

1 Variables

2 root

	var	symbol	documentation	type	units	eqs
5	<i>t</i>	t	time	frame	<i>s</i>	
6	<i>to</i>	to	time zero	frame	<i>s</i>	4
7	<i>te</i>	te	time end	frame	<i>s</i>	5
8	<i>dt_pulse</i>	dt_pulse	pulse length	frame	<i>s</i>	6
1	<i>value</i>	value	numerical value	constant		
2	<i>one</i>	one	numerical value one	constant		1
3	<i>zero</i>	zero	numerical value zero	constant		2
4	<i>onehalf</i>	onehalf	numerical value one half	constant		3

3 physical

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

4 control

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

5 reactions

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

6 material

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

7 macroscopic

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

8 solid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

9 fluid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

10 energy

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

11 liquid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

12 gas

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

13 control-control

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

14 energy–gas

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

15 energy–energy

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

16 gas–gas

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

17 energy–liquid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

18 liquid–liquid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

19 energy–solid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

20 solid-solid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

21 gas–liquid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

22 gas–solid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

23 liquid–solid

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

24 material–material

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

25 reactions-reactions

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

26 control-reactions

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

27 reactions-control

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

28 control-material

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

29 material-control

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

30 control-macroscopic

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

31 macroscopic-control

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

32 reactions-material

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

33 material-reactions

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

34 reactions-macroscopic

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

35 macroscopic-reactions

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

36 material-macroscopic

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

37 macroscopic-material

	var	symbol	documentation	type	units	eqs
--	-----	--------	---------------	------	-------	-----

38 Equations

39 Generic

no	equation	documentation	layer
1	$one := \text{Instantiate}(value, value)$	numerical value one	root
2	$zero := \text{Instantiate}(value, value)$	numerical value zero	root
3	$onehalf := \text{Instantiate}(value, value)$	numerical value one half	root
4	$to := \text{Instantiate}(t, value)$	time zero	root
5	$te := \text{Instantiate}(t, value)$	time end	root
6	$dt_{pulse} := \text{Instantiate}(t, value)$	pulse length	root