CCGS CONSTABLE CARRIÈRE

AF	10/12/2012	As-Fitted	PM	AJM	BF
Rev.	Date	Description	Perform	Check	Appr.

Client: CANADIAN COAST GUARD	Title: Alarm, Monitoring and Control System - Annotated List of Inputs and Outputs
	MID-SHORE PATROL VESSEL

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Format: Letter	Project No.: 6094
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Drawing No: AF6097-25200-01	Rev AF

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Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0304	PME Charge Air Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B9
0049	PME Coolant Pressure - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B16
0305	PME Coolant Temp - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0306	PME Cranckcase Pressure - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device #535 530 23 75 with ECU7 adapter #X00E50203279	Sensor B50
0553	PME Cylinder 1 to 12 Temperature (analog indication on CCAMS display)	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	
0556	PME Exhaust Temperature After Cylinder A1 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0556	PME Exhaust Temperature After Cylinder A1 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0556	PME Exhaust Temperature After Cylinder A2 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0556	PME Exhaust Temperature After Cylinder A2 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0556	PME Exhaust Temperature After Cylinder A3 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0556	PME Exhaust Temperature After Cylinder A3 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0556	PME Exhaust Temperature After Cylinder A4 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0556	PME Exhaust Temperature After Cylinder A4 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0556	PME Exhaust Temperature After Cylinder A5 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0556	PME Exhaust Temperature After Cylinder A5 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0556	PME Exhaust Temperature After Cylinder A6 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0556	PME Exhaust Temperature After Cylinder A6 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0556	PME Exhaust Temperature After Cylinder B1 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0556	PME Exhaust Temperature After Cylinder B1 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0556	PME Exhaust Temperature After Cylinder B2 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0556	PME Exhaust Temperature After Cylinder B2 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0556	PME Exhaust Temperature After Cylinder B3 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0556	PME Exhaust Temperature After Cylinder B3 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0556	PME Exhaust Temperature After Cylinder B4 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0556	PME Exhaust Temperature After Cylinder B4 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0556	PME Exhaust Temperature After Cylinder B5 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0556	PME Exhaust Temperature After Cylinder B5 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0556	PME Exhaust Temperature After Cylinder B6 - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0556	PME Exhaust Temperature After Cylinder B6 - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0557	PME Exhaust Temperature Before Turbine A -High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.21
0558	PME Exhaust Temperature Before Turbine B - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.22
1011	PME FO Pre-Filter No.1 - High Water Level	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Disconnect W011,1 cable from sensor, connect to a supplemental water sensor and put in water	Switch on pre-filter
1012	PME FO Pre-Filter No.2 - High Water Level	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Disconnect W011,2 cable from sensor, connect to a supplemental water sensor and put in water	Switch on pre-filter
0308	PME Fuel Leakage	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Remove sensor from leakage tank and put in water	Sensor F46
0309	PME Fuel Pressure After Filter - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B34.1
0314	PME Lube Oil Differential Pressure - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0317	PME Lube Oil Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B7
0559	PME Main Bearing 1 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.1
0559	PME Main Bearing 2 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.2

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0559	PME Main Bearing 3 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.3
0559	PME Main Bearing 4 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.4
0559	PME Main Bearing 5 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.5
0559	PME Main Bearing 6 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.6
0559	PME Main Bearing 7 Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.7
0560	PME Main Bearings Temperature (analog indication on CCAMS display)	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	
0318	PME Oil Pressure After Filter - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0319	PME Priming Pump Failure	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Set the PPC to off position manually	
0321	PME Raw Water Pressure - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B21
0636	PME RPM Speed	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Indication only - compare to value at engine.	
0995	PME Running	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	When engine is running check with the CCAM display	
0322	PME Shutdown - Clutch Pressure Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Activate Test button on the Allen Bradley switch	
0323	PME Shutdown - Coolant Temp High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0324	PME Shutdown - Cranckcase Pressure High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device #535 530 23 75 with ECU7 adapter #X00E50203279	Sensor B50
0325	PME Shutdown - Main Bearing 1 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.1
0325	PME Shutdown - Main Bearing 2 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.2
0325	PME Shutdown - Main Bearing 3 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.3
0325	PME Shutdown - Main Bearing 4 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.4
0325	PME Shutdown - Main Bearing 5 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.5
0325	PME Shutdown - Main Bearing 6 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.6

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0325	PME Shutdown - Main Bearing 7 Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.7
0326	PME Shutdown - Oil Pressure After Filter Low - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0327	PME Shutdown - Overspeed	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Temporary program idle RPM to be 500, press the overspeed test button in LOP	
0561	PME Shutdown - Splash Oil No.1 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.1
0561	PME Shutdown - Splash Oil No.2 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.2
0561	PME Shutdown - Splash Oil No.3 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.3
0561	PME Shutdown - Splash Oil No.4 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.4
0561	PME Shutdown - Splash Oil No.5 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.5
0561	PME Shutdown - Splash Oil No.6 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.6
0328	PME Slowdown - Charge Air Temperature High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B9
0329	PME Slowdown - Coolant Pressure Low - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B16
0330	PME Slowdown - Coolant Temp High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0562	PME Slowdown - Exh Temp After Cylinder A1 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0562	PME Slowdown - Exh Temp After Cylinder A1 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0562	PME Slowdown - Exh Temp After Cylinder A2 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0562	PME Slowdown - Exh Temp After Cylinder A2 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0562	PME Slowdown - Exh Temp After Cylinder A3 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0562	PME Slowdown - Exh Temp After Cylinder A3 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0562	PME Slowdown - Exh Temp After Cylinder A4 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0562	PME Slowdown - Exh Temp After Cylinder A4 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4

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0562	PME Slowdown - Exh Temp After Cylinder A5 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0562	PME Slowdown - Exh Temp After Cylinder A5 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0562	PME Slowdown - Exh Temp After Cylinder A6 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0562	PME Slowdown - Exh Temp After Cylinder A6 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0562	PME Slowdown - Exh Temp After Cylinder B1 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0562	PME Slowdown - Exh Temp After Cylinder B1 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0562	PME Slowdown - Exh Temp After Cylinder B2 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0562	PME Slowdown - Exh Temp After Cylinder B2 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0562	PME Slowdown - Exh Temp After Cylinder B3 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0562	PME Slowdown - Exh Temp After Cylinder B3 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0562	PME Slowdown - Exh Temp After Cylinder B4 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0562	PME Slowdown - Exh Temp After Cylinder B4 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0562	PME Slowdown - Exh Temp After Cylinder B5 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0562	PME Slowdown - Exh Temp After Cylinder B5 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0562	PME Slowdown - Exh Temp After Cylinder B6 - Above / Below - High High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0562	PME Slowdown - Exh Temp After Cylinder B6 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0331	PME Slowdown - Exh Temp Before Turbine A High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.21
