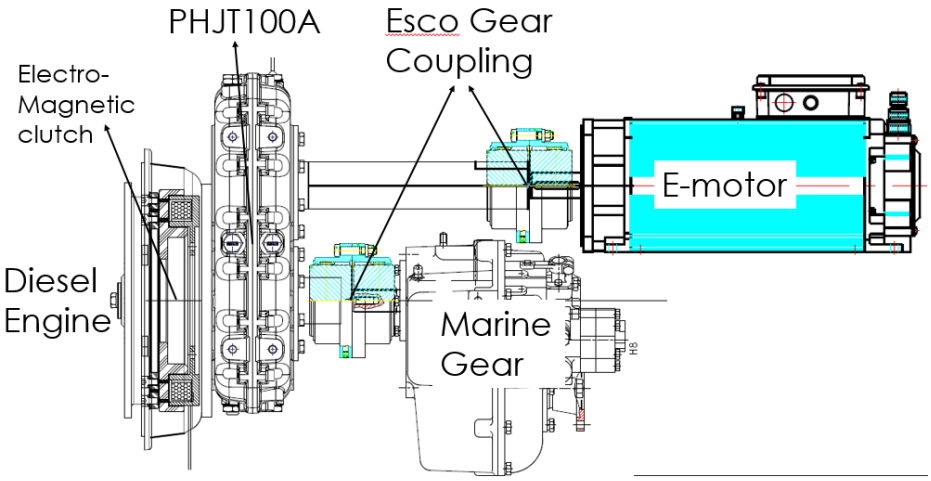
PHJT100A with HESP20/36

Our new PHJT100A with HESP20/36 package, is an all-inclusive total Hybrid solution which contains all necessary components and service for Parallel Hybrid propulsion integration. We offer this package with our PHJT100A Parallel Hybrid Transmission and HESP20 (20kW E-power) or HESP36 (36kW E-power) Hybrid Electrical Solution Package.



Parallel Hybrid Jet Transmission PHJT100A

Developed as the smaller brother of our PHT series of Hybrid Transmissions. With the goal of making a quality, heavy duty Parallel Hybrid Solution available to the smaller power range of marine propulsion. The PHJT100A accepts diesel engines up to 188kW and is available in several ratios. It contains an electromagnetic 24Vdc clutch for disengagement of diesel engine, which is directly connected through an SAE (3 or 4) bell housing with flexible coupling (11.5" or 10") for easy installation. Output can be connected directly to propulsionline (Jet-drive) or remotely to marine gear with EscoGear coupling which gives a compact but very solid connection. The 20kW or 36 kW E-machine is connected with an Esco Gear coupling.

This solution gives a very strong and compact Hybrid package, with all the benefits of combining diesel and electric power in a parallel installation!

Depending of the diesel input speed, you can choose for an integrated ratio between E-machine and PHJT output/input. Due to the integrated ratio, torque of the electric motor can be multiplied in propulsion mode. Diesel engine speed is multiplied with the ratio to the generator. This means that the power of the electric motor and the efficiency of the system are optimized in both situations.

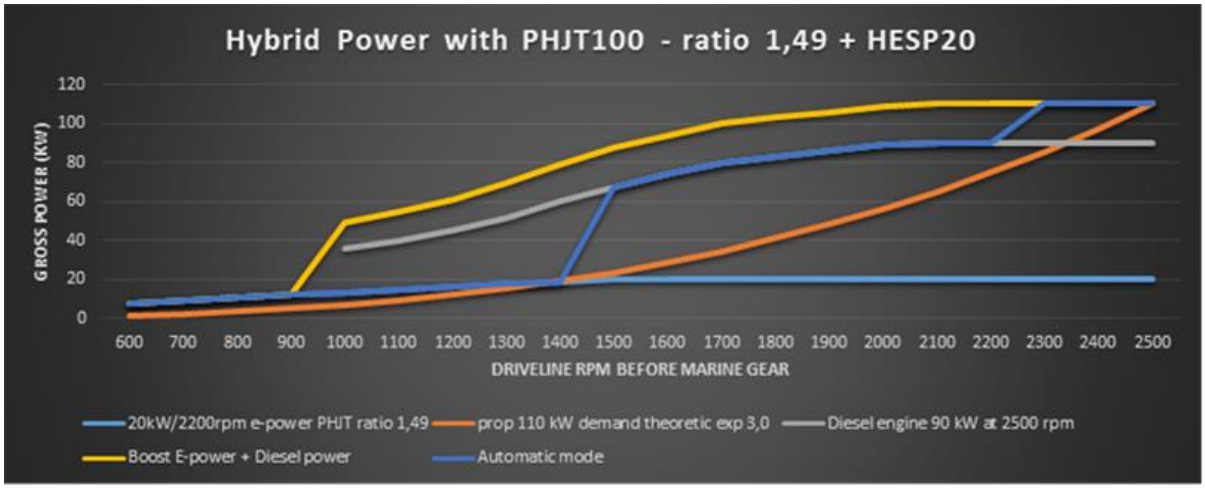
PHJT100A ratio	Max. Power	Max. Diesel rpm	Max. E-power
1,00	188kW	3500rpm	50kW
1,20	188kW	3000rpm	50kW
1,30	175kW	2850rpm	50kW
1,49	165kW	2650rpm	50kW
1,72	150kW	2500rpm	50kW

June, 2018

Hybrid Electric Solution Package HESP20/36

Gives your application a fully operational electric system in combination with a PHJT100A and an electric energy supply, with 5 modes of operation: Diesel, Electric, automatic, generator and boost. It contains all the electric hardware and software to operate your hybrid system:

- E-motor LQ100X 20kW or LQ132L 36kW: Compact design motor, High efficiency, Water cooled (18c° cooling to be foreseen by customer°, 400 Volt AC nominal (requires 560 VDC batteries)
- Variable Frequency Drive: DC line 530-700 VDC, AC feed 400-480V 50-60 Hz in IP55 locker with external air cooling.
- Hybrid Control Unit
- 5" Anti-glare Hybrid Control Screen
- Hybrid Electrical box: Contains PLC and electric connections, air cooled
- Hybrid Control Software: 5 modes of operation:
  Electric, Diesel, Automatic, Generator and Boost
- Hybrid Power Command (Single or Dual lever head)
- Commissioning Support on board



HESP modes: power curve example

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