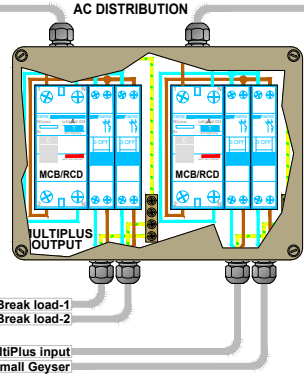


**Recommended AC Out cable/breaker size MultiPlus**  
 With Power assist the MultiPlus can add 1 kW to the output load when needed. Together with the adjustable 16A input this all adds up to the max sum of input and output current of 16+4.3=20.3A. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

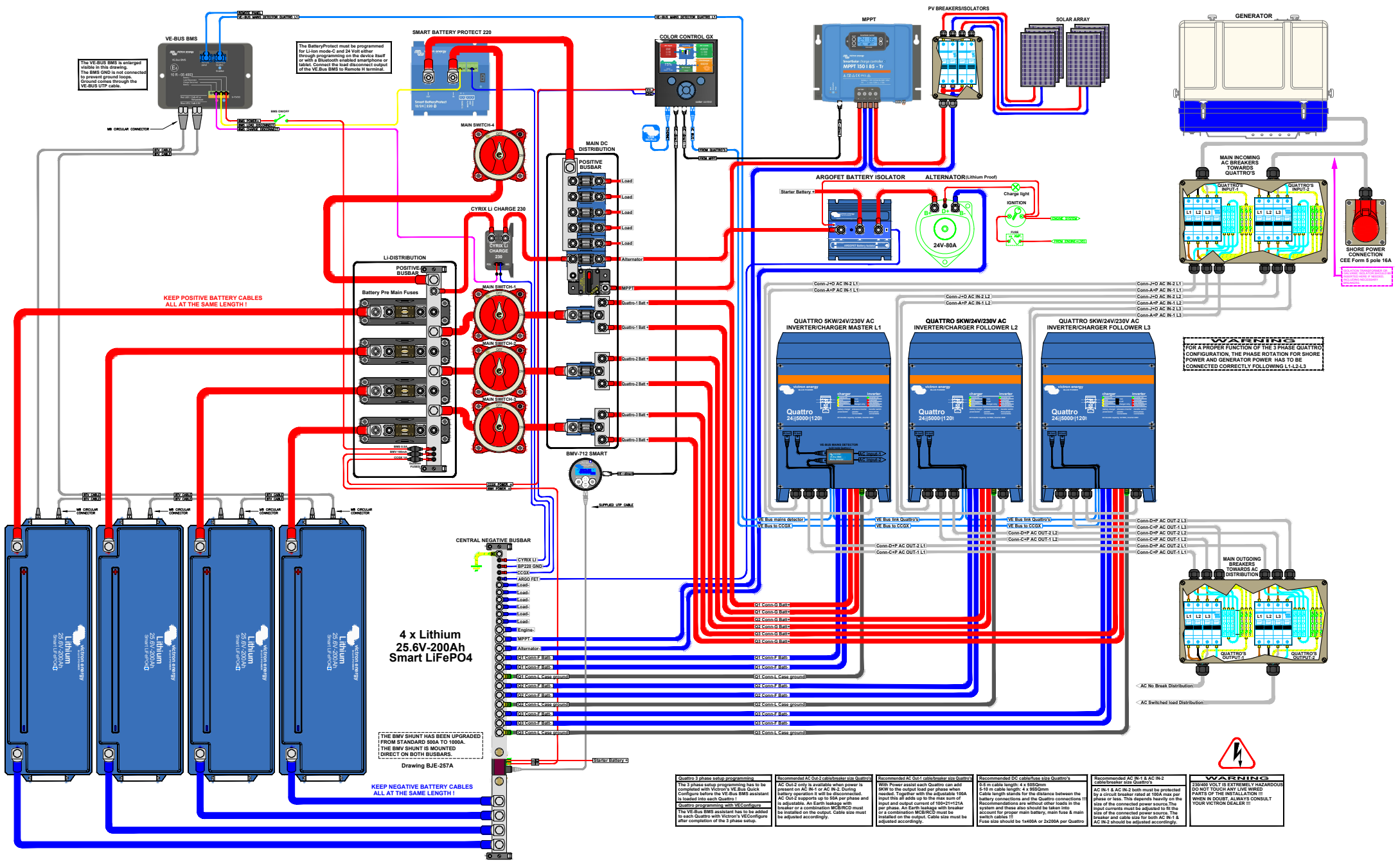
**Recommended DC cable/fuse size MultiPlus**  
 0-5 m cable length: 35Sqmm  
 Cable length stands for the total distance between the battery connections plus and minus and the MultiPlus connections! Recommendations are without other loads in the system and these also should be taken into account for proper main battery, main fuse & main switch cables! INTERNAL Fuse size should be 200A.

**Recommended AC In cable/breaker size MultiPlus**  
 AC IN must be protected by a circuit breaker rated at 16A max or less. This depends heavily on the size of the connected power source. The input current must be adjusted to fit the size of the connected power source. The breaker and cable size for AC IN should be adjusted accordingly.

