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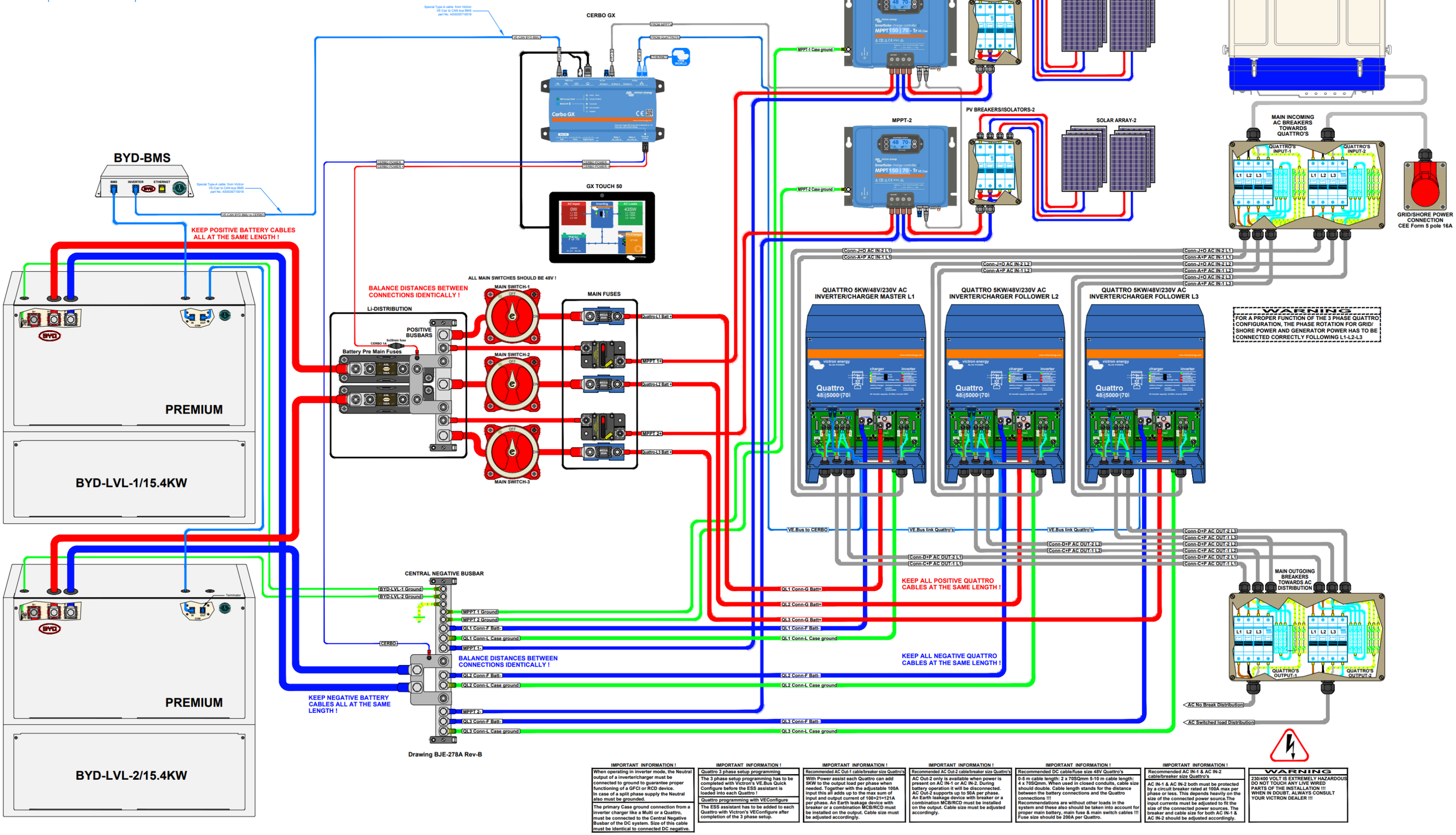

