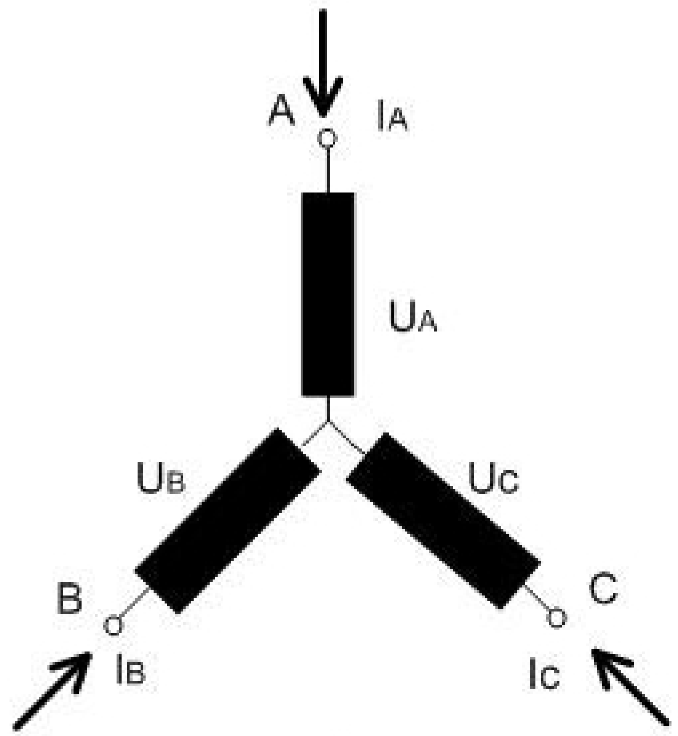

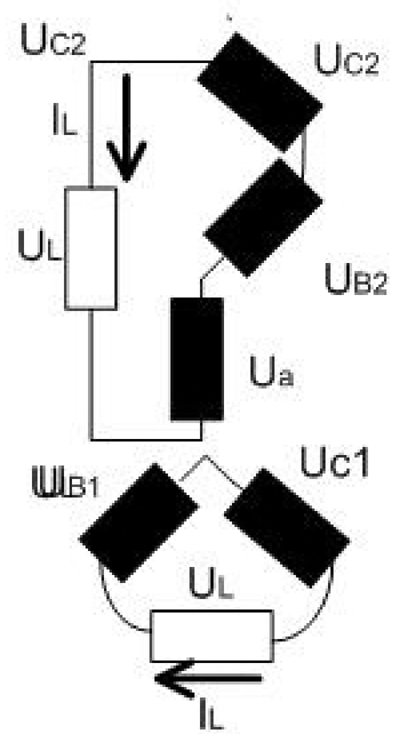

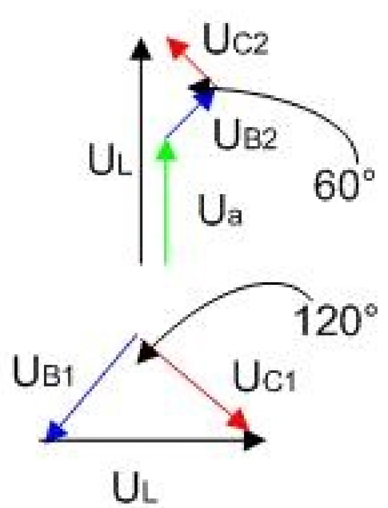

- LeBlanc transformer is a 3 phase transformer.
- The terminals A,B and C sre connencted to the symetrical 3 phase net: UA = UB = UC =U
- The output power of the load rs is equal: S = ULIL = P +-jQ, tg(φ) = Q/P. Normally the output voltages UL are equal and the load resistive (Q = 0, $\varphi = 0$).
- The secondary winding with voltage Ua is wound on the center leg.
- Ua = 2 UL/3
  Ub1=Uc1 = UL/1.73
  Ub2=Uc2=UL/3
- $\hat{I}A$ = (Ua/UA) IL $e^{j\varphi}$ · $\hat{I}B = \hat{I}A\ e^{j2\pi/3}$, $\hat{I}C = \hat{I}A\ e^{-j2\pi/3}$
-
- **Creating the inputs in the Large Transformers Program for**

  $\varphi = 0$
-

Design 1 on the leg A:
- **Primary voltage = U**
- **Secondary voltage = Ua**
- **Secondary current = IL, Angle = 0° degrees**

Design 2 on the leg IB or C:
- **Primary voltage = U**
- **Secondary voltage 1 = UL/1.73**
- **Secondary current 1 = IL, Angle = +60°**

- **Secondary voltage 2 = UL/3**
- **Secondary current 2= IL, Angle = 300°**

- The results of the Design 1 need to be wound on the leg A. The results of the Design 2 need to be wound on the Leg B and C. The primary windings on the legs A,B and C has to be equal.