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



ISOLATION TRANSFORMER OR GALVANIC ISOLATOR SHOULD BE INSERTED HERE IF NEEDED INCLUDING NECESSARY BREAKERS



The VE-BUS BMS is a shunt type and is not connected to prevent ground loops. Ground comes through the VE-BUS UTP cable.

The BatteryProtect must be programmed for LiIon mode C and 24 Volt either through programming on the device itself or with a Bluetooth enabled smartphone or tablet. Connect the load disconnect output of the VE-Bus BMS to Remote if terminal.

KEEP POSITIVE BATTERY CABLES ALL AT THE SAME LENGTH!

4 x Lithium 25.6V-200Ah Smart LiFePO4

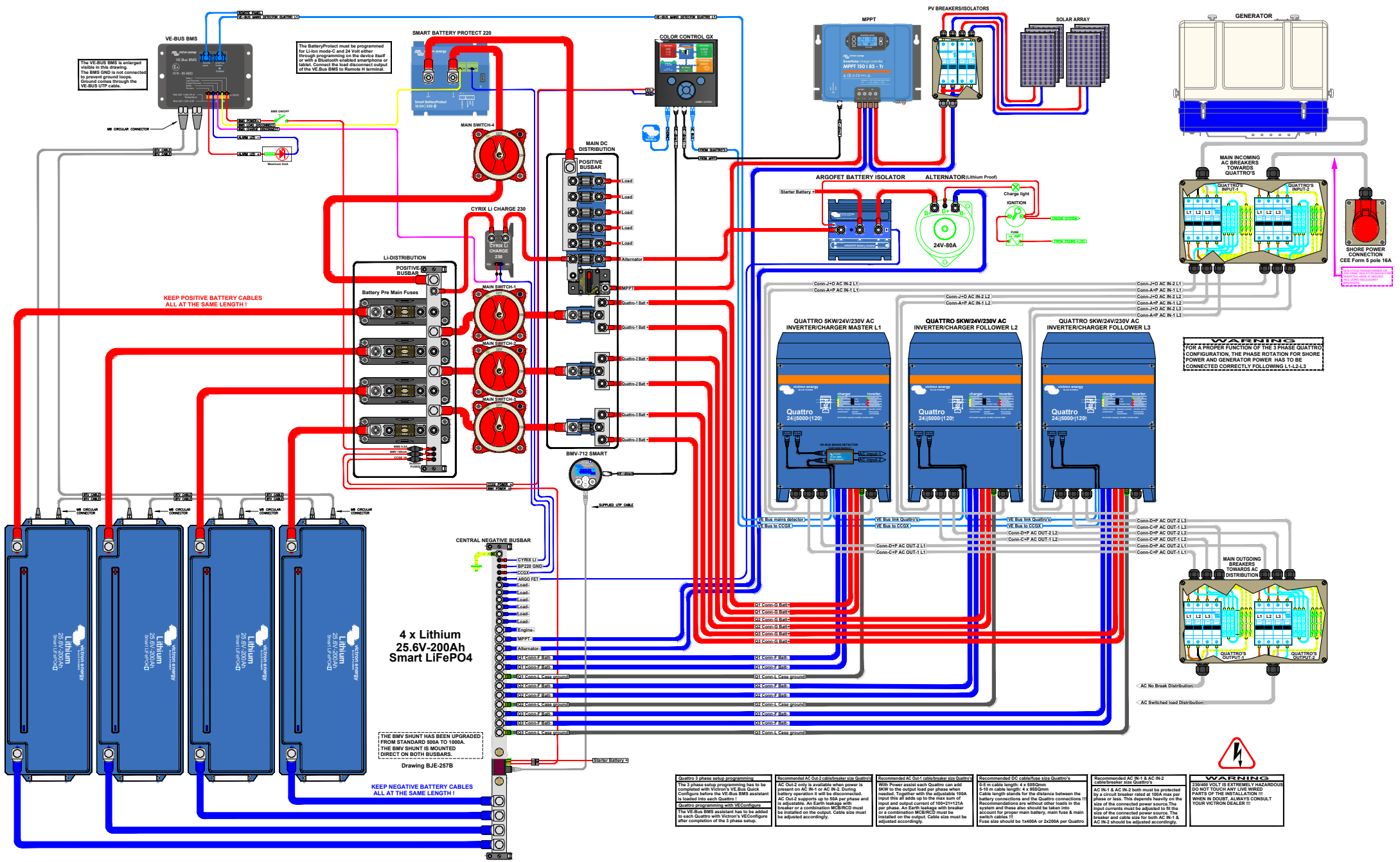
KEEP NEGATIVE BATTERY CABLES ALL AT THE SAME LENGTH

THE BMV SHUNT HAS BEEN UPGRADED FROM STANDARD 500A TO 1000A. THE BMV SHUNT IS MOUNTED DIRECT ON BOTH BUSBARS.

