

src_ac.xbe

Attributes

```
xbe name=src_ac evaluate=yes
# y = a*sin(w*(t-t0)+phi)
Jacobian: constant
input_vars:
output_vars: y
aux_vars:
iparms:
sparms:
rparms:
+ a=1
+ f_hz=1
+ phi_deg=0
+ t0=0
+ dc=0
+ omega=0
+ phi_rad=0
stparms:
igparms:
outparms: y
```

Description

`src_ac.xbe` is an AC source. The real parameters, `a`, `f_hz`, `phi_deg`, `t0`, and `dc`, represent A , f , ϕ , t_0 , and x_0 , respectively, in the following equation:

$$x(t) = A \sin(2\pi f(t - t_0) + \phi) + x_0 .$$

Note that `phi_deg` needs to be supplied in degrees. It is internally converted to radians.