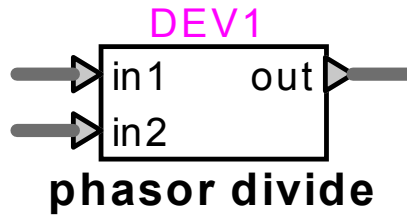


# Phasor operation : phasor divide



Phasor operation : phasor divide ..... 1

1 Description ..... 1

    1.1 Pins..... 1

    1.2 Parameters ..... 1

    1.3 Input..... 1

    1.4 Output..... 1

## 1 Description

This device divides two vectors or phasors represented by 2-signal bundles of their polar coordinates.

### 1.1 Pins

This device has three pins:

<i>pin</i>	<i>type</i>	<i>description</i>	<i>units</i>
in1	2-signal bundle	input-1 magnitude	any
		input-1 angle	rad
in2	2-signal bundle	input-2 magnitude	any
		input-2 angle	rad
out	2-signal bundle	output magnitude	units(in1_mag)/units(in2_mag)
		output angle	rad

### 1.2 Parameters

No parameters are required for this device.

### 1.3 Input

The input pins may be connected to any control signals.

### 1.4 Output

The outputs are the polar coordinates of the division of the first input vector by the second vector.

The operation is immediate, and is calculated as follows:

$$\begin{aligned}
 \text{out\_mag} &= \text{in1\_mag} / \text{in2\_mag} \\
 \text{out\_rad} &= \text{in1\_rad} - \text{in2\_rad}
 \end{aligned}
 \tag{1}$$