Drawing BJE-257A

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

- Quattro 3 phase setup programming:** The 3 phase setup programming has to be completed with Victor's VE-Bus Quick Configure before the VE-Bus BMS assistant is loaded into each Quattro 1.
- Quattro programming with VE Configure:** The VE-Bus BMS assistant has to be added to each Quattro with Victor's VE Configure after completion of the 3 phase setup.
- 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 60A per phase and is adjustable. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.
- Recommended AC Out-1 cable/breaker size Quattro's:** With Power assist each Quattro can assist 80W to the output load per phase when needed. Together with the adjustable 10A input this all adds up to the max sum of input and output current of 10A + 12.5A per phase. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.
- Recommended DC cable/breaker size Quattro's:** 6.8 m cable length: 4 x 95SDmm. 5-10 m cable length: 4 x 16SDmm. Cable length inside 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 breaker and cable size for AC IN-1 & AC IN-2 should be adjusted accordingly.
- 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 source. The breaker and cable size for AC IN-1 & AC IN-2 should be adjusted accordingly.
- WARNING:** 230-240VOLT IS EXTREMELY HAZARDOUS. DO NOT TOUCH ANY LIVE WIRING PARTS OF THE INSTALLATION!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTOR DEALER!!!



The VE-BUS BMS is highlighted in this drawing. The BMS GND is not connected to prevent ground loops. Ground comes through the VE-BUS UTP cable.

The BatteryProtect must be programmed for LiIon mode C and 24 Volt either through programming on the device itself or with a Bluetooth enabled smartphone or tablet. Connect the load disconnect output of the VE-Bus BMS to Remote if terminal.

KEEP POSITIVE BATTERY CABLES ALL AT THE SAME LENGTH!

4 x Lithium 25.6V-200Ah Smart LiFePO4

THE BMV SHUNT HAS BEEN UPGRADED FROM STANDARD 500A TO 1000A. THE BMV SHUNT IS MOUNTED DIRECT ON BOTH BUSBARS.

KEEP NEGATIVE BATTERY CABLES ALL AT THE SAME LENGTH!

CENTRAL NEGATIVE BUSBAR

- CYRUX LI
- BP230 GND
- CCG
- ARD0 FET
- Load
- Load
- Load
- Load
- Engine
- MPPT
- Alternator
- Q1 Comm 1 Bus
- Q1 Comm 2 Bus
- Q1 Comm 3 Bus
- Q1 Comm 4 Bus
- Q1 Comm 1 Case ground
- Q1 Comm 2 Case ground
- Q1 Comm 3 Case ground
- Q1 Comm 4 Case ground
- Q2 Comm 1 Bus
- Q2 Comm 2 Bus
- Q2 Comm 3 Bus
- Q2 Comm 4 Bus
- Q2 Comm 1 Case ground
- Q2 Comm 2 Case ground
- Q2 Comm 3 Case ground
- Q2 Comm 4 Case ground
- Q3 Comm 1 Bus
- Q3 Comm 2 Bus
- Q3 Comm 3 Bus
- Q3 Comm 4 Bus
- Q3 Comm 1 Case ground
- Q3 Comm 2 Case ground
- Q3 Comm 3 Case ground
- Q3 Comm 4 Case ground

STARTER BATTERY

**Quattro 3 phase setup programming**  
The 3 phase setup programming has to be completed with Victor's VE-Bus Quick Configure before the VE-Bus BMS assistant is loaded into each Quattro 1.

**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 and is adjustable. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

**Recommended AC Out-1 cable/breaker size Quattro's**  
WV Power assist each Quattro can assist 8kW to the output load per phase when input and output current of 100A max per phase. Input this all adds up to the max sum of input and output current of 100A x 2 x 3 = 600A per phase. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

**Recommended DC cable/breaker size Quattro's**  
6.8 m cable length: 4 x 95Gmm  
5-10 m cable length: 4 x 165Gmm  
Cable length inside 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 breaker and cable size for AC IN-1 & AC IN-2. Fuse size should be 1x400A or 2x200A per Quattro.

