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**DUST - AIR FILTERS**

**TO PROTECT**

**TRANSFORMER OIL**

## UTILIZATION AND APPLICATION FIELD

Dust - air filters are intended to protect transformer oil against moisture and dust from free air during the transformers or other similar equipments operations such as: closed rooms, tanks, enclosed equipments which should be protected against dust and moisture in contact with atmosphere.

## OPERATING CONDITIONS

Depending on climatic area where they are intended to operate the dust - air filters are performed in two versions that is :

- a version for normal climate area, symbol N;
- a version for tropical climate area, symbol T;

## TECHNICAL CHARACTERISTICS

- ◆ operating temperature: - 40° to + 90° C;
- ◆ dust retaining composition: oil Tr 30 STAS 811 - 83
- ◆ water retaining composition : fine - pored composition;
- ◆ colour-aspect: hyaline blue, clear, hiatal texture;
- ◆ operating position: vertical with fixed support holding

## WORKING MODE

Dust - air filter is a static apparatus through which the intaken and exhaust air from the atmosphere circulates controlled this providing the retaining of dust and moisture impurities from the intaken air to the inside of the transformer.

The flow and speed of the air circulated through filter take the uniformly increasing and decreasing values depending on thermal condition of the protected oil, thermal condition generated by taking over of the heat emanated by immersed transformer and by stabilisation of the inner medium pressure differencies due to dilatation, of the outer medium due to precipitations.

The filter is connected to transformer ( equipment ) only in operating time.

Air - dust filters to protect transformer oil are given in two versions:with and without protection hood for glass cylinder.

Filters having the hood in their component too, are designated with index "a ".

Operating position is based on purifier elemnt properties to retain dust , mineral oil TR 30 STAS 811 - 83 and on hygroscopic element, chemical product drysilicate ( silicagel ) gel STAS 10732 - 80.

The filter has the size depending on protected oil weight.