0332	PME Slowdown - Exh Temp Before Turbine B High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.22
0333	PME Slowdown - Fuel Pressure After Filter Low - Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B34.1
0334	PME Slowdown - Lube Oil Temperature High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B7

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0564	PME Splash Oil No.1 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.1
0564	PME Splash Oil No.2 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.2
0564	PME Splash Oil No.3 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.3
0564	PME Splash Oil No.4 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.4
0564	PME Splash Oil No.5 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.5
0564	PME Splash Oil No.6 Difference Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.6
0337	PME Starting Air Pressure Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Release of air with manual valve beneath the sensor	
0353	PME Slowdown - Port Gearbox Lube Oil Temperature - High - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0316	PME Lube Oil Sump Level Low	DI	AM.DRP01.01.DI-05	%G00005	AM01DA-05	200	MAIN PROPULSION	Adjust low level contact on the switch by adjustment screw	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0568	SME Exhaust Temperature After Cylinder A1 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0568	SME Exhaust Temperature After Cylinder A1 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0568	SME Exhaust Temperature After Cylinder A2 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0568	SME Exhaust Temperature After Cylinder A2 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0568	SME Exhaust Temperature After Cylinder A3 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0568	SME Exhaust Temperature After Cylinder A3 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0568	SME Exhaust Temperature After Cylinder A4 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0568	SME Exhaust Temperature After Cylinder A4 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0568	SME Exhaust Temperature After Cylinder A5 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0568	SME Exhaust Temperature After Cylinder A5 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0568	SME Exhaust Temperature After Cylinder A6 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0568	SME Exhaust Temperature After Cylinder A6 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0568	SME Exhaust Temperature After Cylinder B1 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0568	SME Exhaust Temperature After Cylinder B1 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0568	SME Exhaust Temperature After Cylinder B2 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0568	SME Exhaust Temperature After Cylinder B2 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0568	SME Exhaust Temperature After Cylinder B3 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0568	SME Exhaust Temperature After Cylinder B3 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0568	SME Exhaust Temperature After Cylinder B4 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0568	SME Exhaust Temperature After Cylinder B4 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0568	SME Exhaust Temperature After Cylinder B5 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0568	SME Exhaust Temperature After Cylinder B5 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0568	SME Exhaust Temperature After Cylinder B6 - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0568	SME Exhaust Temperature After Cylinder B6 - Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0557	SME Exhaust Temperature Before Turbine A -High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.21
0558	SME Exhaust Temperature Before Turbine B - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.22
0439	SME Shutdown - Main Bearing 1 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.1
0439	SME Shutdown - Main Bearing 2 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.2
0439	SME Shutdown - Main Bearing 3 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.3
0439	SME Shutdown - Main Bearing 4 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.4
0439	SME Shutdown - Main Bearing 5 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.5
0439	SME Shutdown - Main Bearing 6 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.6
0439	SME Shutdown - Main Bearing 7 Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.7
0573	SME Shutdown - Splash Oil No.1 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.1
0573	SME Shutdown - Splash Oil No.2 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.2
0573	SME Shutdown - Splash Oil No.3 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.3
0573	SME Shutdown - Splash Oil No.4 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.4
0573	SME Shutdown - Splash Oil No.5 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.5
0573	SME Shutdown - Splash Oil No.6 Diff. Temp. High - High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.6
0575	SME Slowdown - Exh Temp After Cylinder A1 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0575	SME Slowdown - Exh Temp After Cylinder A1 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.1
0575	SME Slowdown - Exh Temp After Cylinder A2 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0575	SME Slowdown - Exh Temp After Cylinder A2 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.2
0575	SME Slowdown - Exh Temp After Cylinder A3 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0575	SME Slowdown - Exh Temp After Cylinder A3 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.3
0575	SME Slowdown - Exh Temp After Cylinder A4 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0575	SME Slowdown - Exh Temp After Cylinder A4 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.4
0575	SME Slowdown - Exh Temp After Cylinder A5 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0575	SME Slowdown - Exh Temp After Cylinder A5 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.5
0575	SME Slowdown - Exh Temp After Cylinder A6 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0575	SME Slowdown - Exh Temp After Cylinder A6 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.6
0575	SME Slowdown - Exh Temp After Cylinder B1 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0575	SME Slowdown - Exh Temp After Cylinder B1 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.7
0575	SME Slowdown - Exh Temp After Cylinder B2 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0575	SME Slowdown - Exh Temp After Cylinder B2 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.8
0575	SME Slowdown - Exh Temp After Cylinder B3 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0575	SME Slowdown - Exh Temp After Cylinder B3 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.9
0575	SME Slowdown - Exh Temp After Cylinder B4 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0575	SME Slowdown - Exh Temp After Cylinder B4 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.10
0575	SME Slowdown - Exh Temp After Cylinder B5 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0575	SME Slowdown - Exh Temp After Cylinder B5 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.11
0575	SME Slowdown - Exh Temp After Cylinder B6 - Above / Below - High High	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0575	SME Slowdown - Exh Temp After Cylinder B6 - Above / Below - Low Low	MTU CAN	190.1.1.41		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	Sensor B4.12
0418	SME Charge Air Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B9
0053	SME Coolant Pressure - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B16
0419	SME Coolant Temp - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0420	SME Cranckcase Pressure - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device #535 530 23 75 with ECU7 adapter #X00E50203279	Sensor B50
0565	SME Cylinder 1 to 12 Temperature (analog indication on CCAMS display)	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection NiCr-Ni, One cylinder is tested	
0569	SME Exhaust Temperature Before Turbine A - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.21
0570	SME Exhaust Temperature Before Turbine B - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.22
1013	SME FO Pre-Filter No.1 - High Water Level	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Disconnect W011,1 cable from sensor, connect to a supplemental water sensor and put in water	Switch on pre-filter
1014	SME FO Pre-Filter No.2 - High Water Level	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Disconnect W011,2 cable from sensor, connect to a supplemental water sensor and put in water	Switch on pre-filter
0422	SME Fuel Leakage	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Remove sensor from leakage tank and put in water	Sensor F46
0423	SME Fuel Pressure After Filter - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B34.1
0428	SME Lube Oil Differential Pressure - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0431	SME Lube Oil Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B7
0571	SME Main Bearing 1 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.1
0571	SME Main Bearing 2 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.2
0571	SME Main Bearing 3 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.3
0571	SME Main Bearing 4 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.4

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0571	SME Main Bearing 5 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.5
0571	SME Main Bearing 6 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.6
0571	SME Main Bearing 7 Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	Sensor B57.7
0572	SME Main Bearings Temperature (analog indication on CCAMS display)	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one bearing is tested)	
0432	SME Oil Pressure After Filter - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0433	SME Priming Pump Failure	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Set the PPC to off position manually	
