4 Interface to the Ship

The compact Azipod propulsion control system is a self-standing system. The propulsion control system can be built to operate with or without a ship automation system. The ship automation system is needed for monitoring the propulsion system. It should also control the auxiliaries of the propulsion system, e.g. the cooling water flow. Ship automation interface is intended to be carried out with a serial data link or by hard wired connections.

Heat dissipation to air inside the ship
(Propulsion Power Drive   2-8,5 kW)
Steering gear + slipring   5-15 kW

Steering and auxiliaries
690/440/400/380 VAC
3 phase 50/60 Hz:
Main Switchboard

690/440/400/380 VAC
3 phase 50/60 Hz:
Emergency Switchboard

Pressurized air
7bar, 250 l/min, ½"

I/O to Ship Automation
15 digital outputs
10 analog outputs
70 digital / Modbus
10 integer / Modbus

Propulsion Power Drive
Propulsion
690 VAC 3 phase 50/60 Hz,
Main Switchboard

+ Cooling for P.P.D.
DN 80 PN10
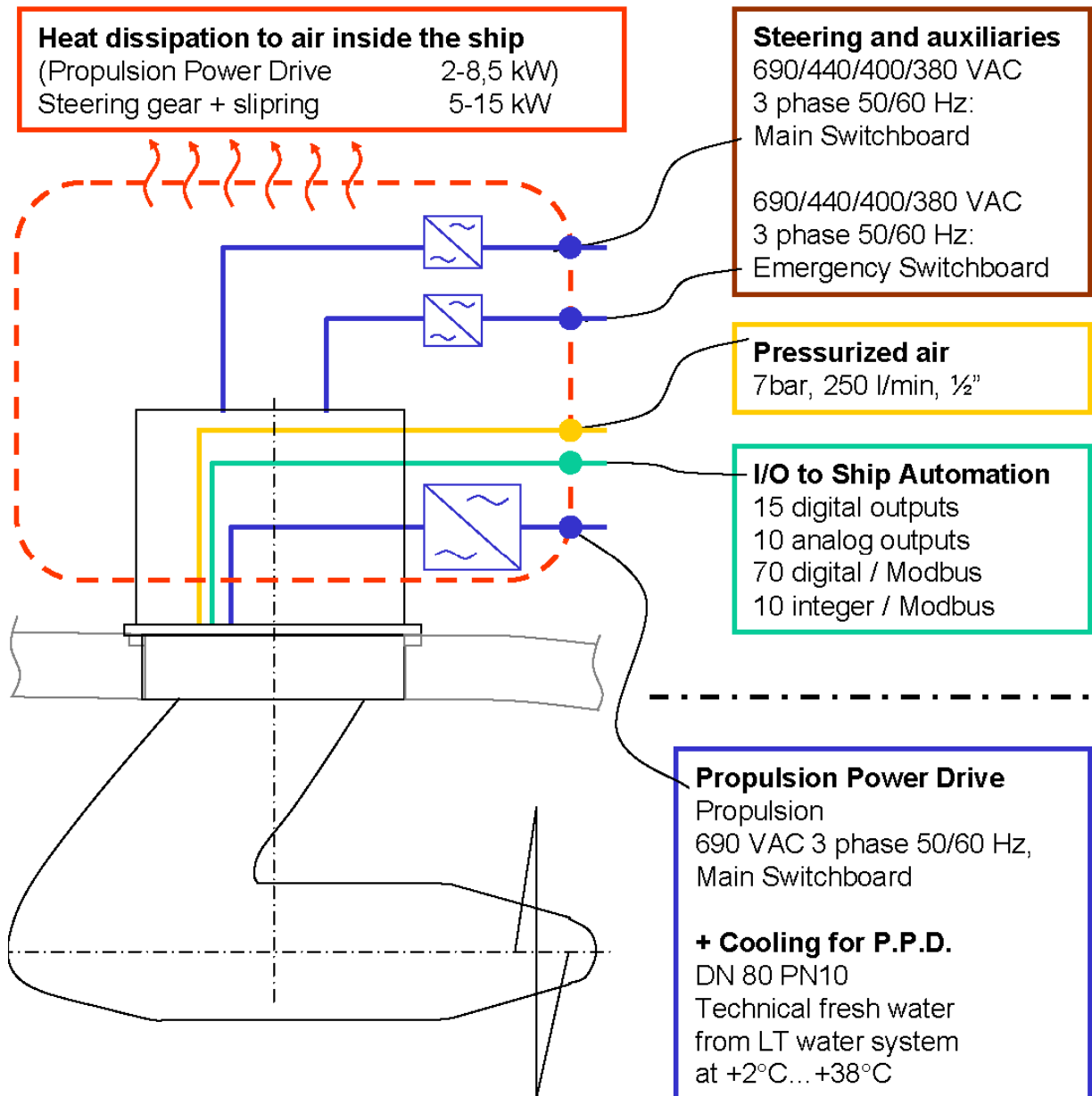Technical fresh water
from LT water system
at +2°C...+38°C

Figure 4-1   Azipod ship interface diagram in a preliminary project format