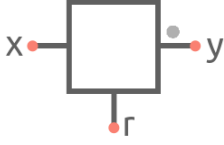


intgrtr_reset_1.gce



Attributes

```
mainvars: x y r
stparams: y_sv=0
iparms:
+ active_pos_edge=1
+ active_neg_edge=0
rparams:
+ k=1
+ g_high=1
```

Description

intgrtr_reset_1.gce is an integrator with a reset facility. In normal operation, the following relationship holds:

$$y = k \int x dt. \quad (1)$$

When an active edge of the reset variable **r** is detected (i.e., when **r** crosses **g_high/2**), the output **y** is reset to 0.

The integer parameters **active_pos_edge** and **active_neg_edge** determine which edge of **r** is considered to be the active edge. If **active_pos_edge** is specified as 1, the positive edge is the active edge. **active_neg_edge** is specified as 1, the negative edge is the active edge.

The start-up parameter **y_sv** provides the starting value in start-up simulation.

AC behaviour is not implemented.