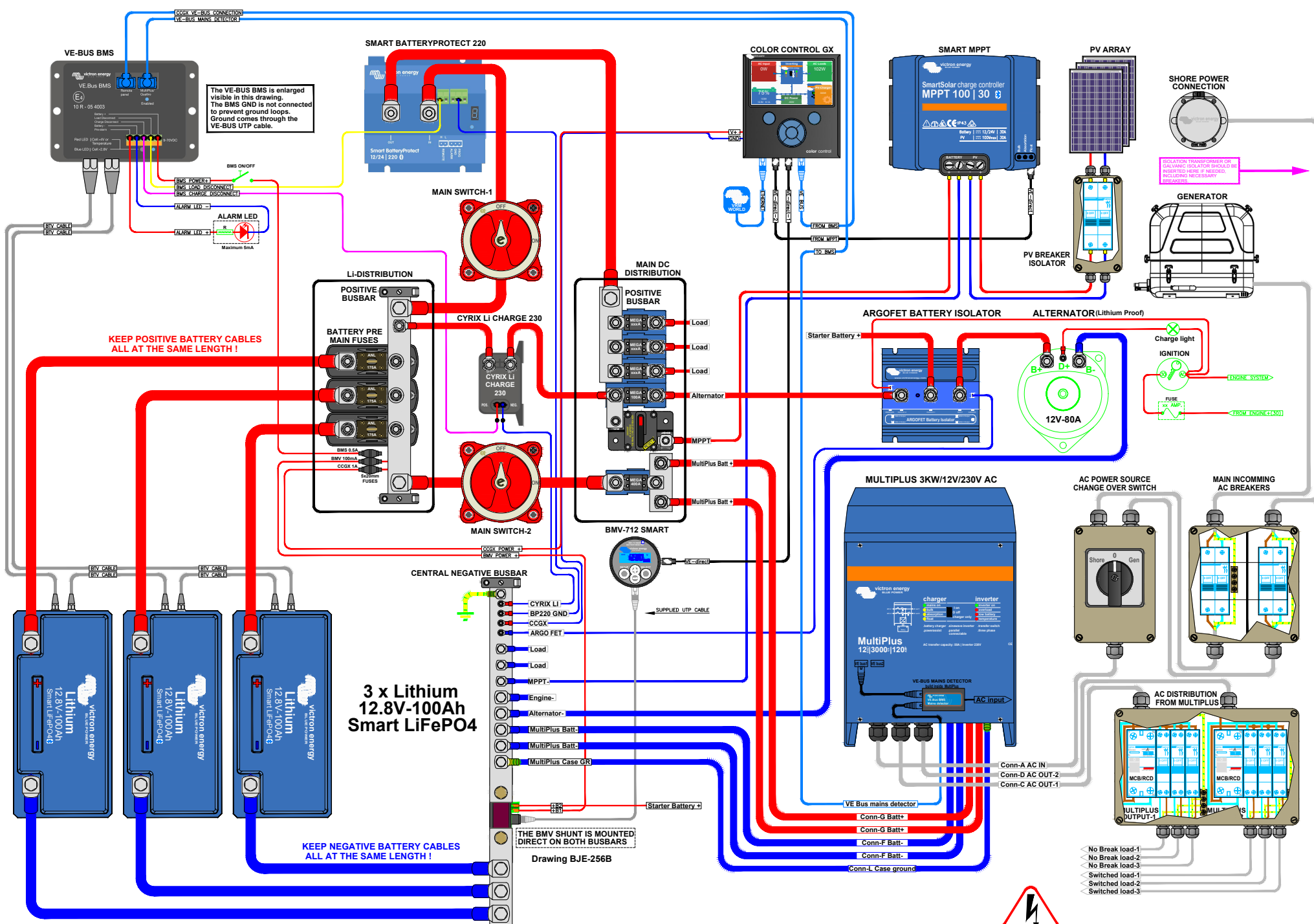
**Recommended AC IN-1 & AC IN-2 cable/breaker size Quattro's**  
AC IN-1 & AC IN-2 both must be protected by a 100A circuit breaker rated at 100A max per phase or less. Recommendations are without other loads in the system and these also should be taken into account for proper main battery, main fuse & main breaker and cable size for AC IN-1 & AC IN-2. Fuse size should be 1x400A or 2x200A per Quattro.

**WARNING**  
230-240VOLT IS EXTREMELY HAZARDOUS. DO NOT TOUCH ANY LIVE WIRE OR PARTS OF THE INSTALLATION !!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTOR DEALER !!!

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

SHORE POWER CONNECTION  
CEE Form 5 pole 16A





KEEP POSITIVE BATTERY CABLES ALL AT THE SAME LENGTH!

KEEP NEGATIVE BATTERY CABLES ALL AT THE SAME LENGTH!

3 x Lithium 12.8V-100Ah Smart LiFePO4

THE BMW SHUNT IS MOUNTED DIRECT ON BOTH BUSBARS

Drawing BJE-256B

**Smart BatteryProtect programming**  
The BatteryProtect must be programmed for Li-Ion mode and 24 Volt either through programming on the device itself or with a Bluetooth enabled smartphone or tablet. Connect the load disconnect output of the VE.Bus BMS to Remote H terminal.

