victron energy
BLUE POWER

Quattro 5kVA

Two AC inputs with integrated transfer switch
The Quattro can be connected to two independent AC sources, for example shore-side power and a generator, or two generators. The Quattro will automatically connect to the active source.

Two AC Outputs
The main output has no-break functionality. In the event of a grid failure, or shore or generator power being disconnected, the Quattro takes over the supply to the connected loads. This happens so fast (less than 20 milliseconds) that computers and other electronic equipment will continue to operate without disruption.
The second output is live only when AC is available on one of the inputs of the Quattro. Loads that should not discharge the battery, like a water heater for example can be connected to this output.

Virtually unlimited power thanks to parallel operation
Up to 6 Quattro's can operate in parallel. Six units 24/5000/120, for example, will provide 25kW / 30kVA output power and 720 Amps charging capacity.

Three phase capability
Three units can be configured for three-phase output. But that's not all: up to 6 sets of three units can be parallel connected to provide 75kW / 90kVA inverter power and more than 2000A charging capacity.

PowerControl - Dealing with limited generator, shore-side or grid power
The Quattro is a very powerful battery charger. It will therefore draw a lot of current from the generator or shore side supply (16 A per Quattro at 230 VAC). A current limit can be set for both AC inputs. The Quattro will then take account of other AC loads and use whatever is spare for charging, thus preventing the generator or shore supply from being overloaded.

PowerAssist - Boosting shore or generator power
This feature takes the principle of PowerControl to a further dimension allowing the Quattro to supplement the capacity of the alternative source. Where peak power is so often required only for a limited period, the Quattro will make sure that insufficient shore or generator power is immediately compensated for by power from the battery. When the load reduces, the spare power is used to recharge the battery.
With this feature problems related to insufficient shore or generator power are solved once and for all. Air conditioning, an electric hob, a washing machine, a dish washer: a 16A shore connection, or even less than 16A, will not limit you in any way.

Solar energy: AC power available even during a grid failure
The Quattro can be used to in off grid as well as grid connected PV and other alternative energy systems.

A grid connected PV system will shut down when the grid fails! Not anymore with a Quattro and batteries
A PV or other grid connected alternative energy system is a big investment. But it is incomplete: it will shut down in the event of a grid failure. A Quattro plus battery can solve this deficiency: the Quattro will replace the grid when needed, keeping the alternative energy system 'on line'. During a power outage the system continues to function 'on its own', as a small autonomous grid. The Quattro will stabilise the 'mini grid' by taking power from it to recharge the battery when power generation exceeds consumption, and by supplying additional power when demand exceeds the supply from the alternate sources. In addition, the Quattro can be used to connect an AC generator to the mini grid.

System configuring has never been easier
After installation, the Quattro is ready to go.
If settings have to changed, this can be done in a matter of minutes with a new DIP switch setting procedure. Even parallel and 3-phase operation can be programmed with DIP switches: no computer needed!
Alternatively, VE.Net can be used instead of the DIP switches.
And sophisticated software (VE.Bus Quick Configure and VE.Bus System Configurator) is available to configure several new, advanced, features.

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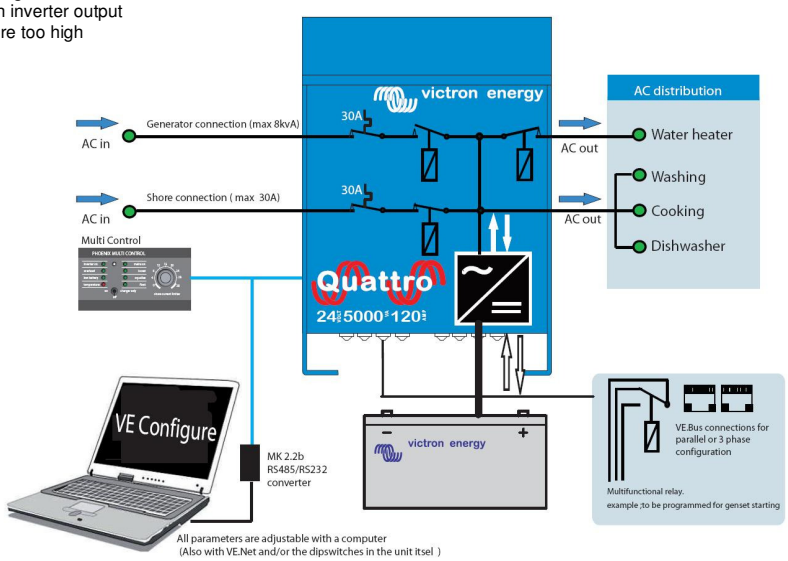
Specifications

Quattro	12/5000/200	24/5000/120	48/5000/70
PowerControl / PowerAssist	**Yes**	**Yes**	**Yes**
Integrated Transfer switch	**Yes**	**Yes**	**Yes**
AC inputs (2x)	Input voltage range: 187-265 VAC	Input frequency: 45 – 65 Hz	Power factor: 1
Maximum feed through current (A)	30	30	30
INVERTER			
Input voltage range (V DC)	9,5 – 17	19 – 33	38 – 66
Output (1)	Output voltage: 230 VAC ± 2%	Frequency: 50 Hz ± 0,1%	
Cont. output power at 25 °C (VA) (3)	5000	5000	5000
Cont. output power at 25 °C (W)	4000	4250	4250
Cont. output power at 40 °C (W)	3000	3350	3350
Peak power (W)	8000	10.000	10.000
Maximum efficiency (%)	92	94	95
Zero-load power (W)	25	30	30
Load shedding output	Maximum load: 10A	Switches off when no external AC source available	
CHARGER			
Charge voltage 'absorption' (V DC)	14,4	28,8	57,6
Charge voltage 'float' (V DC)	13,8	27,6	55,2
Storage mode (V DC)	13,2	26,4	52,8
Charge current house battery (A) (4)	200	120	70
Charge current starter battery (A)		4	
Battery temperature sensor		ja	
GENERAL			
Multi purpose relay (5)	**Yes**	**Yes**	**Yes**
Protection (2)		a - f	
Common Characteristics	Operating temp.: -20 to +50°C (fan assisted cooling)	Humidity (non condensing) : max 95%	
ENCLOSURE			
Common Characteristics	Material & Colour: aluminium (blue RAL 5012)	Protection category: IP 21	
Battery-connection	Four M8 bolts (2 plus and 2 minus connctions)		
230 V AC-connection	Screw clamp 13 mm² (AWG 6)		
Weight (kg)	30		
Dimensions (hxwxd in mm)	444 x 328 x 240		
STANDARDS			
Safety	EN 60335-1, EN 60335-2-29		
Emission / Immunity	EN55014-1, EN 61000-3-2 / EN 55014-2, EN 61000-3-3		
Automotive Directive	2004/104/EC		

1) Can be adjusted to 60 Hz; 120 V 60 Hz on request
2) Protection
   a. Output short circuit
   b. Overload
   c. Battery voltage too high
   d. Battery voltage too low
   e. 230VAC on inverter output
   f. Temperature too high
3) Non linear load, crest factor 3:1
4) At 25 °C ambient
5) Multi purpose relay which can be set for general alarm, DC undervoltage or genset start signal function



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