**Max and min values(604800 seconds operation)**

Name: battery\_0\_\_actualPower (kW)

Power delivered from battery to vessel grid (negative for charging)

min -863.000000

max 725.000000

mean -0.380103

Name: thrusterAndPropulsion (kW)

Power consumed by thrusters and propulsion

min 0.000000

max 3741.740000

mean 595.090588

Name: hotelLoad (kW)

Vessel hotel load: non-thrusters and propulsion loads such as accommodation and auxiliaries. Estimation used when connected to shore power.

min -431.740000

max 1823.040000

mean 432.619608

Name: sumEngMdoPower (kW)

Sum power delivered from 4x diesel engines

min 0.000000

max 4455.000000

mean 953.869813

Name: shorePowerEstimated(kW)

Estimated shore power delivered to vessel (Estimation based on records from shore)

min 0.000000

max 354.000000

mean 74.220486

Name: engMdoPower\_0\_ (kW)

Power delivered from engine 0

min 0.000000

max 2072.000000

mean 111.577940

Name: engMdoPower\_1\_ (kW)

Power delivered from engine 1

min 0.000000

max 2182.000000

mean 500.024058

Name: engMdoPower\_2\_ (kW)

Power delivered from engine 2

Not in use

Name: engMdoPower\_3\_ (kW)

Power delivered from engine 3

min 0.000000

max 2145.000000

mean 342.267816

shore power = (estimated hotel load) – (battery system power) - (engine power)

(engine power)+ (shore power)+ (battery system power) -(estimated hotel load) – (Thrust.&prop.load) = 0

Hotel load is all loads except thrusters and propulsion