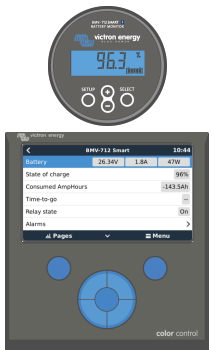
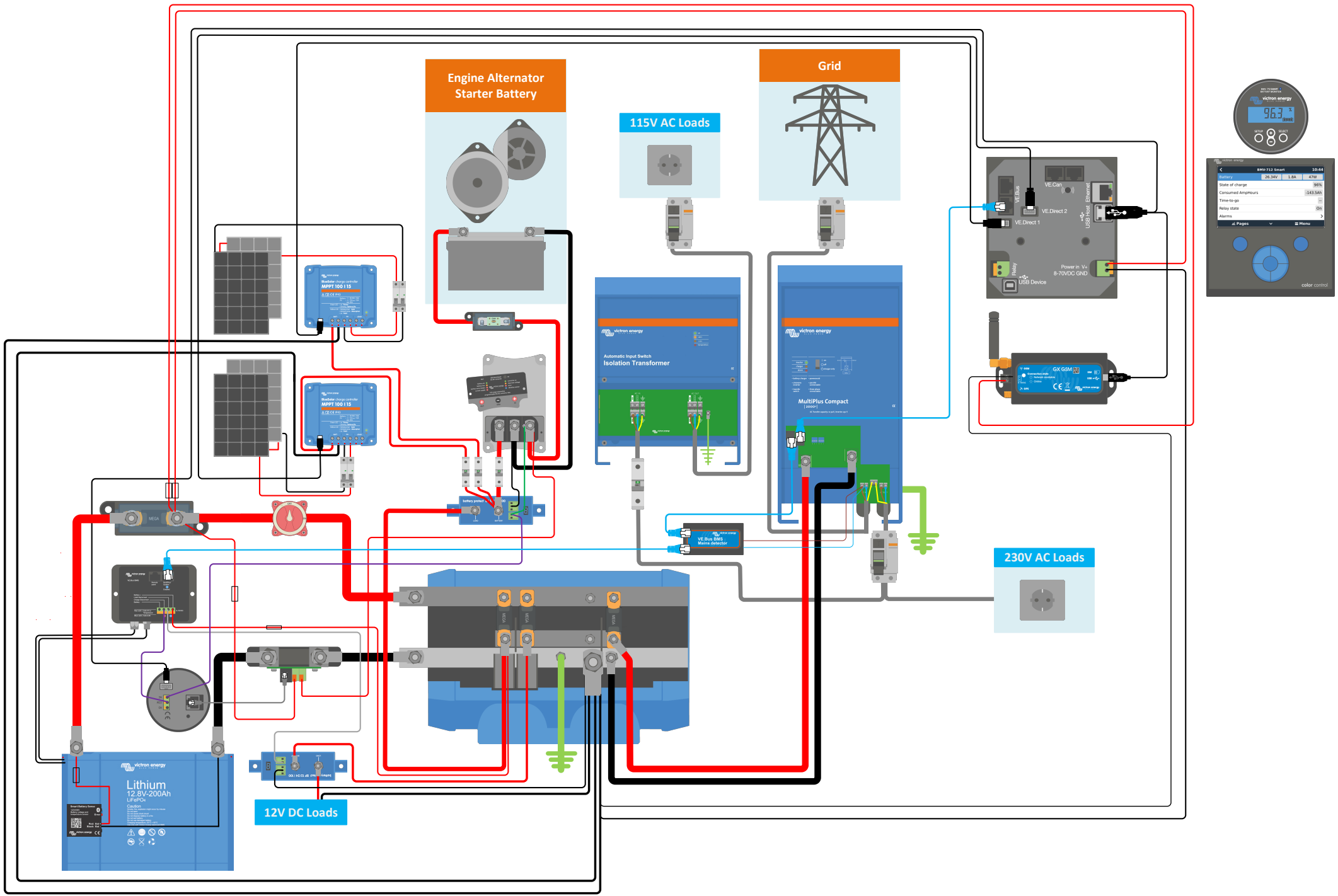
**Recommended AC Out-2 cable/breaker size MultiPlus**  
AC Out-2 only is available when power is present on AC In-1. During battery operation it will be disconnected. AC Out-2 supports up to 16A and is adjustable. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

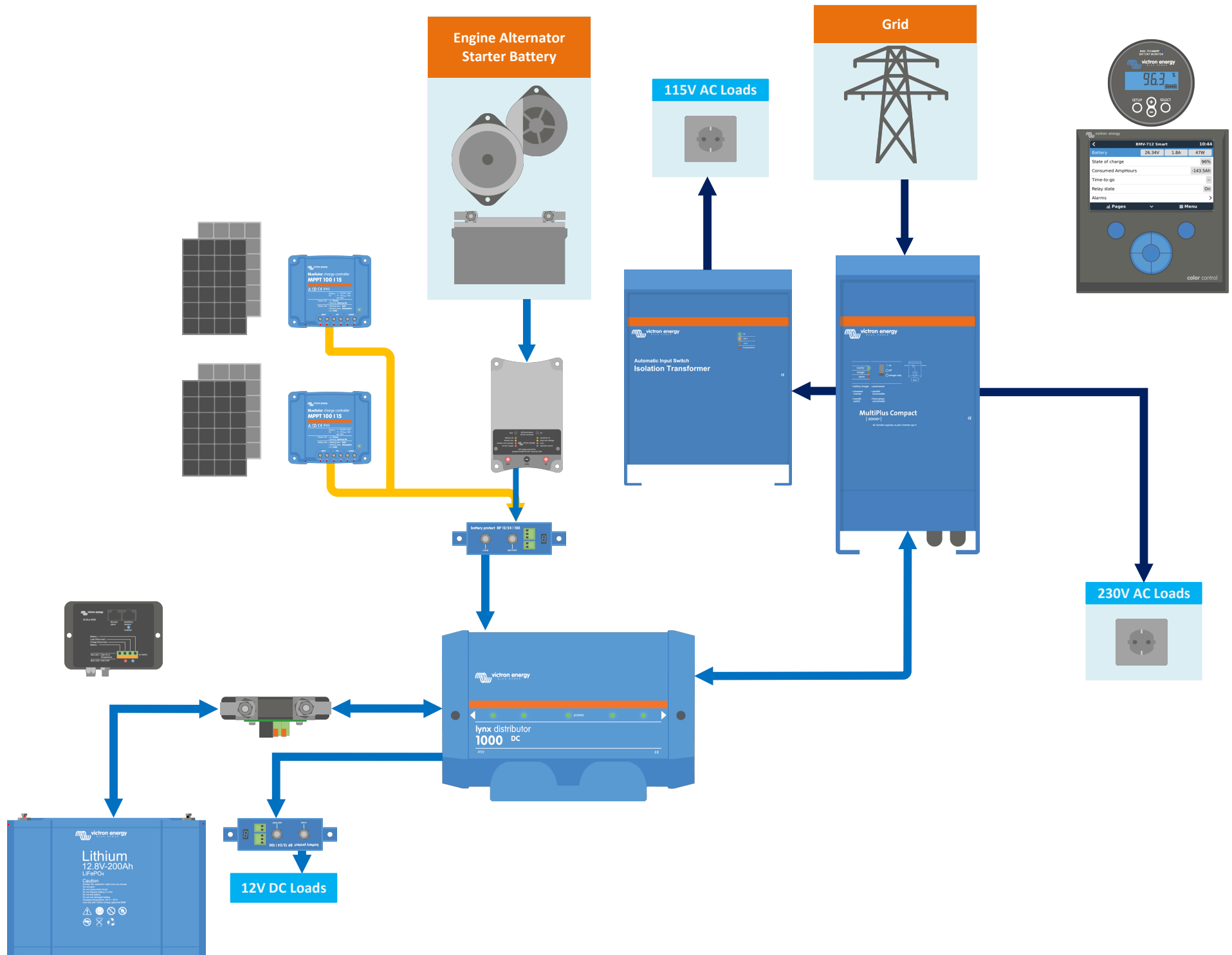
**Recommended AC Out-1 cable/breaker size MultiPlus**  
When power assist the MultiPlus can add 3KW to the output load when needed. Together with the adjustable 50A input this all adds up to the max sum of input and output current of 50+13=63A. An Earth leakage with breaker or a combination MCB/RCD must be installed on the output. Cable size must be adjusted accordingly.

