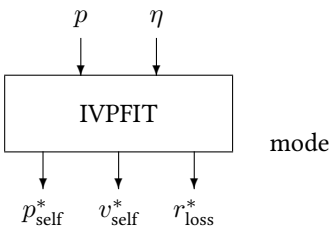
Block IVPFIT

The IVPFIT calculates the parameters for the IVP block from its input data.





Name	IVPFIT
Function	se0009
Inputs	1
Outputs	3
Parameters	0 . . . [1]
Strings	0
Group	I

Inputs

1 Normalized power p
2 Efficiency η

Outputs

1 Normalized self consumption p^*_{self}
2 Normalized voltage losses v^*_{self}
3 Normalized ohmic losses r^*_{loss}

Parameters

1 Mode
- 0 Inputs are normalized with inverter input power (default)
- 1 Inputs are normalized with inverter output power

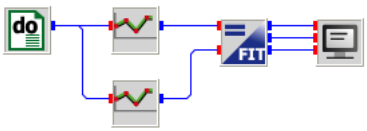
Strings

None

Remarks

The IVPFIT block uses a method suggested by Schmidt and Sauer for fitting. As a consequence, only the first three data tuples are considered in the calculation of the inverter parameters. The points should be chosen close to $p = 0.1$, $p = 0.5$ and $p = 1.0$, respectively.

ivpfit.vseit



Two POLYG blocks provide three points of the efficiency curve of an inverter. The upper block gives the three relative powers.

```
1 0.1
2 0.5
3 1.0
```

while the lower one provides the three efficiencies at 10, 50, and 100 per cent, respectively.

```
1 0.85
2 0.95
3 0.90
```

The DO block counts from 1 to 3 and the parameters calculated by the IVPFIT block are displayed by the SCREEN block.

```
 0.02029259 -0.07799642  0.18506698
```

See also Block IVP