OPEN DELTA / V-V TRANSFORMER

In a three phase systems, the use of transformers with three windings is common. These windings are often connected in delta or star, resulting in common transformer configurations such as delta-delta or delta-star. An open delta transformer or also known as V-V transformer uses two single phase transformer or two windings of a 3 limbs transformer to provide either a three-phase or single phase supply to the load.

While open delta transformer is cheaper than a conventional three winding transformer, the open delta will only deliver 57.7% of the power of a conventional transformer not two thirds, 66.7% as may be expected. There is limited adoption of open delta transformers although they can be useful in certain situations such as when a 3 phase to single phase system is required or during emergency condition where one of the 3 single phase transformers of a 3 phase system is faulty.

TECHNICAL SPECIFICATIONS

CAPACITY
- Up to 1000kVA

RATED VOLTAGE
- Up to 1000V

RATED FREQUENCY
- 50Hertz
- 60Hertz

AMBIENT TEMPERATURE
- 40°C
- Others upon request

INSULATION CLASSIFICATION
- Class F & H
- Others upon request

REFERRENCE STANDARD
- IEC 60076
- IEC 61558

TRANSFORMER CORE MATERIAL
- High grade electrical steel

WINDING CONDUCTORS
- Copper or Aluminium wire
- Copper or Aluminium foils

OPTIONAL ACCESSORIES
- Enclosures up to IP54
- MCCB with or without shunt trip
- Ammeter and Voltmeter
- Temperature controller
- Fan fail detector alarm
- BMS open relay contacts