victron energy
BLUE POWER

Quattro 3kVA - 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. The Quattro takes over the supply to the connected loads in the event of a grid failure or when shore/generator power is disconnected. 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 on each AC input. 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.

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

System configuring has never been easier
After installation, the Quattro is ready to go.
If settings have to be 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.
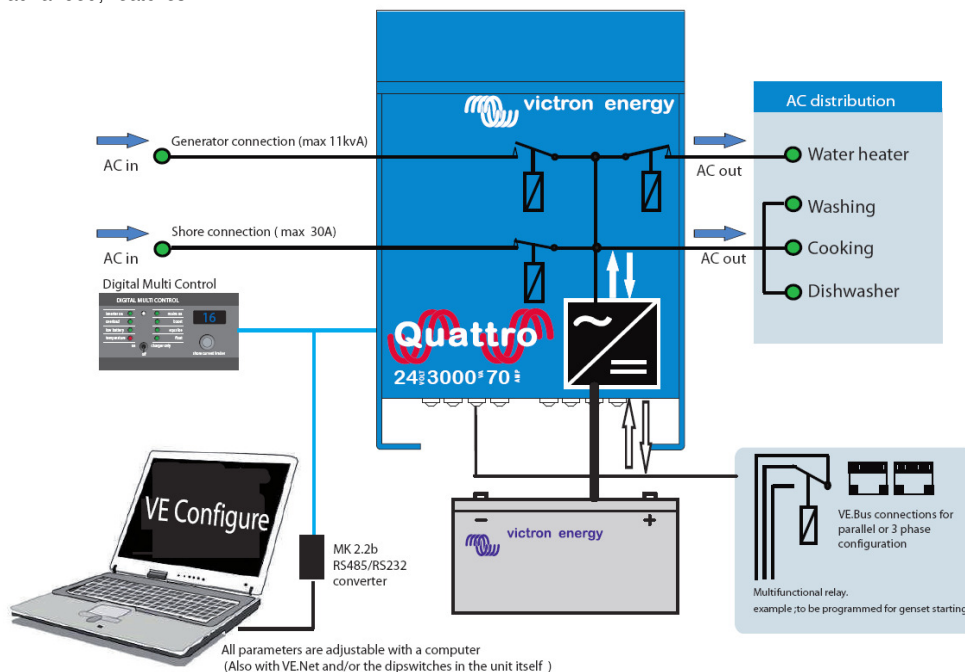
Specifications

Quattro	12/3000/120	24/3000/70	24/5000/120	48/5000/70
PowerControl / PowerAssist	Yes			
Integrated Transfer switch	Yes			
AC inputs (2x)	Input voltage range: 187-265 VAC		Input frequency: 45 – 65Hz	Power factor: 1
Maximum feed through current (A)	50 / 30	50 / 30	2 x 30	50 / 30
INVERTER				
Input voltage range (V DC)	9,5 – 17	19 – 33	19 – 33	38 – 66
Output (1)	Output voltage: 230 VAC ± 2%		Frequency: 50 Hz ± 0,1%	
Cont. output power at 25 ℃ (VA) (3)	3000	3000	5000	5000
Cont. output power at 25 ℃ (W)	2500	2500	4250	4250
Cont. output power at 40 ℃ (W)	2000	2000	3350	3350
Peak power (W)	6000	6000	10.000	10.000
Maximum efficiency (%)	92	94	94	95
Zero-load power (W)	15	15	25	25
Zero load power in AES mode (W)	10	10	20	20
Zero load power in Search mode (W)	4	5	5	6
CHARGER				
Charge voltage 'absorption' (V DC)	14,4	28,8	28,8	57,6
Charge voltage 'float' (V DC)	13,8	27,6	27,6	55,2
Storage mode (V DC)	13,2	26,4	26,4	52,8
Charge current house battery (A) (4)	120	70	120	70
Charge current starter battery (A)	4 (12V and 24V models only)			
Battery temperature sensor	Yes			
GENERAL				
Auxiliary output (A) (6)	25	25	10	25
Programmable relay (5)	Yes			
Protection (2)	a - g			
Common Characteristics	Operating temp.: -20 to +50 ℃ 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 connections)			
230 V AC-connection	Screw terminals 13 mm² (6 AWG)			
Weight (kg)	19	19	30	30
Dimensions (hxwxd in mm)	362 x 258 x 218	362 x 258 x 218	444 x 328 x 240	444 x 328 x 240
STANDARDS				
Safety	EN 60335-1, EN 60335-2-29			
Emission / Immunity	EN55014-1, EN 55014-2, EN 61000-3-3			

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. Temperature too high
   f. 230VAC on inverter output
   g. Input voltage ripple too high

3) Non linear load, crest factor 3:1
4) At 25 ℃ ambient
5) Switches off when no external AC source available
6) Programmable relay that can be set for general
   alarm, DC undervoltage or genset start/stop function
   AC rating: 230V/4A
   DC rating: 4A up to 35VDC, 1A up to 60VDC

Accessories

Digital Multi Control
This panel is intended both for Multi's and Quattro"s.
Allows PowerControl and PowerAssist current limit setting for two AC sources: a generator and shore-side current for example. Setting range: up to 200 Amps. The brightness of the LED's is automatically reduced during night time.

Computer controlled operation and monitoring (Victron Interface MK2)
Every Quattro is ready to communicate with a computer through its RS-485 data port. All you need to link to your PC is the data link as shown. This enables you to set and read out all parameters. (see also 'A guide to VEConfigure')

BMV-600 Battery Monitor
The BMV–600 Battery Monitor features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. Besides this, the software includes complex calculation algorithms, like Peukert's formula, to exactly determine the state of charge of the battery. The BMV–600 selectively displays battery voltage, current, consumed Ah or time to go. The monitor also stores a host of data regarding performance and use of the battery.