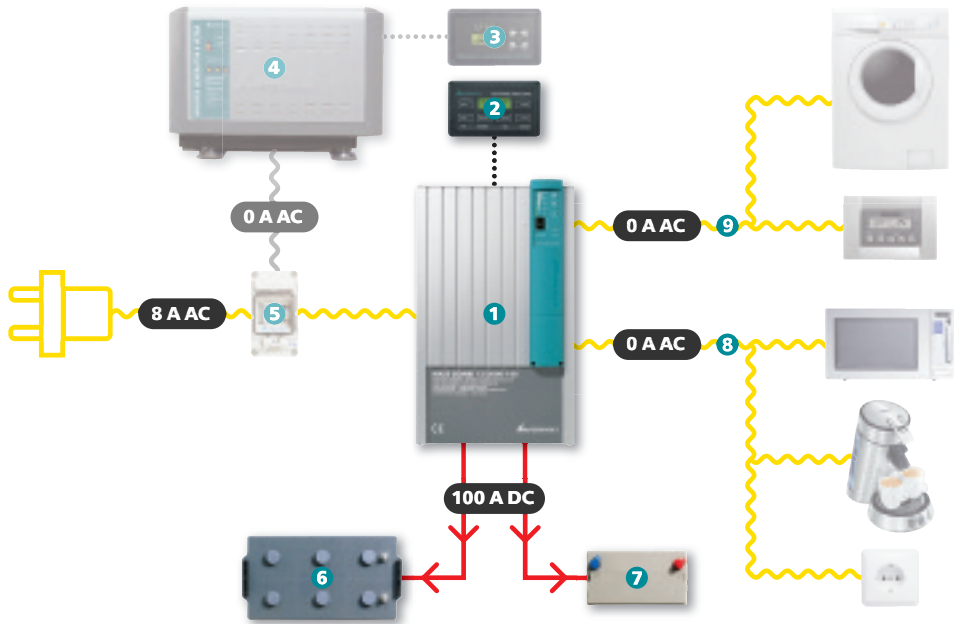


# The Mass Combi : the four most common applications

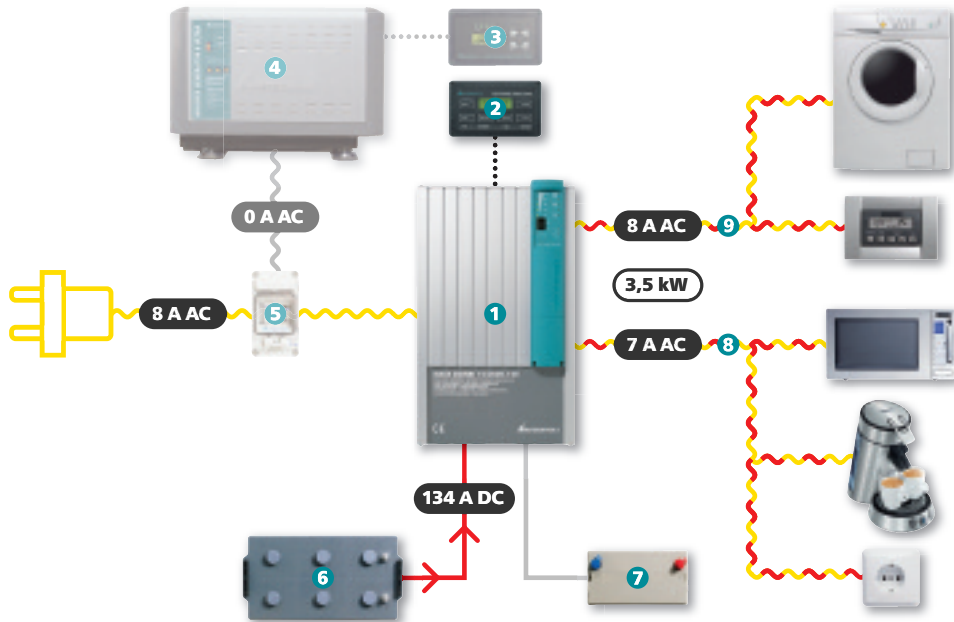
## 1. Connected to grid power - unlimited power.

**The batteries are being charged**  
The electrical system is connected to the grid. The circuit breaker is limited to 8 amps. All appliances using alternating current (AC) have been switched off. The Mass Combi 12/2000 charges two connected gel and/or AGM batteries. A 100 amps charge current is available.



