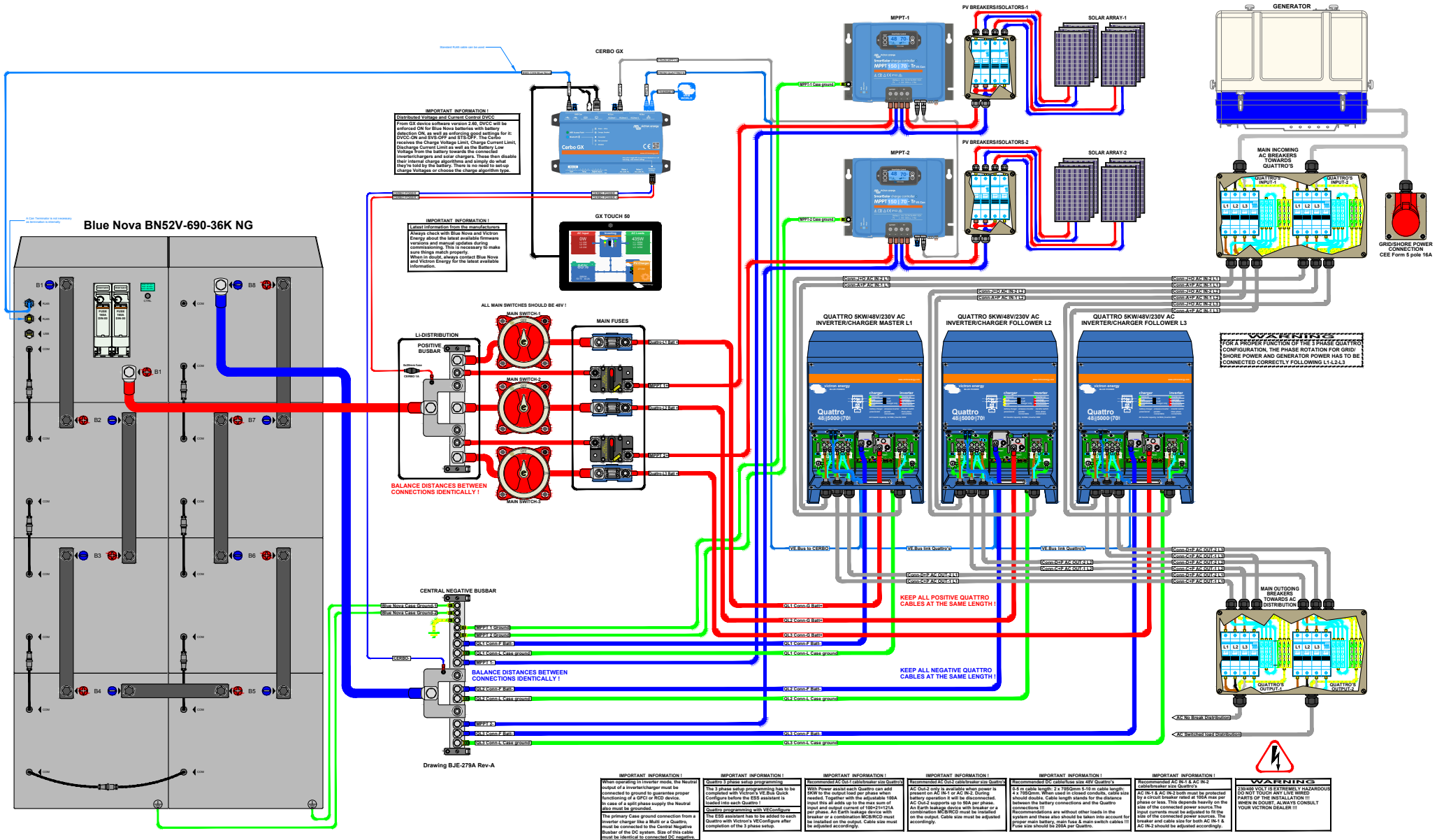


Drawing BJE-278A Rev-B

<p>IMPORTANT INFORMATION!</p> <p>When operating in inverter mode, the Neutral leg of a 3 phase inverter must be connected to ground to guarantee proper functioning of a GFCI or RCD device. In case of a split phase supply the Neutral <u>must</u> be connected.</p> <p>The primary case ground connection from a inverter charger like a Multi or a Quattro, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative.</p>	<p>IMPORTANT INFORMATION!</p> <p>Quattro 3 phase setup programming</p> <p>The 3 phase setup programming has to be completed with Victron VE Bus Check Configure before the IBS assistant is installed into each Quattro.</p> <p>Quattro programming with VECConfigure</p> <p>The IBS assistant has to be applied to each Quattro with Victron's VECConfigure after completion of the 3 phase setup.</p>	<p>IMPORTANT INFORMATION!</p> <p>Recommended AC Out 1 cable/breaker size Quattro</p> <p>With Power assist each Quattro can add 8kW to the output load per phase when used in parallel. Together with the distributed IBSA report this all adds up to the max sum of input and output current of 117A/117A per phase. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.</p>	<p>IMPORTANT INFORMATION!</p> <p>Recommended AC Out 2 cable/breaker size Quattro</p> <p>AC Out 2 only is available when power is present on AC In 1 or AC In 2. Quattro AC Out 2 supports up to 8kW per phase. The Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.</p>	<p>IMPORTANT INFORMATION!</p> <p>Recommended DC cable/breaker size 48V Quattro</p> <p>8.0 m cable length: 2 x 750mm 5-10 m cable length: 1 x 4 x 750mm. When used in closed conduits, cable size should increase. Cable length stands for the distance between the battery connections and the Quattro connections.</p> <p>Recommendations are without other loads in the system and these also should be taken into account for proper main battery, main fuse, and main switch cables!! Fuse size should be 200A per Quattro.</p>	<p>IMPORTANT INFORMATION!</p> <p>Recommended AC In 1 & AC In 2 cable/breaker size Quattro</p> <p>AC In 1 & AC In 2 both must be protected by a circuit breaker rated at 100A and 3 phase or 4S. This depends heavily on the size of the connected power sources. The input currents must be adjusted to fit the breaker and cable size for both AC In 1 & AC In 2 should be adjusted accordingly.</p>	<p>WARNING!</p> <p>230/400 VOLT IS EXTREMELY HAZARDOUS DO NOT TOUCH ANY LIVE WIRED PARTS!! THE INSTALLATION MUST BE COMPLETED BY A QUALIFIED ELECTRICIAN!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER!!</p>
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Blue Nova BN52V-690-36K NG

IMPORTANT INFORMATION!
Distributing Voltage and Current Control (DVCC)
 From GX device software version 2.0, DVCC will be enforced ON for Blue Nova batteries with battery protection ON, as well as enforcing good settings for it. DVCC ON and BYE OFF and BYE ON. The cable receives the Charge Voltage Limit, Charge Current Limit, Charging Current Limit as well as the Battery Low Voltage from the battery towards the connected inverter-chargers and solar chargers. These then disable their internal charge algorithms and simply do what they're told by the battery. There is no need to set-up charge voltages or choose the charge algorithm type.

