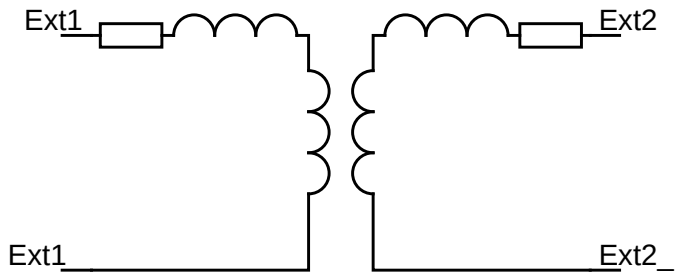
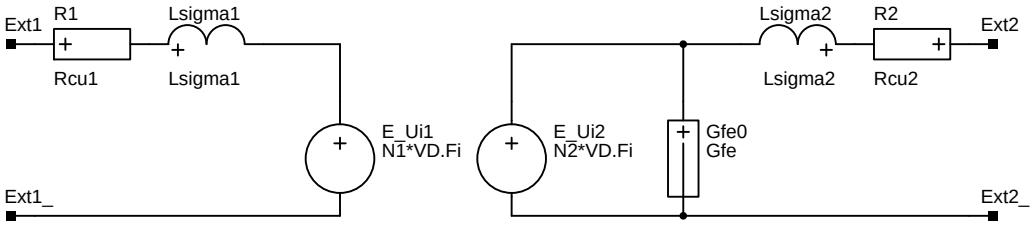
# One Phase Transformer




## Assumptions

Model transformátoru bez sycení jádra s respektováním transformačního převodu, rozptylu a činného odporu vinutí




## Interface

`Ext1`
`Ext1_`
`Ext2`
`Ext2_`

## External Parameters

| | | |
|---|---|---|
| `N1` $= 22000$ | [–] | Pocet zavitu vinuti 1. |
| `N2` $= 110000$ | [–] | Pocet zavitu vinuti 2. |
| `Rcu1` $= 0.0363$ | [Ω] | Cinny odpor vinuti 1. |
| `Rcu2` $= 0.9075$ | [Ω] | Cinny odpor vinuti 2. |
| `Lsigma1` $= 3.848\text{m}$ | [H] | Rozptylova indukcnost vinuti 1. |
| `Lsigma2` $= 96.2\text{m}$ | [H] | Rozptylova indukcnost vinuti 2. |
| `Rm` $= 12167000$ | [–] | Magneticky odpor jadra |
| `Gfe` $= 10^{-12}$ | [S] | Ztraty v zeleze |

## System Parameters

## Data

```
:: One Phase Transformer
ONEPHTRA
Ext1,
Ext1_,
Ext2,
Ext2_/
N1= 22000,      :: [-]  Pocet zavitu vinuti 1.
N2=110000,      :: [-]  Pocet zavitu vinuti 2.
Rcu1=0.0363,    :: [Ohm] Cinny odpor vinuti 1.
Rcu2=0.9075,    :: [Ohm] Cinny odpor vinuti 2.
Lsigma1=3.848m, :: [H] Rozptylova indukcnost vinuti 1.
Lsigma2=96.2m,  :: [H] Rozptylova indukcnost vinuti 2.
Rm=12167000,    :: [-] Magneticky odpor jadra
Gfe=1e-12;      :: [S] Ztraty v zeleze

SYSVAR Fi;  :: Magneticky tok jadra
0=Fi*Rm-N1*I.E_Ui1-N2*I.E_Ui2;
R1 Ext1-1 = Rcu1;
Lsigma1 1-2 = Lsigma1;
Lsigma2 3-4 = Lsigma2;
R2 Ext2-3 = Rcu2;
E_Ui1 2-Ext1_ = N1*VD.Fi;
E_Ui2 4-Ext2_ = N2*VD.Fi;
Gfe0 4-Ext2_ = Gfe;
EO@;
```

## Origin

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## Last Update

November 8, 2019