**Recommended DC cable/fuse size MultiPlus**  
0-5 m cable length: 4 x 50Sqrmm  
5-10 m cable length: 4 x 70Sqrmm  
Cable length stands for the distance between the battery and the MultiPlus 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 1 x 400A or 2 x 200A

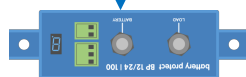
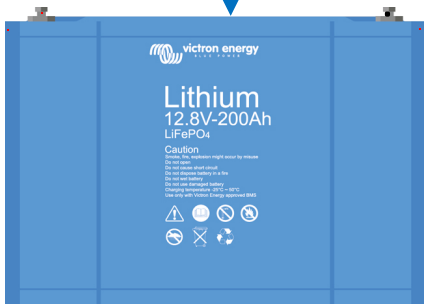
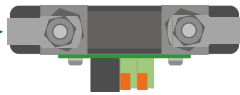
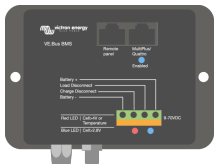
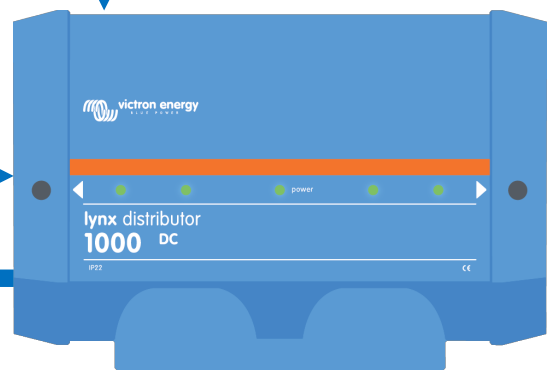
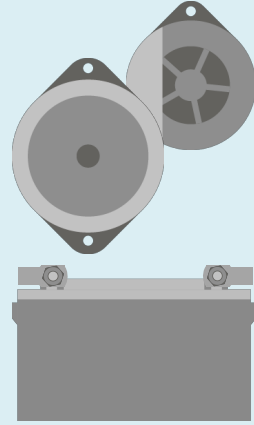
**Recommended AC IN cable/breaker size MultiPlus**  
AC IN must be protected by a circuit breaker rated at 50A or less. This depends heavily on the size of the connected power source. The input currents must be adjusted to fit the size of the connected power source. The breaker and cable size for AC IN should be adjusted accordingly.

**WARNING**  
230 VOLT IS EXTREMELY HAZARDOUS DO NOT TOUCH ANY LIFE WIRED PARTS OF THE INSTALLATION !!! WHEN IN DOUBT, ALWAYS CONSULT YOUR VICTRON DEALER !!!

