

## vsi\_3ph\_1.xbe

### Attributes

```
xbe name=vsi_3ph_1 evaluate=yes
Jacobian: variable
input_vars: g1 g2 g3 g4 g5 g6
output_vars: va vb vc
aux_vars:
iparms:
sparms:
rparms:
+ vdc=10
+ L=1
+ Lby2=0
stparms:
igparms:
outparms: va vb vc g1 g2 g3 g4 g5 g6
```

### Description

vsi\_3ph\_1.xbe represents an ideal 3-phase inverter shown below. The variables  $va$ ,  $vb$ ,  $vc$  are assigned values  $V_{dc}$ ,  $V_{dc}/2$ , or 0, depending on the gate signals  $g1$ ,  $g2$ ,  $g3$ ,  $g4$ ,  $g5$ ,  $g6$ . A gate signal is considered to be high if it is greater than  $L/2$ .

