s_xfmr_level3_1ph (subcircuit)

Attributes

```
inputs:
outputs:
e_left_nodes:
e_right_nodes:
e_top_nodes: p_p s_p
e_bottom_nodes: p_n s_n
b_left_nodes:
b_right_nodes:
b_top_nodes:
b_bottom_nodes:
parameters:
  ip0: 0
  is0: 0
  k: 1
  l1: 1m
  l2: 1m
  p_ll: 1n
  p_rs: 1m
  r_large: 1G
  s_ll: 1n
  s_rs: 1m
```

Description

s_xfmr_level3_1ph is the single-phase transformer model shown in the figure where xfmr1 is a basic transformer model with self inductances and coupling coefficient as parameters (see the documentation for xfmr_l1l2.ebe). The parameters l1, l2, k of s_xfmr_level3_1ph correspond to l1, l2, k of xfmr_l1l2.ebe, respectively.

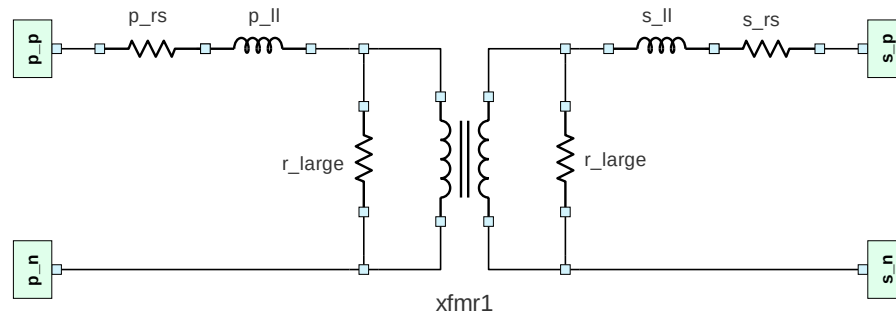Large resistances (r_large) are included on both sides of xfmr1 to avoid singular matrix situations.

Figure 1: Schematic diagram of s_xfmr_level3_1ph.