

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

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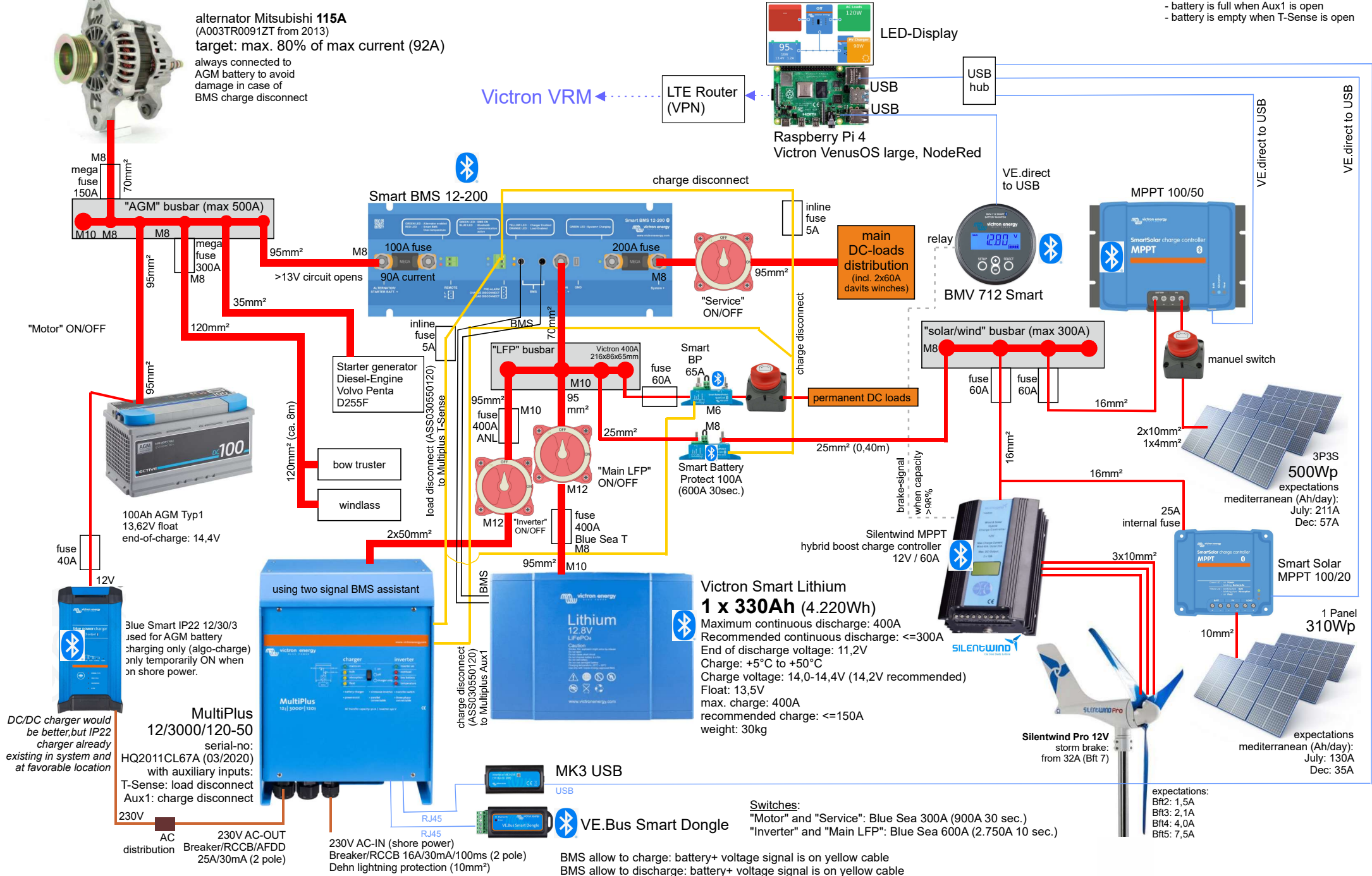


alternator Mitsubishi **115A**  
(A003TR0091ZT from 2013)  
target: max. 80% of max current (92A)

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

3P3S  
500Wp  
expectations  
mediterranean (Ah/day):  
July: 211A  
Dec: 57A

1 Panel  
310Wp  
expectations  
mediterranean (Ah/day):  
July: 130A  
Dec: 35A

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

230V AC-IN (shore power)  
Breaker/RCCB 16A/30mA/100ms (2 pole)  
Dehn lightning protection (10mm<sup>2</sup>)

expectations:  
Bf1: 1,5A  
Bf2: 2,1A  
Bf4: 4,0A  
Bf5: 7,5A