ENERFLEX

With leading technology from

victron energy
BLUE POWER

Input Current Information

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Subject to technical changes

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Minimum Input Current:

In the following table the various Victron Inverter/Chargers and the corresponding minimum input currents are listed. These have to be considered in Off-Grid and Backup systems using Quattros (generator on AC-input 2).

Victron Inverter/Charger	Minimum input current
MultiPlus-II 48/3000/35-32	3A
MultiPlus-II 48/5000/70-50	
Quattro 48/5000/70-2x100	4A
Quattro 48/8000/110-2x100	10,5A
Quattro 48/10000/140-2x100	10,5A
Quattro 48/15000/200-2x100	14,5A

Calculating the required generator power

Single phase inverter system:

Example with Victron MultiPlus-II 48/400/35-32.

Victron inverter/charger	Minimum input current
MultiPlus-II 48/3000/35-32	3A

Single phase generator + single phase inverter/charger system:

Minimum active power: 3A x 230V = 920W = 0,92kW

Minimum apparent power: 0,92kW / 0,8 = 1,15kVA

This is the minimum continuous power the generator has to provide in order to be connected to the inverter input. Most generators just have a nominal power value in their datasheet (peak power), for battery charging instead the continuous power is relevant, therefore the apparent power should be 1,5-2 fold that value.

Recommended apparent power in our example: 1,7-2,3 kVA

Three phase generator + single phase inverter system:

The three phase power of the generator in a single phase system must be divided by three, because the datasheet values are only correct in case of symmetric load. Exception: three phase generators with a special stronger winding – then on a single phase more power can be consumed. Check the values in the data sheets

Recommended apparent power: 2,3kVA x 3 = 6,9kVA

Three phase inverter system:

Example with three Victron MultiPlus-II 48/400/35-32.

Victron Modell	Minimaler Eingangsstrom
MultiPlus-II 48/3000/35-32	3A

Three phase generator + three phase inverter system:

Minimum single phase active power: 3A x 230V = 920W = 0,92kW

Minimum single phase apparent power: 0,92kW / 0,8 = 1,15kVA

Minimum three phase apparent power: 1,15kVA x 3 = 3,45kVA

This is the minimum continuous power the generator has to provide in order to be connected to the inverter input. Most generators just have a nominal power value in their datasheet (peak power), for battery charging instead the continuous power is relevant, therefore the apparent power should be 1,5-2 fold that value.

Recommended apparent power: 5,1-6,9 kVA

In three phase inverter systems charging directly with a single phase generator is not possible. If charging the batteries with a single phase generator is necessary, an additional charger from Victron Energy is required.