3 Phase Quattro system with Cerbo GX Touch 50 BYD-LVL Smart Solar MPPTs

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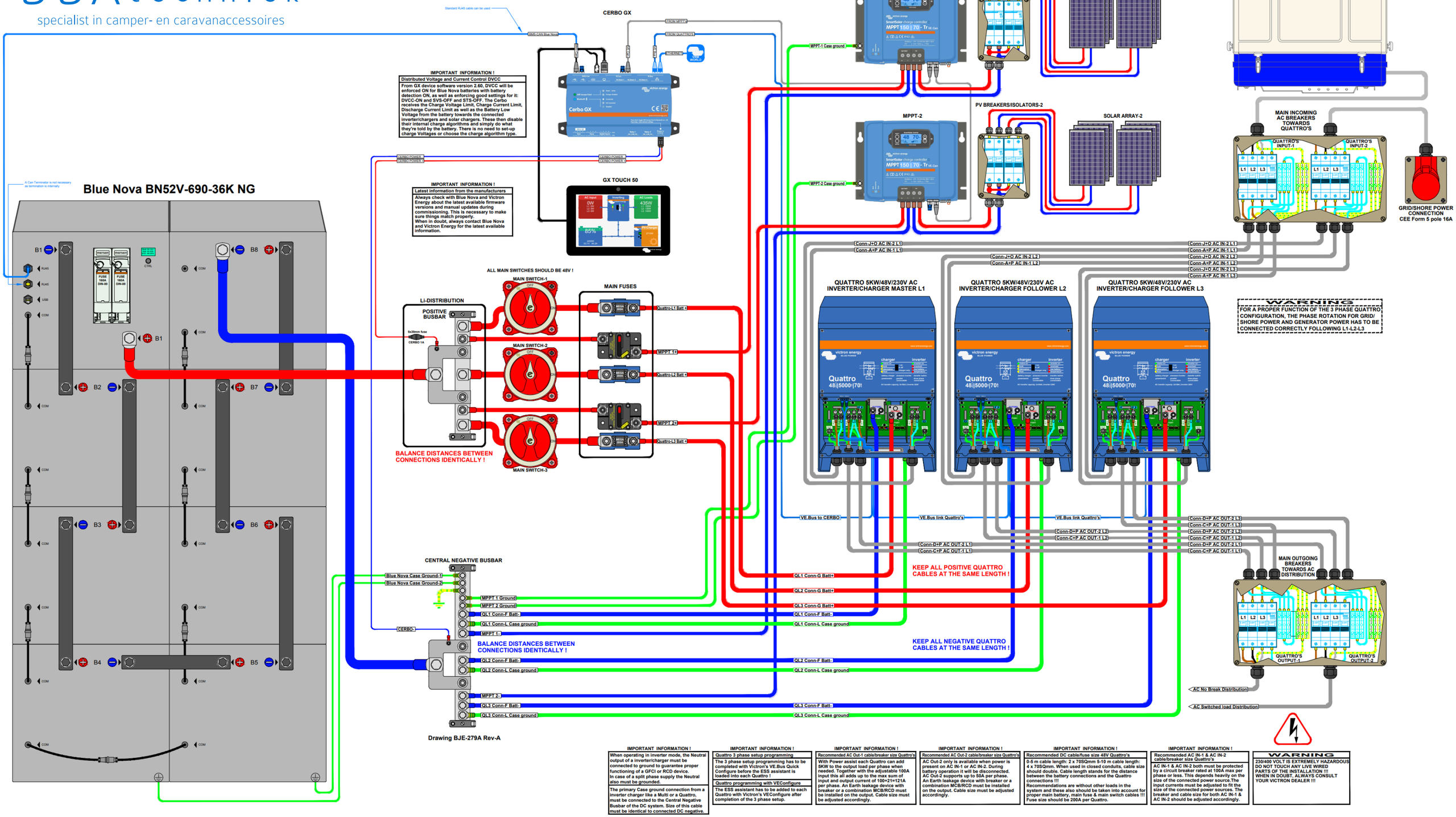
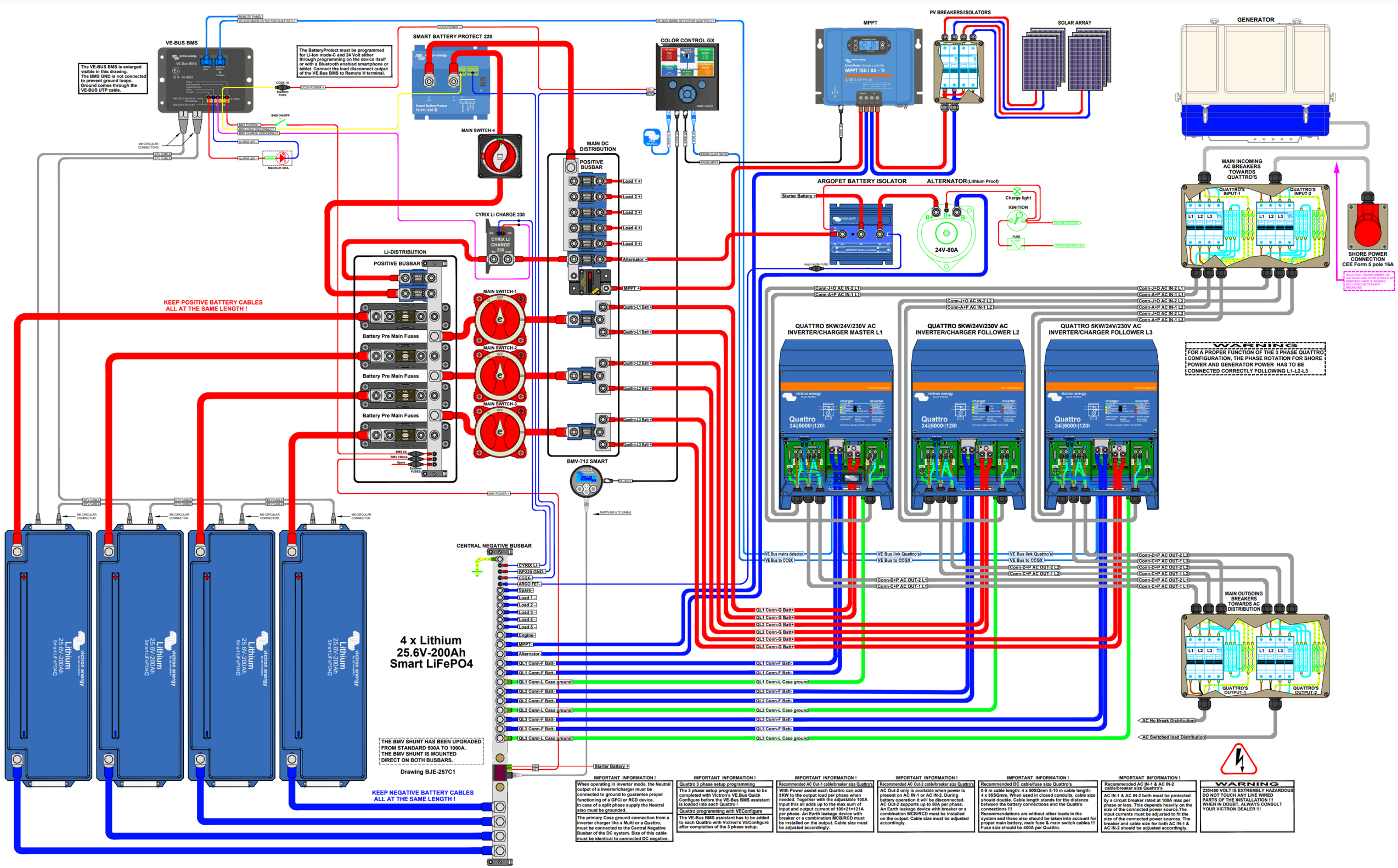