0435	SME Raw Water Pressure - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B21
0654	SME RPM Speed	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Indication only - compare to value at engine.	
0999	SME Running	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	When engine is running check with the CCAM display	
0436	SME Shutdown - Clutch Pressure Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Activate Test button on the Allen Bradley switch	
0437	SME Shutdown - Coolant Temp High High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0440	SME Shutdown - Oil Pressure After Filter Low - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B5.1
0441	SME Shutdown - Overspeed	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Temporary program idle RPM to be 500, press the overspeed test button in LOP	
0442	SME Slowdown - Charge Air Temperature High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B9
0443	SME Slowdown - Coolant Pressure Low - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B16
0444	SME Slowdown - Coolant Temp High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B6
0445	SME Slowdown - Exh Temp Before Turbine A High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.21
0446	SME Slowdown - Exh Temp Before Turbine B High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT100	Sensor B4.22
0447	SME Slowdown - Fuel Pressure After Filter Low - Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection for pressure	Sensor B34.1
0448	SME Slowdown - Lube Oil Temperature High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	Sensor B7

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0576	SME Splash Oil No.1 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.1
0576	SME Splash Oil No.2 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.2
0576	SME Splash Oil No.3 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.3
0576	SME Splash Oil No.4 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.4
0576	SME Splash Oil No.5 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.5
0576	SME Splash Oil No.6 Difference Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000 (one splash is tested)	Sensor B77.6
0451	SME Starting Air Pressure Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Release of air with manual valve beneath the sensor	
0471	SME Slowdown - Stbd Gearbox Lube Oil Temperature - High - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0430	SME Lube Oil Sump Level Low	DI	AM.DRP02.01.DI-05	%G00309	AM02BA-05	200	MAIN PROPULSION	Adjust low level contact on the switch by adjustment screw	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0351	Port Gearbox Clutch Oil Pressure	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	In gearbox junction box, install jumper between terminals 10 and 11	
0352	Port Gearbox Filter Dirty	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Lower set piont on Allen Bradley differential pressure switch	
0353	Port Gearbox Lube Oil Temperature - High	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0354	Port Gearbox Oil Level Low	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Manually raise switch point on Murphy switch	
0355	Port Gearbox Thrust Bearing Temperature	MTU CAN	190.1.1.41		AM01ZA-02 via AM01ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0469	Stbd Gearbox Clutch Oil Pressure	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	In gearbox junction box, install jumper between terminals 10 and 11	
0470	Stbd Gearbox Filter Dirty	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Lower set piont on Allen Bradley differential pressure switch	
0471	Stbd Gearbox Lube Oil Temperature - High	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0472	Stbd Gearbox Oil Level Low	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Manually raise switch point on Murphy switch	
0473	Stbd Gearbox Thrust Bearing Temperature	MTU CAN	190.1.1.42		AM02ZA-02 via AM02ZA-04	200	MAIN PROPULSION	Simulate with MTU test device x00e50204923, connection PT1000	
0050	Port Clutch Cntrl Central Unit - Supply Failure	DI	AM.DRP01.02.DI-01	%G00033	AM01CA-01	200	MAIN PROPULSION	Switch off power for cable AM00HA-04 at CCAMS UPS A breaker No.4	
0341	Port Clutch Cntrl Central Unit - Em.Clutch Out Circuit Failure	DI	AM.DRP01.02.DI-02	%G00034	AM01CA-01	200	MAIN PROPULSION	Lift conductor on terminal X9:19 in the Port Clutch Cntrl Central Unit	
0639	Port Remote Cntrl Central Unit - Back-Up Power Failure	DI	AM.DRP01.02.DI-05	%G00037	AM01CA-02	200	MAIN PROPULSION	Switch off power for cable AM00HK-01 at CCAMS UPS B breaker No.6	
0640	Port Remote Cntrl Central Unit - Control Failure	DI	AM.DRP01.02.DI-06	%G00038	AM01CA-02	200	MAIN PROPULSION	Switch off power for cable AM00HA-01 at CCAMS UPS A breaker No.1	
0054	Stbd Clutch Cntrl Central Unit - Supply Failure	DI	AM.DRP02.02.DI-01	%G00337	AM02CA-01	200	MAIN PROPULSION	Switch off power for cable AM00HK-04 at CCAMS UPS B breaker No.9	
0458	Stbd Clutch Cntrl Central Unit - Em.Clutch Out Circuit Failure	DI	AM.DRP02.02.DI-02	%G00338	AM02CA-01	200	MAIN PROPULSION	Lift conductor on terminal X9:19 in the Stbd Clutch Cntrl Central Unit	
0658	Stbd Remote Cntrl Central Unit - Back-Up Power Failure	DI	AM.DRP02.02.DI-05	%G00341	AM02CA-02	200	MAIN PROPULSION	Switch off power for cable AM00HB-01 at CCAMS UPS A breaker No.6	
0659	Stbd Remote Cntrl Central Unit - Control Failure	DI	AM.DRP02.02.DI-06	%G00342	AM02CA-02	200	MAIN PROPULSION	Switch off power for cable AM00HJ-01 at CCAMS UPS B breaker No.1	
0801	SME Exhaust Gas After Turbo Temperature High	AI TC	AM.DRP02.05.AI-04	%R00136	AM02FA-03	200	MAIN PROPULSION	Observe temperature rise on CCAMS while engine is running - compare to readings from calibrated infra-red temperature gun.	
0532	Trailing Pump Port Gearbox Running	DI	AM.DRP03.01.DI-24	%G00632	AM03BB-08	200	MAIN PROPULSION	Confirm CCAMS indication while pump is running.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0531	Trailing Pump Port Gearbox - Not In Auto	DI	AM.DRP03.01.DI-25	%G00633	AM03BB-08	200	MAIN PROPULSION	Switch starter to manual mode - observe CCAMS indication.	
0534	Trailing Pump Stbd Gearbox Running	DI	AM.DRP03.01.DI-26	%G00634	AM03BB-10	200	MAIN PROPULSION	Confirm CCAMS indication while pump is running.	
0533	Trailing Pump Stbd Gearbox - Not In Auto	DI	AM.DRP03.01.DI-27	%G00635	AM03BB-10	200	MAIN PROPULSION	Switch starter to manual mode - observe CCAMS indication.	
0828	PME - RPM Command	AI 4-20	AM.DRP03.05.AI-11	%R000229	AM03FA-11	200	MAIN PROPULSION	Compare to actual command value.	
0829	SME - RPM Command	AI 4-20	AM.DRP03.05.AI-12	%R000230	AM03FA-12	200	MAIN PROPULSION	compare to actual command value.	
0348	Port CPP Pump Starter P1 Overload	DI	AM.DRP04.03.DI-12	%G00988	AM04DA-12	245	CPP SYSTEM	Lift lead 13 or 14 at the Port CPP P1 starter.	