IMPORTANT INFORMATION!
Latest information from the manufacturer
 Always check with Blue Nova and Victron Energy about the latest available firmware updates and manual updates during commissioning. This is necessary to ensure things match properly. When in doubt, always contact Blue Nova and Victron Energy for the latest available information.

ALL MAIN SWITCHES SHOULD BE 48V!

BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY!

BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY!

Drawing BJE-279A Rev-A

- IMPORTANT INFORMATION!**
 When operating in inverter mode, the Neutral output of a inverter-charger must be connected to ground to guarantee proper functioning of a DCI or RCC device. In case of a split phase supply the Neutral should be grounded.
- IMPORTANT INFORMATION!**
 The primary Case ground connection from a inverter-charger like a Multi or a Quattro, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative.
- IMPORTANT INFORMATION!**
 This 3 phase setup programming has to be completed with Victron's VE-Bus Config before the ESS assistant is installed into each Quattro.
- IMPORTANT INFORMATION!**
 Quattro programming with VCC software. The ESS assistant has to be added to each Quattro with Victron's VCC software after completion of the 3 phase setup.
- IMPORTANT INFORMATION!**
 Recommended AC Out 1 cable-breaker size Quattro: With Power assist each Quattro can use 160W to the output load per phase which is available when power is present on AC IN-1 or AC IN-2. During inverter operation it will be disconnected. AC IN-2 supports up to 600W per phase. An Earth leakage device with triangler or a combination RC/BC/DC must be installed on the output. Cable size must be adjusted accordingly.
- IMPORTANT INFORMATION!**
 Recommended AC Out 2 cable-breaker size Quattro: AC Out 2 only is available when power is present on AC IN-1 or AC IN-2. During inverter operation it will be disconnected. AC IN-2 supports up to 600W per phase. An Earth leakage device with triangler or a combination RC/BC/DC must be installed on the output. Cable size must be adjusted accordingly.
- IMPORTANT INFORMATION!**
 Recommended DC cable-size size 48V Quattro's: 1.5" in outer diameter 7.5 750mm 5.0m cable length 4 x 750mm. When used in closed conduit, cable size should double. Cable length stands for the distance between the battery connections and the Quattro connections!!!
- IMPORTANT INFORMATION!**
 Recommended DC cable-size size 48V Quattro's: 1.5" in outer diameter 7.5 750mm 5.0m cable length 4 x 750mm. When used in closed conduit, cable size should double. Cable length stands for the distance between the battery connections and the Quattro connections!!!
- IMPORTANT INFORMATION!**
 Recommended AC IN-1 & AC IN-2 cable-breaker size Quattro's: AC IN-1 & AC IN-2 both must be protected by a circuit breaker rated at least the size of the connected power source. The breaker must be located on the side of the connected power source. The input currents must be adjusted to the size of the connected power source. This breaker and cable size for both AC IN-1 & AC IN-2 should be adjusted accordingly.

