Current State of the Design

gt30A

PARAMETERS/sandart

Insulating maeterial

layer design

2d design

effect of Er on design

**Gt30a Parameters.**

The subject transformer is classified as gas insulated inductive voltage transformer. The manufacturing and testing of the voltage transformer is done according to IEC 61869-1 / IEC 61869-3 standard. The voltage transformer satisfies the following parameters

Model Name : Gt30a

Rated System Voltage : 34.5 /√ 3( line - neutral)

Rated Frequency : 50 hz

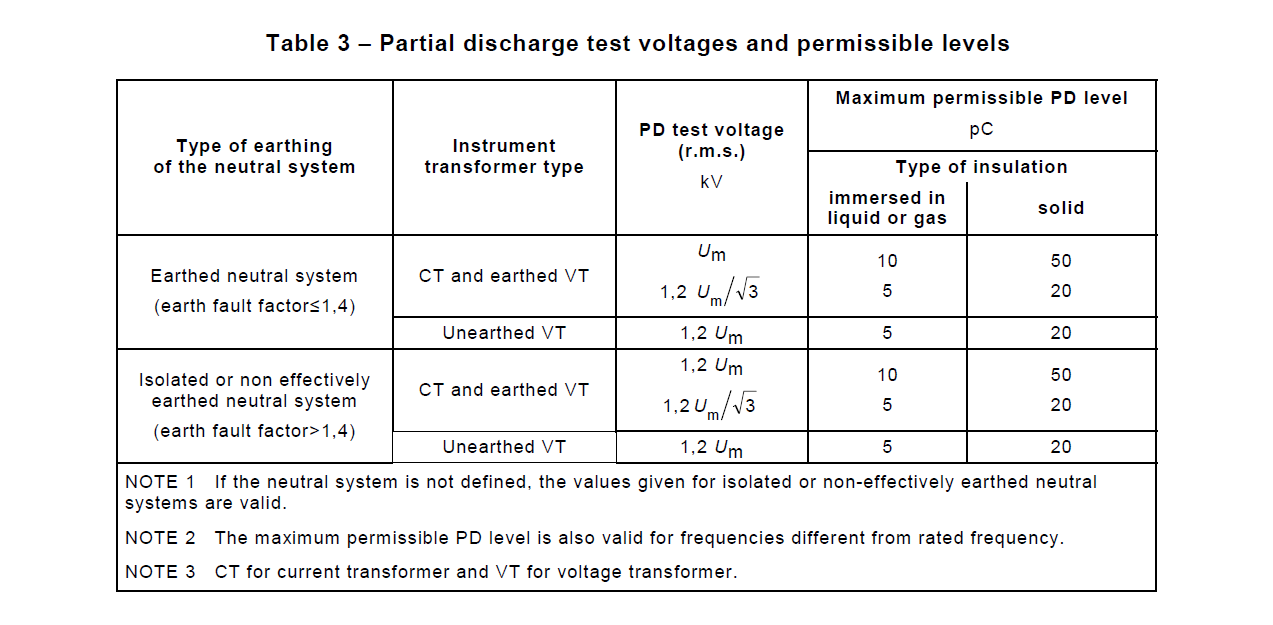
Secondary Voltage Output : 100/√ 3 ( line - neutral)

Highest Voltage for Equipment Um : 36 kV (Rms)

Rated Power Frequency withstand Voltage : 70 kV (Rms)

Rated Lightning Impulse Withstand Voltage : 170 kV (peak)

Rated Accuracy Class:



IEC 61869-1

The resultant values of the magnetic design

Primer Number of Turns:

Secondary Number of Turns:

Core Area:

DIN boyutsal limitler eklenecek

Type/Routine testler eklenecek

**Insulating materials**

In high Voltage Insulation applications there are various insulationg materials in all gas,liquid and solid forms. The main parameter of the insulation material is dielectric strenght which also varies with the applied voltage being AC, DC or impulse. The other determining parameters of the material choice are the application conditions such as working temparature , type of the casing , humidity ..etc and the cost.

Gas Insulated Voltage transformers mainly have three insulation which are epoxy resin (solid) , Sf6 (gas) , kraft paper(solid).

*Epoxy Resin*

Üretimde kullanılan reçinen firma adı ve ürün kodu yazılmalımı ?

Epoxy resin is a mixture consisting of filler (silica or similar materials) , hardener , resin , accelerator and depending on the application flexibilizer. The a mixture epoxy resin The epoxy resin casing of the transformer both provides electrical insulation and mechanical support.

Typical values for a silica filled Epoxy resin Mixture:

Specific gravity (g/ml) :1.7-1.8

Relative Dielectric Constant : 3.8-4.6

Dielectric Loss Tangent: 30-200

Volume Resistivity( Ω.cm): 10^16

*Sf6*

S

**Layer design**