0349	Port CPP Pump Starter P3 Overload	DI	AM.DRP04.03.DI-13	%G00989	AM04DA-13	245	CPP SYSTEM	Lift lead 13 or 14 at the Port CPP P3 starter.	
0343	Port CPP Hydraulic Power Pack - Low Oil Level	DI	AM.DRP04.03.DI-14	%G00990	AM04EA-12	245	CPP SYSTEM	Lift one lead at the head of the level sensor on the power pack.	
0345	Port CPP Hydraulic Power Pack - Oil Filter Clogged	DI	AM.DRP04.03.DI-15	%G00991	AM04EA-12	245	CPP SYSTEM	Lift one lead on the differential pressure sensor on the power pack	
0342	Port CPP Gravity Tank - Oil Level Low	DI	AM.DRP04.03.DI-16	%G00992	AM04DA-15	245	CPP SYSTEM	Lift conductor one or two of cable AM04DA-15 in the head of the level switch on top of the Port Gravity Tank.	
0465	Stbd CPP Pump Starter P1 Overload	DI	AM.DRP04.03.DI-28	%G01004	AM04DB-12	245	CPP SYSTEM	Lift lead 13 or 14 at the Stbd CPP P1 starter.	
0466	Stbd CPP Pump Starter P3 Overload	DI	AM.DRP04.03.DI-29	%G01005	AM04DB-13	245	CPP SYSTEM	Lift lead 13 or 14 at the Stbd CPP P3 starter.	
0055	Stbd CPP Hydraulic Power Pack - Low Oil Level	DI	AM.DRP04.03.DI-30	%G01006	AM04EA-14	245	CPP SYSTEM	Lift one lead at the head of the level sensor on the power pack.	
0462	Stbd CPP Hydraulic Power Pack - Oil Filter Clogged	DI	AM.DRP04.03.DI-31	%G01007	AM04EA-14	245	CPP SYSTEM	Lift one lead on the differential pressure sensor on the power pack	
0460	Stbd CPP Gravity Tank - Oil Level Low	DI	AM.DRP04.03.DI-32	%G01008	AM04DB-15	245	CPP SYSTEM	Lift conductor one or two of cable AM04DB-15 in the head of the level switch on top of the Stbd Gravity Tank.	
0344	Port CPP Hydraulic Power Pack - Main Pump Oil Pressure	AI 4-20	AM.DRP04.04.AI-12	%R000324	AM04EA-12	245	CPP SYSTEM	Compare CCAMS reading to value at associated local gauge on power pack.	
0346	Port CPP Hydraulic Power Pack - Static Oil Pressure in Hub	AI 4-20	AM.DRP04.04.AI-13	%R000325	AM04EA-12	245	CPP SYSTEM	Compare CCAMS reading to value at associated local gauge on power pack.	
0461	Stbd CPP Hydraulic Power Pack - Main Pump Oil Pressure	AI 4-20	AM.DRP04.04.AI-14	%R000326	AM04EA-14	245	CPP SYSTEM	Compare CCAMS reading to value at associated local gauge on power pack.	
0463	Stbd CPP Hydraulic Power Pack - Static Oil Pressure in Hub	AI 4-20	AM.DRP04.04.AI-15	%R000327	AM04EA-14	245	CPP SYSTEM	Compare CCAMS reading to value at associated local gauge on power pack.	
0347	Port CPP Hydraulic Power Pack Oil Temperature	AI RTD	AM.DRP04.05.AI-04	%R000335	AM04EA-12	245	CPP SYSTEM	Compare CCAMS reading to tempearture in the tank taken via filling cap using a calibrated Infrared temperature gun or thermometer.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0464	Stbd CPP Hydraulic Power Pack Oil Temperature	AI RTD	AM.DRP04.06.AI-04	%R000335	AM04EA-14	245	CPP SYSTEM	Compare CCAMS reading to tempearture in the tank taken via filling cap using a calibrated Infrared temperature gun or thermometer.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0580	Alarm Columns Power Supply Failure	DI	AM.DRP03.04.DI-32	%G00736	AM03HB-01	252-A4	CCAMS SYSTEM	Turn off power for cable AM00HB-05, circuit No.10 in CCAMS UPS A	
0041	Backup UPS Battery Bank Voltage (EM1) (TC in volts mode)	AI TC	AM.DRP02.05.AI-01	%R00133	AM02FA-01 via AM02CB-01	313	24V DC DIST	Compare CCAMS reading to reading at local monitor, or read voltage at battery terminals with a multimeter.	
0067	Backup UPS Battery Charger Failure (For EM1 Panel)	DI	AM.DRP02.02.DI-17	%G00353	AM02CB-16 via AM02CB-01	313	24V DC DIST	Open circuit braeker L1-20 or turn off switch on local monitor cabinet.	
0068	Backup UPS Earth Fault (EM1 Panel)	DI	AM.DRP02.02.DI-19	%G00355	AM02CB-18 via AM02CB-01	313	24V DC DIST	Simulate earth fault by pushing test button on earth fault module inside panel.	
0069	Backup UPS Rectifier Failure (For EM1 Panel)	DI	AM.DRP02.02.DI-18	%G00354	AM02CB-17 via AM02CB-01	313	24V DC DIST	Open circuit braeker E1-16 or turn off switch on local monitor cabinet.	
0946	CCAMS Drop 01 Supply Failure	DI	AM.DRP01.01.DI-32		INTERNAL	252-A2	CCAMS POWER DIST	Open fuse FU01-AM01AA or FU03-AM01AA in the AM01 CCAMS Panel.	
0092	CCAMS Drop 02 Supply Failure	DI	AM.DRP02.01.DI-32	%G00336	Internal cable within AM02 cabinet	252-A2	CCAMS POWER DIST	Open fuse FU01-AM02AA or FU03-AM02AA in the AM02 CCAMS Panel.	
0093	CCAMS Drop 03 Supply Failure	DI	AM.DRP03.01.DI-32	%G00640	Internal cable within AM03 cabinet	252-A2	CCAMS SYSTEM	Open fuse FU01-AM03AA or FU03-AM03AA in the AM03 CCAMS Panel.	
0095	CCAMS PLC Panel AM00KA Supply Failure	DI	AM.DRP03.01.DI-30	%G00638	AM00KA-30	252-A2	CCAMS SYSTEM	Open fuse 01 or 03 at CCAMS PLC A in the Wheelhouse console.	