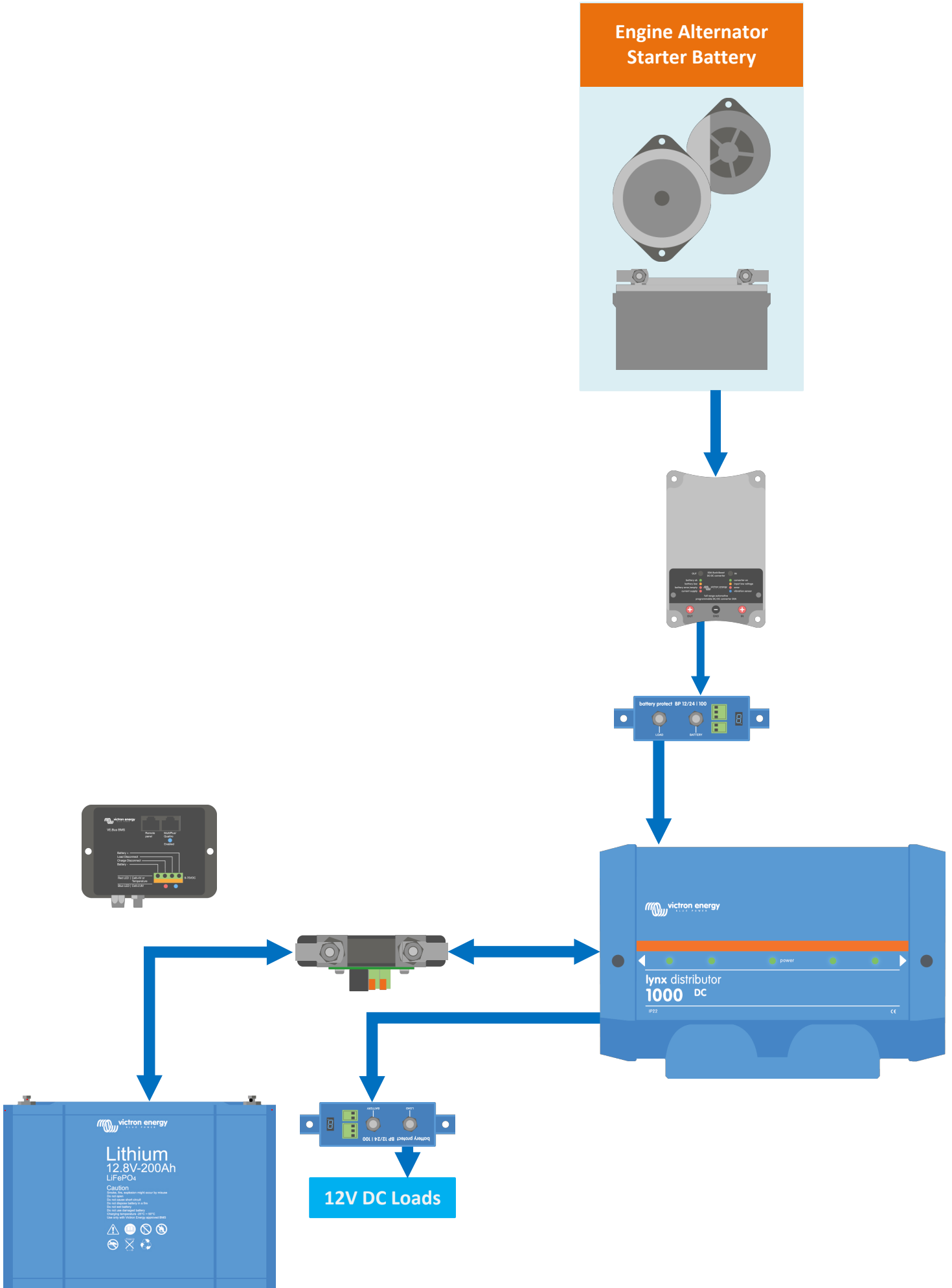




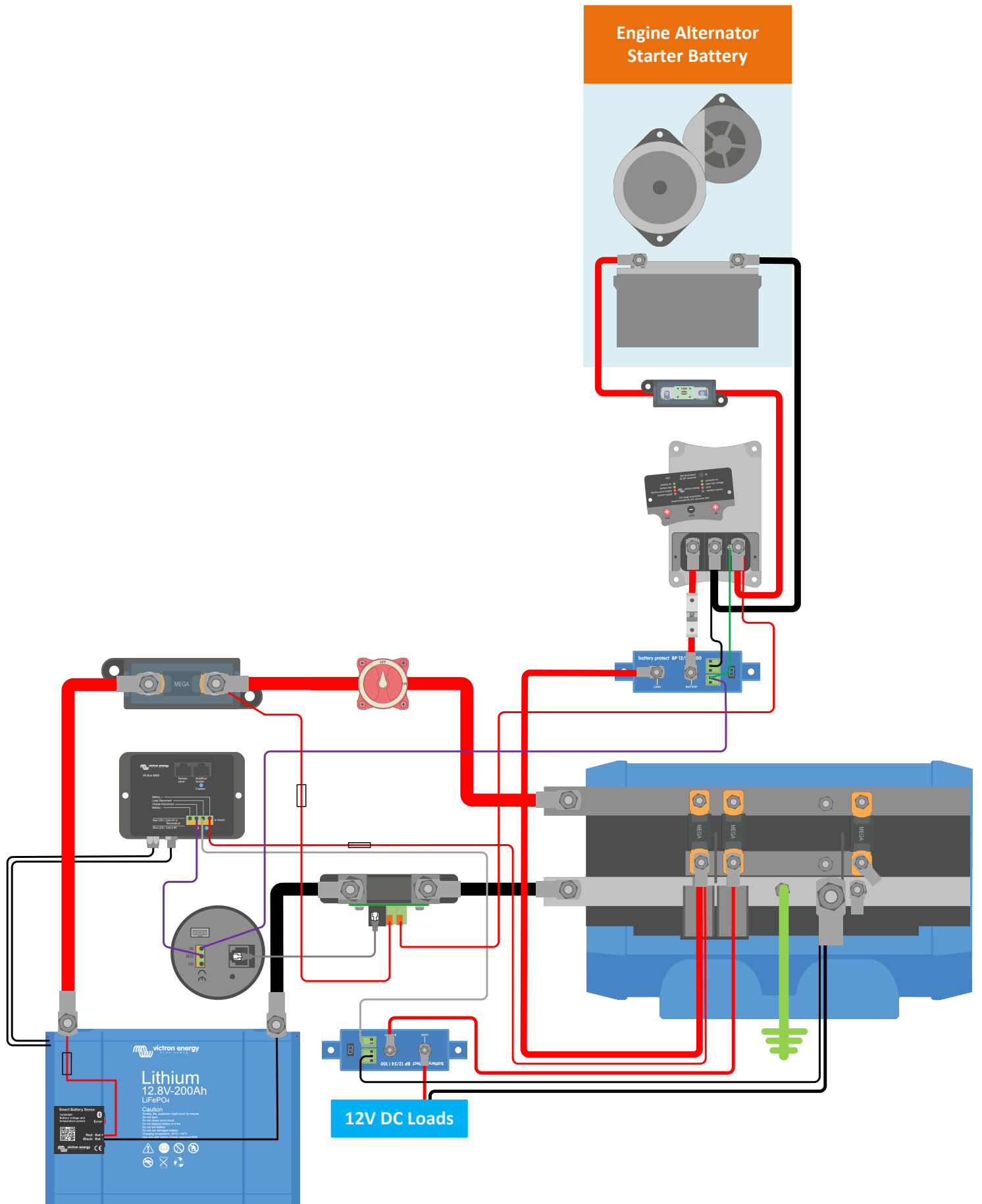
Engine Alternator  
Starter Battery



