Signals

dataId	Unit	Description	Status
21EL	rpm	Rotational speed of the engine. Idle = 500 rpm Rated = 900 rpm	Ok
61XS	bool	Autostop over speed. Digital indication of alarm state from the Safety system. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
62XS	bool	Autostop lubrication oil pressure low. Digital indication of alarm state from Safety system. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
63XS	bool	Autostop oil mist concentration in crankcase high. Digital indication of alarm state from Safety system. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
64XS	bool	Autostop high jacket water temperature at engine outlet. Digital indication of alarm state from Safety system. **True** - No active alarm **False** - Active alarm	Ok
65XS	bool	Emergency stop button activated. Digital indication of alarm state from Safety system. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
66XS	bool	Autostop gear oil pressure low. Digital input signal to safety system indicating low gear oil pressure. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
71XS	bool	Engine speed pickup failure in Safety system. Digital signal state indicating error on speed measurement by engine safety system. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value

dataId	Unit	Description	Status
74XS	Enum	Value indicating a wire break on critical signals to the Safety system **0..1** = No wirebreak **2** = Wire break Gear oil pressure - 51XS **3** = Wire break Emergency stop button - 71EL **4** = Wire break Jacket water temperature - 07HT **5** = Wire break Oil mist shutdown - A04LO **6** = Wire break Lub oil pressure aft. filter - 15LO **7** = Wire break Shutdown solenoid - 77SA	Unknown Only **0** value
41XS	bool	Control cabinet 24VDC failure. Digital signal indicating problems with the 24 VDC power supply to the engine control cabinet (ECC) **True** - No active alarm **False** - Active alarm	Ok
75XS	bool	Safety PLC failure. Digital signal indicating that the Safety PLC has entered **STOP** mode. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
12XS	bool	Engine running status **True** - Engine running (rpm > 300) **False** - Engine stopped	Ok
13XS	bool	Interlock start **True** - Engine start blocked **False** - Engine start allowed	Ok
11XS	bool	Start failure. Engine failed to start **True** - Active alarm **False** - No active alarm	Unknown Only **False** value
20XS	bool	Alarm interlock to monitoring system. Digital signal from engine control system to block given alarms on the IAS as the engine is starting. Usually active while engine is stopped and the first 30 seconds after start **True** - Active alarm **False** - No active alarm	Ok

dataId	Unit	Description	Status
90EL	°C	Charge air temperature control set point for PID control of LT water through charge air cooler. Normal range is 37..55°C	Ok
27XS	bool	Alarm reduce load to monitoring system Digital signal from engine control system to reduce load to the operator. **True** - Reduce load request **False** - No active alarm	Unknown Only **False** value
19XS	bool	Control PLC failure Digital signal indicating that the engine control PLC has entered **STOP** mode **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
11XA	bool	PLC intercommunication failure. Digital signal indicating communication problems between the Control PLC and the Safety PLC. **True** - No active alarm **False** - Active alarm	Unknown Only **True** value
91XS	bool	Auto stop Major alarm from speed governor. Digital signal from engine Safety system indicating if the digital speed governor has performed entered an Autostop condition **True** - Active alarm **False** - No active alarm	Unknown Only **False** value
92XS	bool	Minor alarm from speed governor. Digital signal from engine Control system indicating if there is an active warning/alarm in the digital speed governor **True** - Active alarm **False** - No active alarm	Ok
75EL	bool	Key switch/turning gear interlock. Digital signal in engine Control PLC indicating if the manual engine key switch is in the start block position or the turning gear is engaged; both conditions resulting in a start blocking condition. **True** - Active start block condition **False** - No start block	Unknown Only **False** value
10XS	bool	Start interlock from external Digital input signal in engine Control PLC indicating a start block condition from an external	Unknown Only **False** value

dataId	Unit	Description	Status
		system **True** - Active start block condition **False** - No start block	
B14LO	bool	Start interlock low lubrication oil pressure. Signal indicating if engine start is blocked due to low lubrication oil priming pressure **True** - Active start block condition **False** - No start block	Ok
90XS	Enum	Digital speed governor status code. Code value indicating minor alarm condition. **0..1** = No alarm **2** = Communication error PLC <-> Governor **3..4** = No alarm **5** = Remote speed demand signal failure **6** = Charge air pressure sensor failure **7** = Speed sensor 1 failure **8** = Speed sensor 2 failure **9** = LON communication failure **10** = Load sensor signal failure **11** = No alarm **12** = Speed sensor 1 failure with clutch open **13** = Both speed sensors failure **14** = Over speed **15** = Wire break on control signal to fuel actuator	Ok
25EL	rpm	Turbocharger speed	Ok
05CA	°C	Charge air temperature in air receiver	Ok
06HT	°C	HT water temperature (jacket water) at engine outlet	Ok

