

# **Ultra Isolation Transformers**

Power System Division

## 1 KVA to 300 KVA

## Single Phase / Three Phase Indoor, air cooled type with enclosure.

#### SAILENT FEATURES

#### 1. Isolation Transformer:

Any Double Wound Transformer is internally an isolation transformer as the primary and secondary are isolated from one another through insulation. However, modern machines and systems need a truly isolated, clean and stable power requirement. This is ensured by an Ultra Isolation Transformer (UIT), it provides for total electrical and electrostatic isolation with most effective screening of spikes, surges and transients, further it gives a true isolated local neutral and dedicated earth which are very essential for modern machines.

Ultra isolation Transformer alternates common mode noise and transverse mode noise and provides for noise or interference free power. In principle, UIT only transfers 50 Hz. Power by transformers action through mutual inductance. It prevents transfer of RF and HF disturbances with extensive insulation between primary and secondary. The insulation levels withstands HV breakdown strength of 2.5 KV and gives a DC Galvanic isolation of above 1000 megohms.

## 2. IP Enclosure Protection for Isolation Transformer:

AE Isolation Transformer conform to IP-30 protection as per IS:2147, Requirements for other degree of protection can be offered on request.

### 3. Details of Earthing for Isolation Transformers:

It is recommended that every isolation Transformer should have its own grounded earth, complete in itself.

#### 4. Constructional Features of Isolation Transformers:

Isolation Transformer shall invariably be in one air cooled section. The enclosures are constructed from M.S. angles and CRCA M.S. sheets of best quality of reputed make.

The professional painting process comprises of (i) 7-tank pre-treatment (ii) Primer Coating and (iii) Two coats of final finish paint or powder coating. or specified.



Ratio : 415 V / 415 V Nominal

Acceptable Input Range : ±10%

Mode of operation : 1:1 Isolation Transformer

Common mode noise rejection

Translents, spikes, surges : Over 100 dB Coupling Capacitances : 0.012 PF

DC Galvanic Isolation : Over 500 Megohms between any

winding or windings to ground

Breakdown strength : 2500 V AC for 2 minutes

## Ordering Information

Input voltage, output voltage, capacity Number of phases, CMNR value, coupling capacitances value





. . . . . . . . . . . . . . .