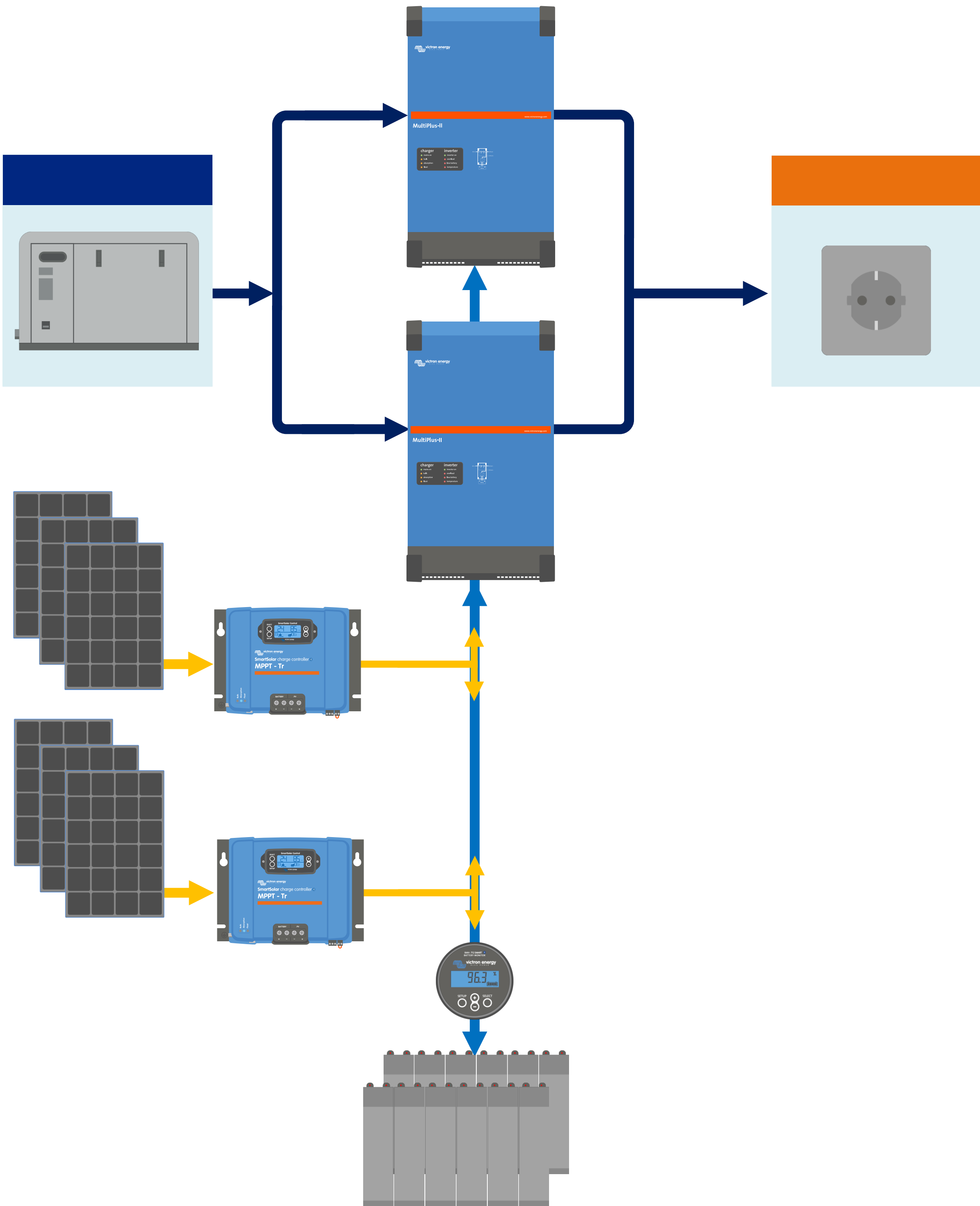
12V DC Loads











Looking for dependable RV batteries? Rely on Victron Energy for quality and long-lasting products.