0096	CCAMS PLC Panel AM00LA Supply Failure	DI	AM.DRP03.01.DI-31	%G00639	AM00LA-30	252-A2	CCAMS SYSTEM	Open fuse 01 or 03 at CCAMS PLC B in the MCR console.	
0097	CCAMS Power Dist. Panel AM00HC 120Vac Supply Failure	DI	AM.DRP01.01.DI-27	%G00027	AM00HC-11	252-A1b	CCAMS POWER DIST	Lift Fuse FU01-AM00HC in CCAMS UPS A	
0098	CCAMS Power Dist. Panel AM00HC 24Vdc Supply Failure	DI	AM.DRP01.01.DI-28	%G00028	AM00HC-11	252-A1b	CCAMS POWER DIST	Open Breaker CB01-AM00HC or CB02-AM00HC in CCAMS UPS A	
0099	CCAMS Power Dist. Panel AM00HL 120 VacSupply Failure	DI	AM.DRP01.01.DI-30	%G00030	AM00HL-11	252-A1b	CCAMS POWER DIST	Lift Fuse FU01-AM00HL in CCAMS UPS A	
0100	CCAMS Power Dist. Panel AM00HL 24VdcSupply Failure	DI	AM.DRP01.01.DI-31	%G00031	AM00HL-11	252-A1b	CCAMS POWER DIST	Open Breaker CB01-AM00HL or CB02-AM00HL in CCAMS UPS A	
0101	CCAMS UPS_A Battery Bank Voltage (TC in volts mode)	AI TC	AM.DRP01.04.AI-01	%R00035	AM01EA-01	252-A1b	CCAMS POWER DIST	Compare CCAMS reading to reading at local monitor, or read voltage at battery terminals with a multimeter.	
0102	CCAMS UPS_A Battery Charger Failure	DI	AM.DRP01.02.DI-17	%G00049	AM01CB-01	252-A1b	CCAMS POWER DIST	Open circuit braeker L1-21 or turn off switch on local monitor cabinet.	
0103	CCAMS UPS_A Earth Fault	DI	AM.DRP01.01.DI-26	%G00026	AM00HC-11	252-A1b	CCAMS POWER DIST	Simulate earth fault by pushing test button on earth fault module inside panel.	
0104	CCAMS UPS_A Power Supply Failure	DI	AM.DRP01.02.DI-18	%G00050	AM01CB-02	252-A1b	CCAMS POWER DIST	Open circuit braeker E312 or turn off switch on local monitor cabinet.	
0105	CCAMS UPS_B Battery Bank Voltage (TC in volts mode)	AI TC	AM.DRP01.04.AI-02	%R00036	AM01EA-02	252-A1b	CCAMS POWER DIST	Compare CCAMS reading to reading at local monitor, or read voltage at battery terminals with a multimeter.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0106	CCAMS UPS_B Battery Charger Failure	DI	AM.DRP01.02.DI-20	%G00052	AM01CB-03	252-A1b	CCAMS POWER DIST	Open circuit braeker L1-28 or turn off switch on local monitor cabinet.	
0107	CCAMS UPS_B Earth Fault	DI	AM.DRP01.01.DI-29	%G00029	AM00HL-11	252-A1b	CCAMS POWER DIST	Simulate earth fault by pushing test button on earth fault module inside panel.	
0108	CCAMS UPS_B Power Supply Failure	DI	AM.DRP01.02.DI-21	%G00053	AM01CB-04	252-A1b	CCAMS POWER DIST	Open circuit braeker E303 or turn off switch on local monitor cabinet.	
0175	E-Swbd Bus Dead	Internal	190.1.1.213	%R00001 Band 256	AM00KA-06	324-B1	SWBD - EMERG	Put Em Gen in Auto and open Em Swbd Tie-Breaker. Indication on electrical screen.	
0176	E-Swbd, 120Vac Section, Insulation Fault	Internal	190.1.1.213	%R00001 Band 4096	AM00KA-06	324-B1	SWBD - EMERG	Push the insulation fault module test button.	
0177	E-Swbd, 600Vac Section, Insulation Fault	Internal	190.1.1.213	%R00001 Band 16384	AM00KA-06	324-B1	SWBD - EMERG	Push the insulation fault module test button.	
0596	E-Swbd,240Vac Section, Insulation Fault	Internal	190.1.1.213	%R00001 Band 8192	AM00KA-06	324-B1	SWBD - EMERG	Push the insulation fault module test button.	
0626	Load Shedding PT1	Internal	190.1.1.211	%R00003 Band 4096	AM00LA-08	324-A1a	SWBD - MAIN	Reduce the Load Shedding set point to well below actual load and observe PT1 Load Shedding (P1 panel shed).	
0627	Load Shedding PT2	Internal	190.1.1.211	%R00003 Band 8192	AM00LA-08	324-A1a	SWBD - MAIN	PT2 will trip 5 seconds after PT1 if load is still above trip setting (P2 panel shed).	
0628	Load Shedding PT3	Internal	190.1.1.211	%R00003 Band 16384	AM00LA-08	324-A1a	SWBD - MAIN	PT3 will trip 5 seconds after PT2 if load is still above trip setting (P5 panel contactor opens in L1 panel - P5 shed).	
0643	E-Swbd Communication Script Internal Fault	Internal	190.1.1.213	%R0002 Band 4	AM00KA-06	324-B1	SWBD - EMERG	Open FU01-SB12AA	
0415	Shore Bkr Closed	Internal	190.1.1.211	%R00001 Band 4096	AM00LA-08	324-A1a	SWBD - MAIN	Close shore power breaker. Indication on electrical screen.	
0416	Shore Power Available	Internal	190.1.1.211	%R00001 Band 2048	AM00LA-08	324-A1a	SWBD - MAIN	When connected to shore power observe indication. Indication on electrical page.	
0417	Shore Power Bkr Tripped	Internal	190.1.1.211	%R00001 Band 8192	AM00LA-08	324-A1a	SWBD - MAIN	Activate the trip push button under the breaker motor (alarm).	
0652	Shore Power Ph. Inverter Engaged	Internal	190.1.1.211	%R00001 Band 16384	AM00LA-08	324-A1a	SWBD - MAIN	Change two phase of shore power supply, observe phase inverter function at switchboard and see indication on CCAMS (alarm).	
0524	Swbd 600Volts, Insulation Fault	Internal	190.1.1.211	%R00002 Band 32768	AM00LA-08	324-A1a	SWBD - MAIN	Push the insulation fault module test button.	
0525	Swbd PORT Bus DEAD (Close on Live)	Internal	190.1.1.211	%R00002 Band 16384	AM00LA-08	324-A1a	SWBD - MAIN	While running on the Port Generator, open the main bus tie breaker.	
