

calc_pf.gce

Attributes

```
mainvars: v i
rparms:
+   t_start=0
+   t_end=0
```

Description

`calc_pf.gce` is a post-processing element. It takes as input the voltage and current data (given by the main variables `v` and `i`, respectively). Using $v(t)$ and $i(t)$, assumed to be periodic, it computes the following:

- (i) rms value of $v(t)$
- (ii) rms value of $i(t)$
- (iii) real (average) power
- (iv) apparent power
- (v) power factor

The above values are made available as output variables. The real parameters `t_start` and `t_end` specify the interval over which the above quantities are to be computed. The user should ensure that this interval corresponds to one or more periods of the voltage and current waveforms.

When the output variable(s) computed by this element is written to an output file of a solve block, it is expected that the variables `v` and `i` are also made available in an output file in the same solve block, but the two output files must be distinct.

This element is not used in AC analysis.