Duty(Continuous/Intermittent) | Continuous           |  |  |
| 4                        | Climatic/ Environmental class | C1/E1                |  |  |
| 5                        | Fire behavior class           | F1                   |  |  |
| 6                        | Type of transformer           | Dry                  |  |  |

| GENERAL CHARACTERISTICS |  |          |  |
|-------------------------|--|----------|--|
| Nr.                     | Description  | Proposed |  |
| 1                       | Primary current  | 0.34A    |  |
| 2                       | Secondary current  | 6.25A    |  |
| 3                       | Degree protection  | IP00     |  |
| 4                       | Construction   | Open     |  |
| 5                       | Class F insulation & Class A Temp. rise for HV & LV windings |          |  |





Single Line Diagram

| TRANSFORMER DIMENSIONS                         |           |          |        |           |
|--|-----------|----------|--------|-----------|
| Width(W)                                       | Height(H) | Depth(D) | Weight | Bolt size |
| 96mm   | 94mm      | 88mm     | 2.8Kg  | N/A       |
| Above mension dimensions & weight may be in ±5 |           |          |        |           |

| bove mension | dimensions | & weight | may b | e in | ±5% |
|--------------|------------|----------|-------|------|-----|

|     | TRANSFORMER LOSSES & EFFICIENCY                 |             |  |
|-----|---|-------------|--|
| Nr. | Description                                     | Proposed    |  |
| 1   | No-load current(primary)/ PF                    | <3% In/ 0.8 |  |
| 2   | No load loss                                    | 3.5W        |  |
| 3   | No load loss at 75°C                            | 3.7W        |  |
| 4   | Load loss at rated voltage & frequency          | 14.7W       |  |
| 5   | Impedance                                       | 6.5%        |  |
| 6   | Efficiency with power factor 1 @ 100% of load   | 97.01%      |  |
| 7   | Efficiency with power factor 1 @ 75% of load    | 97.76%      |  |
| 8   | Efficiency with power factor 0.8 @ 100% of load | 98.14%      |  |
| 9   | Efficiency with power factor 0.8 @ 75% of load  | 98.60%      |  |