0526	Swbd STBD Bus DEAD (Close on Live)	Internal	190.1.1.211	%R00001 Band 32768	AM00LA-08	324-A1a	SWBD - MAIN	While running on the Stbd Generator, open the main bus tie breaker.	
0527	Swbd Tie Breaker Closed	Internal	190.1.1.211	%R00002 Band 2048	AM00LA-08	324-A1a	SWBD - MAIN	Open and Close Tie Breaker, observe indication on CCAMS. Indication on electrical page.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0366	Port Gen Intake Manifold Air Temperature	J1939	190.1.1.21	40003	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0361	Port Gen Engine Percent Load	J1939	190.1.1.21	40004	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0367	Port Gen Oil Pressure	J1939	190.1.1.21	40006	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0362	Port Gen Engine Speed	J1939	190.1.1.21	40008	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0359	Port Gen Coolant Temperature	J1939	190.1.1.21	40011	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0364	Port Gen Fuel Rate (LPH)	J1939	190.1.1.21	40011	AM00LA-03	311-A	GEN - AUX - PT	Indication only, observe on CCAMS while engine is running	
0961	Port Gen Auto Mode	Internal	190.1.1.211	%R00001 Band 256	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch on SWBD	
0048	Port Gen In Auto (Remote)	Internal	190.1.1.211	%R00002 Band 1	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch on Generator controls	
0228	Port Gen Breaker Tripped	Internal	190.1.1.211	%R00002 Band 128	AM00LA-08	324-A1a	SWBD - MAIN	Activate the trip push button under the breaker motor	
0228	Port Gen Breaker Tripped	Internal	190.1.1.211	%R00002 Band 128	AM00LA-08	324-A1a	SWBD - MAIN	Activate the trip push button under the breaker motor	
0229	Port Gen Common Alarm	Internal SWBD	190.1.1.211	%R00002 Band 2	AM00LA-08	324-A1a	SWBD - MAIN	Trip any generator shutdown and the common alarm will follow	
0614	Port Gen Insulation Fault	Internal SWBD	190.1.1.211	%R00002 Band 256	AM00LA-08	324-A1a	SWBD - MAIN	Open terminal B9 on PLC01	
0232	Port Gen Reverse Power	Internal	190.1.1.211	%R00002 Band 32	AM00LA-08	324-A1a	SWBD - MAIN	With both generator online, when Synchronization is in manual mode, use the speed increase and speed decrease and lower the speed of one generator until the reverse	
0234	Port Gen Running	Internal SWBD	190.1.1.211	%R00002 Band 4	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, observe on CCAMS while engine is running	
0226	Port Gen Auto Start Select	Internal	190.1.1.211	%R00002 Band 512	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch	
0227	Port Gen Breaker Closed	Internal	190.1.1.211	%R00002 Band 64	AM00LA-08	324-A1a	SWBD - MAIN	Manually close the breaker and wait for alarm	
0227	Port Gen Breaker Closed	Internal	190.1.1.211	%R00002 Band 64	AM00LA-08	324-A1a	SWBD - MAIN	Manually close the breaker and wait for alarm	
0230	Port Gen E.Stop Pulled	Internal SWBD	190.1.1.211	%R00002 Band 8	AM00LA-08	324-A1a	SWBD - MAIN	Pull E-Stop and observe alarm	
0612	Port Gen Cooldown Lamp Blinking	Internal SWBD	190.1.1.211	%R00003 Band 128	AM00LA-08	324-A1a	SWBD - MAIN	Shut down the generator and observe Cooldown indication at the Switchboard and on CCAMS	
0544	Port Gen Power Meter Communication Lost	Internal	190.1.1.211	%R00015 Band 8	AM00LA-08	324-A1a	SWBD - MAIN	Remove RS 485 plug from PLC01	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0001	Port Gen Frequency	Internal SWBD	190.1.1.211	%R1100	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0264	Port Gen Voltage L1-L2	Internal SWBD	190.1.1.211	%R1105	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0265	Port Gen Voltage L2-L3	Internal SWBD	190.1.1.211	%R1106	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0266	Port Gen Voltage L3-L1	Internal SWBD	190.1.1.211	%R1107	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0252	Port Gen Amp Phase A	Internal SWBD	190.1.1.211	%R1109	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0254	Port Gen Amp Phase B	Internal SWBD	190.1.1.211	%R1110	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0255	Port Gen Amp Phase C	Internal SWBD	190.1.1.211	%R1111	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0258	Port Gen kWatt Total	Internal SWBD	190.1.1.211	%R1117	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0373	Port Generator Exhaust Temperature	AI TC	AM.DRP01.04.AI-06	%R00040	AM01EA-05	311-A	GEN - AUX - PT	Observe temperature rise on CCAMS while genset is running - compare to readings from calibrated infra-red temperature gun.	
0363	Port Gen Fuel Leakage From Pressure Pipes Alarm	DI	AM.DRP04.03.DI-04	%G00980	AM04DA-01	311-A	GEN - AUX - PT	Open wire on switch terminals	
0368	Port Gen Oil Pressure Low	DI	AM.DRP04.03.DI-05	%G00981	AM04DA-01	311-A	GEN - AUX - PT	Open wire on switch terminals	
0369	Port Gen Oil Temp High	DI	AM.DRP04.03.DI-06	%G00982	AM04DA-01	311-A	GEN - AUX - PT	Open wire on switch terminals	
0357	Port Gen Coolant Pressure Low	DI	AM.DRP04.03.DI-07	%G00983	AM04DA-01	311-A	GEN - AUX - PT	Open wire on switch terminals	
0356	Port Gen Coolant Level Low	DI	AM.DRP04.03.DI-08	%G00984	AM04DA-01	311-A	GEN - AUX - PT	Flip test switch on coolant level sensor (Murphy Sensor)	
0358	Port Gen Coolant Temp High	DI	AM.DRP04.03.DI-09	%G00985	AM04DA-01	311-A	GEN - AUX - PT	Open wire on switch terminals	
0372	Port Gen. Start Failure (Overcrank)	DI	AM.DRP04.03.DI-10	%G00986	AM04DA-01	311-A	GEN - AUX - PT	Disable starting ability, attempt to start, after 3 failed attempts "Overcrank" alarm should appear.	