dataId	Unit	Description	Status
05LO	°C	Lubrication oil temperature at engine inlet	Ok
05DO	°C	Fuel oil temperature at engine inlet	Ok
10DO	°C	Fuel oil pressure after fine filter at engine inlet	Ok
10SA	bar	Starting air pressure	Ok Sensor failure on engine 1
14SA	bar	Control air pressure	Ok
10HT	bar	HT water pressure at engine inlet	Ok
11LO	bar	Rocker arms lubrication oil pressure	Ok
21CA	bar	Charge air pressure in air receiver	Ok
B04LO	bool	Oil mist detector failure. Digital signal indicating a problem with the oil mist detector **True** - No alarm condition **False** - Active alarm	Unknown Only **True** value
10EX	°C	Exhaust temperature after turbocharger	Ok
11EX	°C	Exhaust temperature before turbocharger cylinder group 1	Ok
12EX	°C	Exhaust temperature before turbocharger cylinder group 2	Ok
01EX	°C	Exhaust temperature at cylinder 1 outlet	Ok
02EX	°C	Exhaust temperature at cylinder 2 outlet	Ok
03EX	°C	Exhaust temperature at cylinder 3 outlet	Ok
04EX	°C	Exhaust temperature at cylinder 4 outlet	Ok
05EX	°C	Exhaust temperature at cylinder 5 outlet	Ok
06EX	°C	Exhaust temperature at cylinder 6 outlet	Ok
07EX	°C	Exhaust temperature at cylinder 7 outlet	Ok
08EX	°C	Exhaust temperature at cylinder 8 outlet	Ok

dataId	Unit	Description	Status
05HT	°C	HT water temperature (jacket water) at engine inlet	Ok
06LO	°C	Lubrication oil temperature at engine outlet	Ok
05LT	°C	LT water temperature before charge air cooler	Ok
10LT	bar	LT water pressure	Ok
05NC	°C	Nozzle cooling oil temperature	Ok
13LO	bar	Lubrication oil pressure before filter	Ok
10LO	bar	Lubrication oil pressure after filter	Ok
12DO	bar	High pressure pipe fuel oil leakage pressure	Unknown No enough variations
01LO	bool	Low level in lubrication oil sump **True** - Level ok **False** - Low level	Unknown Only **True** value
13DO	bar	Fuel oil pressure before filter	Ok
10NC	bar	Nozzle oil cooling pressure	Ok
B24EL	mm	Fuel rack position	Ok
31EL_LIM	mm	Active fuel limit. The current max allowed fuel rack position	Error
31EL_Alarm	bool	Overload alarm. Digital signal indicating overload condition. **True** - No alarm **False** - Overload	Ok
D24EL	mA	Feedback signal from fuel rack transmitter	Ok
C24EL	mm	Fuel rack position corrected. Fuel rack position after calibration and fuel temperature correction	Ok
VVTMiller	bool	Feedback signal indicating VVT in *Miller* position	Error Shows only **False**
VVTLowLoad	bool	Feedback signal indicating VVT in *Low Load* position	Error Shows only

dataId	Unit	Description	Status
			False
VVTFailure	n	VVT failure code	Unknown Shows only **0**
VVTLLCmd	bool	VVT *Low Load* position command from the Control PLC	Error Shows only **False**
51XA		Status UN01. Node status for CAN300 communication module **05** - Running	Ok
53XA		Status UN03. Node status for CAN IO module 3 **05** - Running	Ok
54XA		Status UN04. Node status for CAN IO module 4 **05** - Running	Ok
55XA		Status UN05. Node status for CAN IO module 5 **05** - Running	Ok
57XA		Status UN07. Node status for CAN IO module 7 **05** - Running	Ok
16DO	bar	Fuel oil pressure after fine filter	Ok
B21CA	bar	Charge air pressure in air receiver	Ok
14LO	bar	Lubrication oil pressure after filter	Ok
24EL	mm	Fuel rack position	Ok
07HT	°C	HT water temperature (jacket water) at engine outlet	Ok
15LO	bar	Lubrication oil pressure after filter	Ok
05XS	bool	0-pitch start block. Digital signal blocking engine start if not 0-pitch	Unknown Shows only **False**
B61XS	bool	Auto stop active. Digital signal indicating if an auto stop condition is true	Ok
D0_10013	bool	Governor - RUN input. Digital input to speed governor indicating RUN condition	Ok

dataId	Unit	Description	Status
		True - RUN active **False** - STOP active	
D0_10016	bool	Governor - Clutch status input Digital input to speed governor indicating clutch status **True** - Clutch closed **False** - Clutch open	Ok
D0_10012	bool	Governor - Isochronous mode Digital input to speed governor indicating request for Isochronous mode **True** - Isoch mode **False** - Droop mode	Unknown Shows only **False**
D0_10024	bool	Governor - Torque fuel limit active **True** - Fuel limit active **False** - Normal	Unknown Shows only **False**
D0_10025	bool	Governor - Boost fuel limit active **True** - Fuel limit active **False** - Normal	Ok
D0_10026	bool	Governor - Start/max fuel limit active **True** - Fuel limit active **False** - Normal	Ok
D0_10027	bool	Governor - Load fuel limit active **True** - Fuel limit active **False** - Normal	Unknown Shows only **False**
D26_30001	rpm	Engine speed	Ok
D26_30003	rpm	Engine speed reference. Set point for speed governor as received from the propulsion control system	Ok
D26_30004	%	Actuator position command from speed governor	Ok
D26_30005	mm	Fuel rack position indication	Ok
D26_30006	bar	Engine BMEP	Ok
D26_30008	kW	Engine power output	Ok
D26_30009	bar	Charge air pressure in receiver	Ok

dataId	Unit	Description	Status
D26_30016	%	Active fuel limit. Max allowed actuator position	Ok
MsgCount		Message counter	Ok