

SY ARGO cruising sailing yacht: LiFePo4 / schematic energy system overview (non professional)

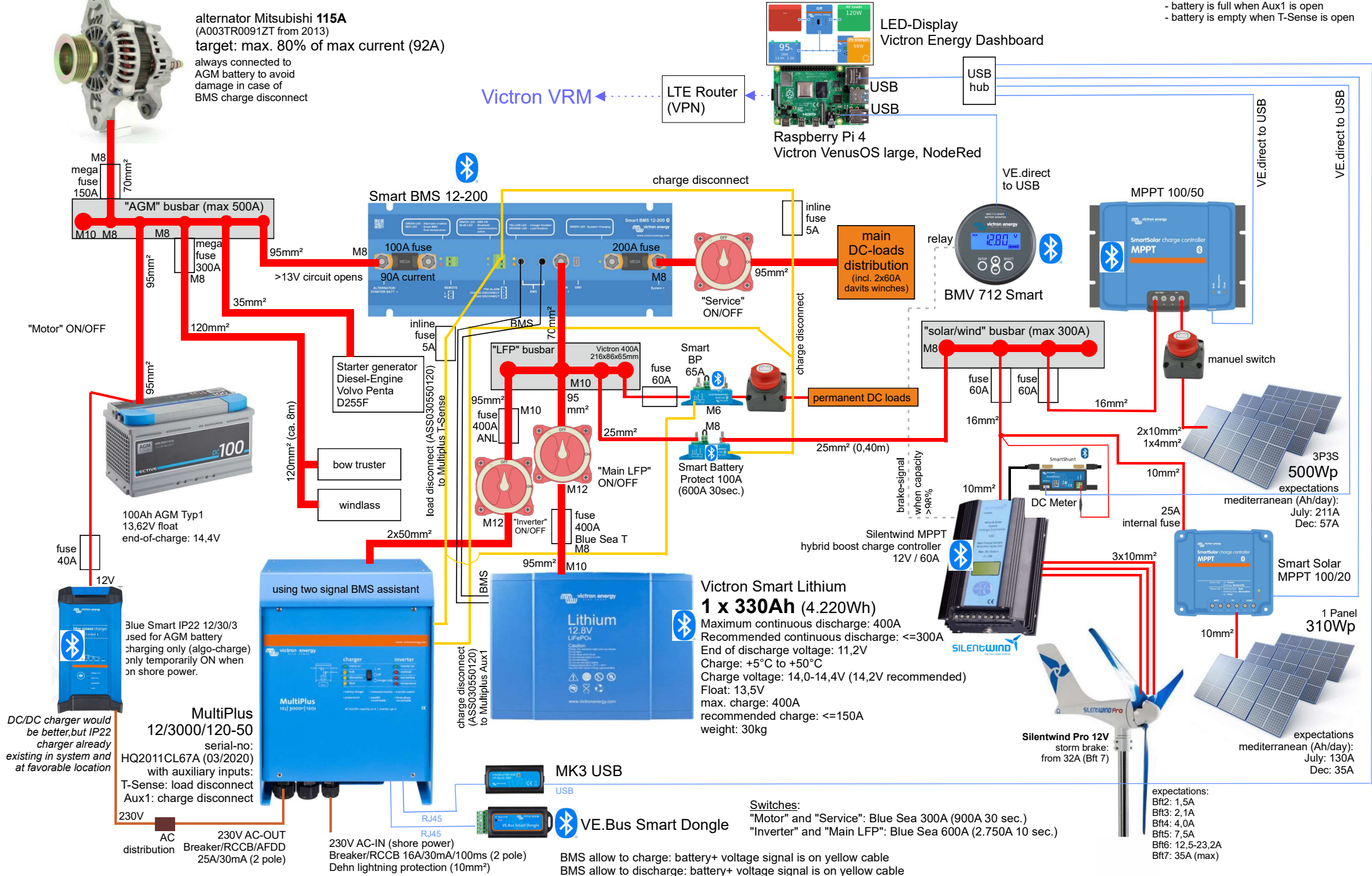
Version: 22.04.2023 / Author: D.Evertz



alternator Mitsubishi **115A**
(A003TR0091ZT from 2013)
target: max. 80% of max current (92A)

always connected to AGM battery to avoid damage in case of BMS charge disconnect

two signal BMS assistant at MultiPlus:
- battery is full when Aux1 is open
- battery is empty when T-Sense is open



Victron Smart Lithium
1 x 330Ah (4.220Wh)
Maximum continuous discharge: 400A
Recommended continuous discharge: <=300A
End of discharge voltage: 11,2V
Charge: +5°C to +50°C
Charge voltage: 14,0-14,4V (14,2V recommended)
Float: 13,5V
max. charge: 400A
recommended charge: <=150A
weight: 30kg

expectations:
Bf1: 1,5A
Bf2: 2,1A
Bf3: 2,1A
Bf4: 4,0A
Bf5: 7,5A
Bf6: 12,5-23,2A
Bf7: 35A (max)

Switches:
"Motor" and "Service": Blue Sea 300A (900A 30 sec.)
"Inverter" and "Main LFP": Blue Sea 600A (2.750A 10 sec.)

BMS allow to charge: battery+ voltage signal is on yellow cable
BMS allow to discharge: battery+ voltage signal is on yellow cable

DC/DC charger would be better, but IP22 charger already existing in system and at favorable location

MultiPlus 12/3000/120-50 serial-no: HQ2011CL67A (03/2020) with auxiliary inputs: T-Sense: load disconnect Aux1: charge disconnect

Blue Smart IP22 12/30/3 used for AGM battery charging only (algo-charge) only temporarily ON when on shore power.

"Motor" ON/OFF

100Ah AGM Typ1 13,62V float end-of-charge: 14,4V

"AGM" busbar (max 500A)

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