0374	Port Generator Winding Temperature Sensor 1	AI RTD	AM.DRP04.05.AI-01	%R000328	AM04FA-01	311-A	GEN - AUX - PT	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0375	Port Generator Winding Temperature Sensor 2	AI RTD	AM.DRP04.05.AI-02	%R000329	AM04FA-01	311-A	GEN - AUX - PT	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0376	Port Generator Winding Temperature Sensor 3	AI RTD	AM.DRP04.05.AI-03	%R000330	AM04FA-01	311-A	GEN - AUX - PT	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0047	Stbd Gen In Auto (Remote)	Internal	190.1.1.211	%R00001 Band 1	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch on Generator controls	
0220	Stbd Gen Breaker Tripped	Internal	190.1.1.211	%R00001 Band 128	AM00LA-08	324-A1a	SWBD - MAIN	Activate the trip push button under the breaker motor	
0046	Stbd Gen Common Alarm	Internal SWBD	190.1.1.211	%R00001 Band 2	AM00LA-08	324-A1a	SWBD - MAIN	Trip any generator shutdown and the common alarm will follow	
0608	Stbd Gen Insulation Fault	Internal SWBD	190.1.1.211	%R00001 Band 256	AM00LA-08	324-A1a	SWBD - MAIN	Open the terminal A9 on PLC01	
0962	Stbd Gen Auto Mode	Internal	190.1.1.211	%R00001 Band 256	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch on SWBD	
0962	Stbd Gen Auto Mode	Internal	190.1.1.211	%R00001 Band 256	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch	
0223	Stbd Gen Reverse Power	Internal	190.1.1.211	%R00001 Band 32	AM00LA-08	324-A1a	SWBD - MAIN	With both generators online, when Synchronization is in manual mode, use the speed increase and speed decrease and lower the speed of one generator until the reverse	
0225	Stbd Gen Running	Internal SWBD	190.1.1.211	%R00001 Band 4	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, observe on CCAMS while engine is running	
0218	Stbd Gen Auto Start Select	Internal	190.1.1.211	%R00001 Band 512	AM00LA-08	324-A1a	SWBD - MAIN	Manually activate the select switch	
0219	Stbd Gen Breaker Closed	Internal	190.1.1.211	%R00001 Band 64	AM00LA-08	324-A1a	SWBD - MAIN	Manually close the breaker and wait for alarm	
0221	Stbd Gen E.Stop Pulled	Internal SWBD	190.1.1.211	%R00001 Band 8	AM00LA-08	324-A1a	SWBD - MAIN	Pull E-Stop and observe alarm	
0606	Stbd Gen Cooldown Lamp Blinking	Internal SWBD	190.1.1.211	%R00003 Band 2	AM00LA-08	324-A1a	SWBD - MAIN	Shut down the generator and observe Cooldown indication at the Switchboard and on CCAMS	
0546	Stbd Gen Power Meter Communication Lost	Internal	190.1.1.211	%R00015 Band 16	AM00LA-08	324-A1a	SWBD - MAIN	Remove RS 485 plug from PLC01	
0546	Stbd Gen Power Meter Communication Lost	Internal	190.1.1.211	%R00015 Band 16	AM00LA-08	324-A1a	SWBD - MAIN	Remove RS 485 plug from PLC01	
0239	Stbd Gen Frequency	Internal SWBD	190.1.1.211	%R1000	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0248	Stbd Gen Voltage L1-L2	Internal SWBD	190.1.1.211	%R1005	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0249	Stbd Gen Voltage L2-L3	Internal SWBD	190.1.1.211	%R1006	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0250	Stbd Gen Voltage L3-L1	Internal SWBD	190.1.1.211	%R1007	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0235	Stbd Gen Amp Phase A	Internal SWBD	190.1.1.211	%R1009	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0237	Stbd Gen Amp Phase B	Internal SWBD	190.1.1.211	%R1010	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0238	Stbd Gen Amp Phase C	Internal SWBD	190.1.1.211	%R1011	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0242	Stbd Gen kWatt Total	Internal SWBD	190.1.1.211	%R1017	AM00LA-08	324-A1a	SWBD - MAIN	Indication only, check the value shown in CCAMS with that of switchboard when generator is running	
0056	Stbd Gen Engine Speed	J1939	190.1.1.22	40002	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0484	Stbd Gen Oil Pressure	J1939	190.1.1.22	40006	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0477	Stbd Gen Coolant Temperature	J1939	190.1.1.22	40007	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0479	Stbd Gen Engine Percent Load	J1939	190.1.1.22	40008	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0483	Stbd Gen Intake Manifold Air Temperature	J1939	190.1.1.22	40009	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0481	Stbd Gen Fuel Rate (LPH)	J1939	190.1.1.22	40011	AM00KA-10	311-B	GEN - AUX - SB	Indication only, observe on CCAMS while engine is running	
0489	Stbd Generator Exhaust Temperature	AI TC	AM.DRP02.05.AI-06	%R00138	AM02FA-06	311-B	GEN - AUX - SB	Observe temperature rise on CCAMS while genset is running - compare to readings from calibrated infra-red temperature gun.	
0480	Stbd Gen Fuel Leakage From Pressure Pipes Alarm	DI	AM.DRP04.03.DI-20	%G00996	AM04DB-01	311-B	GEN - AUX - SB	Open wire on switch terminals	
0656	Stbd Gen Oil Pressure Low	DI	AM.DRP04.03.DI-21	%G00997	AM04DB-01	311-B	GEN - AUX - SB	Open wire on switch terminals	
0485	Stbd Gen Oil Temp High	DI	AM.DRP04.03.DI-22	%G00998	AM04DB-01	311-B	GEN - AUX - SB	Open wire on switch terminals	
0475	Stbd Gen Coolant Pressure Low	DI	AM.DRP04.03.DI-23	%G00999	AM04DB-01	311-B	GEN - AUX - SB	Open wire on switch terminals	
0474	Stbd Gen Coolant Level Low	DI	AM.DRP04.03.DI-24	%G01000	AM04DB-01	311-B	GEN - AUX - SB	Flip test switch on coolant level sensor (Murphy Sensor)	
0476	Stbd Gen Coolant Temp High	DI	AM.DRP04.03.DI-25	%G01001	AM04DB-01	311-B	GEN - AUX - SB	Open wire on switch terminals	
0488	Stbd Gen. Start Failure (Overcrank)	DI	AM.DRP04.03.DI-26	%G01002	AM04DB-01	311-B	GEN - AUX - SB	Disable starting ability, attempt to start, after 3 failed attempts "Overcrank" alarm should appear.	
0490	Stbd Generator Winding Temperature Sensor 1	AI RTD	AM.DRP04.06.AI-01	%R000332	AM04GA-01	311-B	GEN - AUX - SB	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0491	Stbd Generator Winding Temperature Sensor 2	AI RTD	AM.DRP04.06.AI-02	%R000333	AM04GA-01	311-B	GEN - AUX - SB	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0492	Stbd Generator Winding Temperature Sensor 3	AI RTD	AM.DRP04.06.AI-03	%R000334	AM04GA-01	311-B	GEN - AUX - SB	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0129	E-Gen In Auto (Remote)	Internal	190.1.1.213	%R00001 Band 1	AM00KA-06	324-B1	GEN - EMERG	Manually activate the select switch on Generator controls	
0589	E-Gen Insulation Fault	Internal	190.1.1.213	%R00001 Band 128	AM00KA-06	324-B1	SWBD - EMERG	Open FU03-SP11CA	
0127	E-Gen Common Alarm	Internal	190.1.1.213	%R00001 Band 2	AM00KA-06	324-B1	GEN - EMERG	Trip any generator shutdown and the common alarm will follow.	