3 Phase Quattro system with Cerbo GX Touch 50 Blue Nova BN52V 690 36K SmartSolar MPPTs



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3 Phase VE Bus BMS system 5 pin with 3xQuattro and 4x200Ah 24V Li

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Split Phase Quattro system with Cerbo GX Touch 50 Discover 42-48-6650 Smart Solar MPPT's

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 LYNK 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 53.6 Volt.

IMPORTANT INFORMATION !
Distributed Voltage and Current Control DVCC
From GX device software version 2.60, DVCC will be enforced ON for Discover batteries with battery detection ON, as well as enforcing good settings for it:
DVCC-ON and SVS-OFF and STS-OFF.
The Cerbo receives the Charge Voltage Limit, Charge Current Limit, Discharge Current Limit as well as the Battery Low Voltage from the battery towards the connected inverterchargers and solar chargers.
These then disable their internal charge algorithms and simply do what they're told by the batteries.

IMPORTANT INFORMATION !
Latest information from the manufacturers
Always check with Discover and Victron Energy about the latest available firmware 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.

LYNK Communication Gateway

CERBO GX

GX TOUCH 50

MPPT-1

MPPT-2

PV BREAKERS/ISOLATORS-1

PV BREAKERS/ISOLATORS-2

SOLAR ARRAY-1

SOLAR ARRAY-2

GENERATOR

MAIN INCOMING AC BREAKERS TOWARDS QUATTRO'S

GRID POWER CONNECTION 120/240VAC

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

LI-DISTRIBUTION
POSITIVE BUSBARS

ALL MAIN SWITCHES SHOULD BE 48V !

MAIN SWITCH-1

MAIN SWITCH-2

MAIN FUSES

BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY !

LYNX DC/DC Power Converter

CENTRAL NEGATIVE BUSBAR

BALANCE DISTANCES BETWEEN CONNECTIONS IDENTICALLY !

QUATTRO-1 / L1 5KW/48V/120V/60Hz AC INVERTER/CHARGER

QUATTRO-2 / L2 5KW/48V/120V/60Hz AC INVERTER/CHARGER

KEEP ALL POSITIVE QUATTRO CABLES AS SHORT AS POSSIBLE AND ALL AT THE SAME LENGTH !

KEEP ALL NEGATIVE QUATTRO CABLES AS SHORT AS POSSIBLE AND ALL AT THE SAME LENGTH !

QUATTRO'S AC OUT-1 SPLIT PHASE SUPPLY 2 x 120VAC & 1 x 240VAC

QUATTRO'S AC OUT-2 SPLIT PHASE SUPPLY 2 x 120VAC & 1 x 240VAC

120V L1 No Break loads
120V L2 No Break loads
240V L1-L2 No Break loads
120V L1 Switched loads
120V L2 Switched loads
240V L1-L2 Switched loads

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 !

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's
With Power assist each Quattro can add 5KW 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+42=142A 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's
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 50A 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/fuse size 48V Quattro's
0-5 m cable length: 2 x 70SQmm 5-10 m cable length: 4 x 70SQmm. When used in closed conduits, cable size should double. Cable length stands for the distance between the battery connections and the Quattro connections !!!
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 !!!
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 input currents must be adjusted 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 !!!