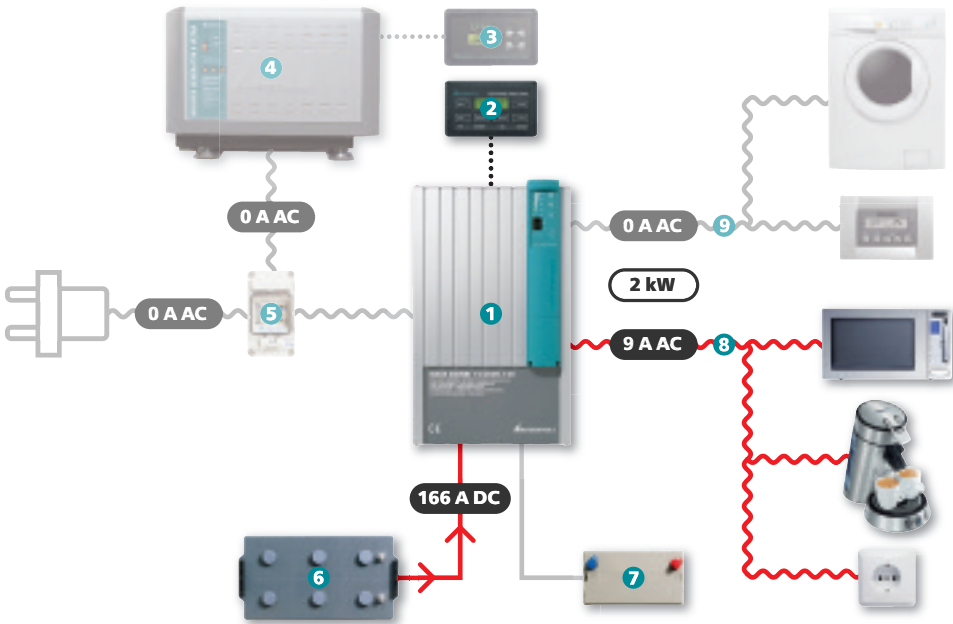
## 2. Connected to grid power- limited power.

**Higher consumption than available from the grid**  
Same circuit breaker value as above diagram: 230 V/8 A. Several 230 V appliances are switched on, consuming 3.5 kW. A total of 16 amps is required. The additional 230 V (8 A) is supplied via the service battery and the Mass Combi. Automatic switching off prevents excessive discharge of the batteries. You can program the setting via Power Sharing in the Mass Combi, or remotely using the APC panel.



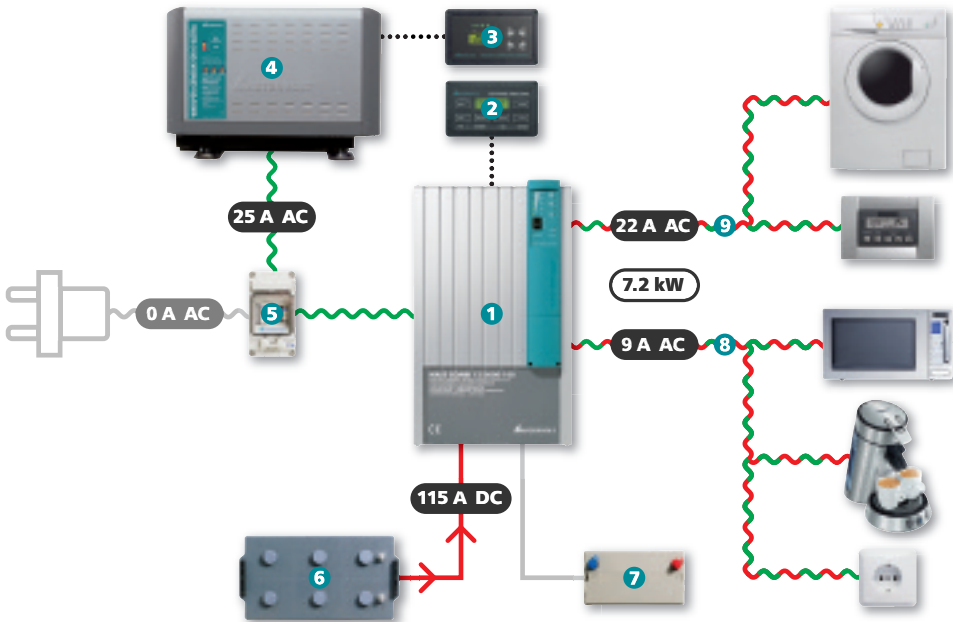
## 3. Not connected to grid power - no generator.

**Battery power**  
When not connected to shore power, the Mass Combi automatically switches interruption free to inverter mode. The batteries supply power for several 230 V appliances as well as various DC consumers. Connected power: 2 kW. The Masterlink/MICC monitoring indicates the precise state of the battery, including battery consumption per minute/hour, 'time to go' before charging and battery level in %. Charge batteries en route using the main engine alternator.



## 4. Not connected to grid power - with generator.

**Generator and battery power**  
In this case the Whisper generator is the source of power and makes the system entirely independent. The generator can both charge the batteries and provide power to the connected consumers. The Mass Combi regulates supply and demand and automatically starts the Whisper generator when necessary. In case of a large power demand, the Mass Combi provides a parallel power supply by supplying an additional 230 V from the service battery. This is how this configuration is able to supply 7.2 kW with a Whisper 6 generator!



- 1 Mass Combi inverter/charger combination.
- 2 Masterlink/MICC, control panel on/off monitoring (or ICC panel).
- 3 DDC panel, remote and control panel for the Whisper generator.
- 4 Whisper generator.
- 5 Masterswitch 0 transfer system.
- 6 Service battery, gel.
- 7 Starter battery, AGM.
- 8 Inverter output.
- 9 High Power output.