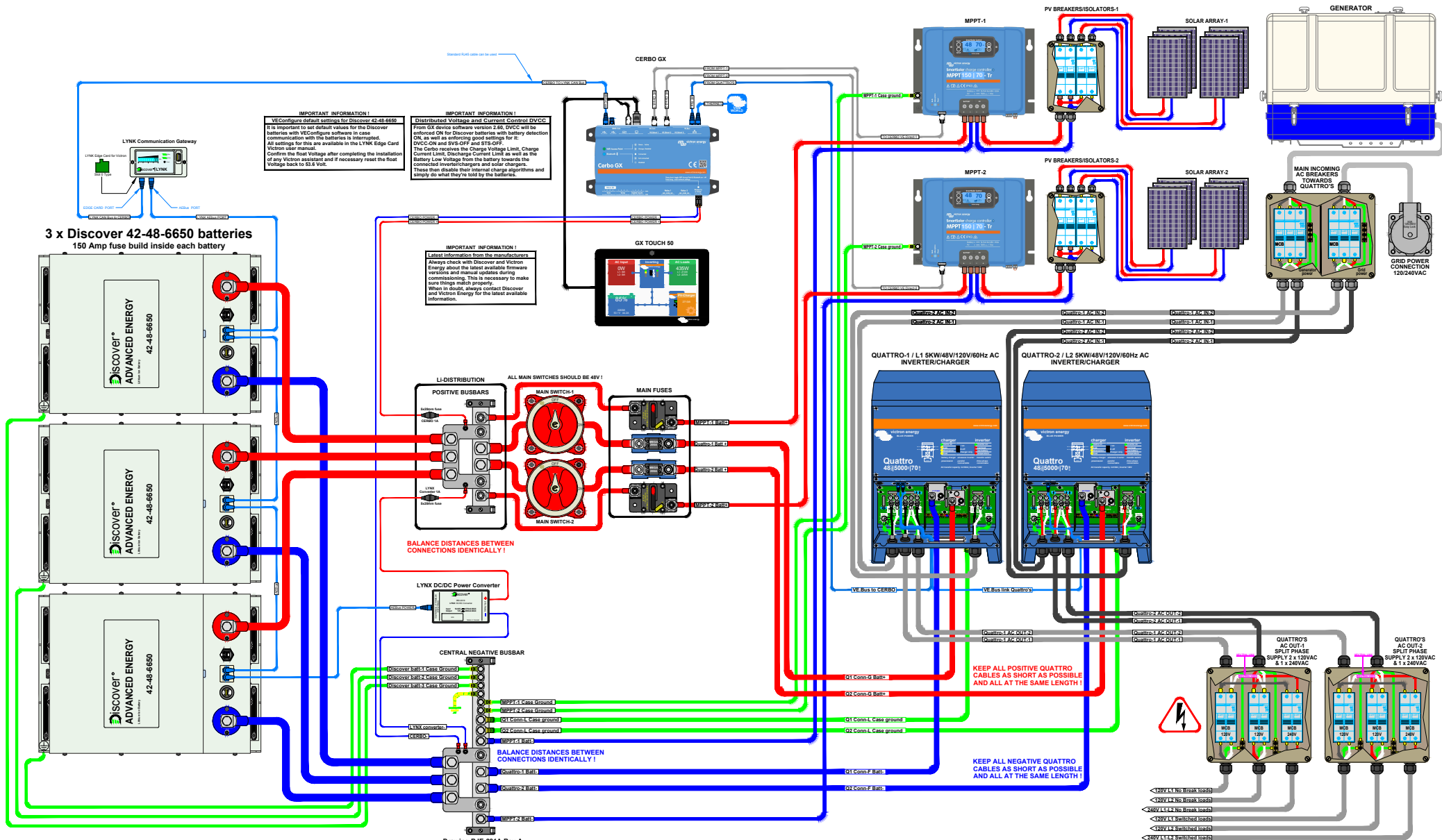
FOR A PROPER FUNCTION OF THE 3 PHASE QUATTRO CONFIGURATION, THE PHASE ROTATION FOR GRID SHORE POWER AND GENERATOR POWER HAS TO BE CONNECTED CORRECTLY FOLLOWING L1, L2, L3.

KEEP ALL POSITIVE QUATTRO CABLES AT THE SAME LENGTH!

KEEP ALL NEGATIVE QUATTRO CABLES AT THE SAME LENGTH!



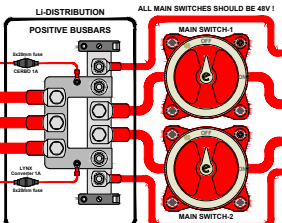
WARNING!
 DO NOT TOUCH ANY LIVE WIRED PARTS OF THE INSTALLATION!!
 WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER!!



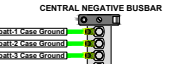
IMPORTANT INFORMATION !
 VEConfigure default settings for Discover 42-48-6650
 It is important to set default values for the Discover batteries with VEConfigure software in case communication with the batteries is interrupted. All settings for this are available in the LYNX Edge Card Victron user manual.
 Confirm the float voltage after completing the installation of any Victron assistant and if necessary reset the float voltage back to 52.8 Volt.

IMPORTANT INFORMATION !
 Latest information from the manufacturers
 Always check with Discover and Victron Energy about the latest updates with hardware versions and manual updates during commissioning. This is necessary to make sure things match properly.
 When in doubt, always contact Discover and Victron Energy for the latest available information.

3 x Discover 42-48-6650 batteries
 150 Amp fuse build inside each battery



BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY !



BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY !

Drawing BJE-281A Rev-A

IMPORTANT INFORMATION !
 When operating in inverter mode, the Neutral output of a inverter charger must be connected to ground to guarantee proper functioning of a GFCI or RCD device. In case of a split phase supply the Neutral also must be grounded.
 The primary Case ground connection from a inverter charger like a Multi or a Quattro, must be connected to the Central Negative Busbar of the DC system. Size of this cable must be identical to connected DC negative.

IMPORTANT INFORMATION !
 Quattro split phase setup programming
 The split phase programming has to be completed with Victron's VE.Bus Quick Configure before any assistant is loaded into each Quattro II.
 Quattro programming with VEConfigure
 The ESS assistant if needed has to be added to each Quattro with Victron's VEConfigure after completion of the split phase setup.

IMPORTANT INFORMATION !
 Recommended AC Out 1 cable/breaker size Quattro
 With Power assist each Quattro can add 60kW to the output load per phase when needed. Together with the adjustable 100A input this all adds up to the max sum of input and output current of 100+60=160A per phase. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

IMPORTANT INFORMATION !
 Recommended AC Out 2 cable/breaker size Quattro
 AC Out 2 only is available when power is present on AC IN-1 or AC IN-2. During battery operation it will be disconnected. AC Out 2 supports up to 80A per phase. An Earth leakage device with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

IMPORTANT INFORMATION !
 Recommended DC cable/size size Quattro's
 12.5 m cable length: 2 x 7500mm 6/10 m cable length: 4 x 7850mm. When used in closed conduits, cable size should double. Cable length stands for the distance between the battery connections and the Quattro connections. II
 Recommendations are without other loads in the system and these also should be taken into account for proper main battery, main fuse & main switch cables. III
 Fuse size should be 200A per Quattro.

IMPORTANT INFORMATION !
 Recommended AC IN-1 & AC IN-2 cable/breaker size Quattro's
 AC IN-1 & AC IN-2 both must be protected by a circuit breaker rated at 100A max per phase or less. This depends heavily on the size of the connected power source. The ripple current must be designed to fit the size of the connected power sources. The breaker and cable size for both AC IN-1 & AC IN-2 should be adjusted accordingly.

WARNING
 120/240 VOLT AC IS EXTREMELY HAZARDOUS !!!
 DO NOT TOUCH ANY LIVE WIRED PARTS OF THE INSTALLATION !!!
 WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER !!!