0124	E-Gen Auto Start Select	Internal	190.1.1.213	%R00001 Band 2048	AM00KA-06	324-B1	GEN - EMERG	Position Mode switch to Auto on Em Gen Control Panel, open Em Bus Tie and let Em Gen Start in Auto.	
0125	E-Gen Breaker Closed	Internal	190.1.1.213	%R00001 Band 32	AM00KA-06	324-B1	SWBD - EMERG	Manually close the breaker and wait for indication. Indication on electrical screen.	
0132	E-Gen Running	Internal	190.1.1.213	%R00001 Band 4	AM00KA-06	324-B1	GEN - EMERG	Observe while engine is running	
0126	E-Gen Breaker Tripped	Internal	190.1.1.213	%R00001 Band 64	AM00KA-06	324-B1	SWBD - EMERG	Activate the trip push button under the breaker motor Alarm text,	
0128	E-Gen E.Stop Pulled	Internal	190.1.1.213	%R00001 Band 8	AM00KA-06	324-B1	GEN - EMERG	With Em Gen running pull the Emergency Stop PB, observe indication on CCAMS	
0543	E-Gen Power Meter Communication Lost	Internal	190.1.1.213	%R00015 Band 4	AM00KA-06	324-B1	SWBD - EMERG	Remove RS 485 plug at PLC02	
0137	E-Gen_FREQ	Internal	190.1.1.213	%R1000	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0146	E-Gen_VOLT_L1_L2	Internal	190.1.1.213	%R1005	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0147	E-Gen_VOLT_L2_L3	Internal	190.1.1.213	%R1006	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0148	E-Gen_VOLT_L3_L1	Internal	190.1.1.213	%R1007	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0133	E-Gen_AMP_PH_A	Internal	190.1.1.213	%R1009	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0135	E-Gen_AMP_PH_B	Internal	190.1.1.213	%R1010	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0136	E-Gen_AMP_PH_C	Internal	190.1.1.213	%R1011	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0138	E-Gen_KWATT_PH_A	Internal	190.1.1.213	%R1015	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0139	E-Gen_KWATT_PH_B	Internal	190.1.1.213	%R1016	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0140	E-Gen_KWATT_PH_C	Internal	190.1.1.213	%R1017	AM00KA-06	324-B1	SWBD - EMERG	Indication only, check the value shown in CCAMS with that of emergency switchboard when generator is running	
0157	E-Gen Engine Speed	J1939	190.1.1.23	40002	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0162	E-Gen Oil Pressure	J1939	190.1.1.23	40006	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0154	E-Gen Coolant Temperature	J1939	190.1.1.23	40007	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0156	E-Gen Engine Percent Load	J1939	190.1.1.23	40008	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0161	E-Gen Intake Manifold Air Temperature	J1939	190.1.1.23	40009	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0159	E-Gen Fuel Rate (LPH)	J1939	190.1.1.23	40011	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0155	E-Gen Engine Hours	J1939	190.1.1.23	40003-40004	AM00KA-03	312	GEN - EMERG	Indication only, observe on CCAMS while engine is running	
0166	Emerg. Gen. Start Failure (Overcrank)	DI	AM.DRP02.02.DI-23	%G00359	AM02CB-05	312	SWBD - EMERG	Disable starting ability, attempt to start, after 3 failed attempts "Overcrank" alarm should appear. Test for both air and battery starting.	
0158	Emerg. Gen Fuel Leakage From Pressure Pipes Alarm	DI	AM.DRP02.02.DI-27	%G00363	AM02CB-05	312	SWBD - EMERG	Open wire on switch terminals	
0163	Emerg. Gen Oil Pressure Low	DI	AM.DRP02.02.DI-28	%G00364	AM02CB-05	312	SWBD - EMERG	Open wire on switch terminals	
0002	Emerg. Gen Oil Temp High	DI	AM.DRP02.02.DI-29	%G00365	AM02CB-05	312	SWBD - EMERG	Open wire on switch terminals	
0152	Emerg. Gen Coolant Pressure Low	DI	AM.DRP02.02.DI-30	%G00366	AM02CB-05	312	SWBD - EMERG	Open wire on switch terminals	
0151	Emerg. Gen Coolant Level Low	DI	AM.DRP02.02.DI-31	%G00367	AM02CB-05	312	SWBD - EMERG	Flip test switch on coolant level sensor (Murphy Sensor)	
0153	Emerg. Gen Coolant Temp High	DI	AM.DRP02.02.DI-32	%G00368	AM02CB-05	312	SWBD - EMERG	Open wire on switch terminals	
0168	Emerg. Generator Winding Temperature Sensor 1	AI RTD	AM.DRP02.03.AI-04	%R00128	AM02DA-04	312	GEN - EMERG	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0043	Emerg. Generator Winding Temperature Sensor 2	AI RTD	AM.DRP02.04.AI-01	%R00129	AM02DA-04	312	GEN - EMERG	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0169	Emerg. Generator Winding Temperature Sensor 3	AI RTD	AM.DRP02.04.AI-02	%R00130	AM02DA-04	312	GEN - EMERG	Observe temperature rise while genset is running - confirm readings from all three windings rise at relatively the same rate.	
0167	Emerg. Generator Exhaust Temperature	AI TC	AM.DRP02.05.AI-07	%R00139	AM02FA-07	312	GEN - EMERG	Observe temperature rise on CCAMS while genset is running - compare to readings from calibrated infra-red temperature gun.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0385	Port Steering Gear 1 - Hydraulic Oil Level Low	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit10	AM00LA-06 / ST01BA-04	561	STEERING GEAR	Lift one lead on Level Switch Sensor located on Steering Gear Hydraulic Tank	
0383	Port Steering Gear 1 - Control Power Failure	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit11	AM00LA-06	561	STEERING GEAR	Lift DC fuse 08 or 09	
0386	Port Steering Gear 1 - Motor Overload	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit12	AM00LA-06	561	STEERING GEAR	Lift lead 95 or 96 at overload ST00HC	
0379	Port Steering Gear 1 - AC Phase Failure	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit13	AM00LA-06	561	STEERING GEAR	Lift incomming AC fuse 01	
0380	Port Steering Gear 1 - AC Voltage Low	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit14	AM00LA-06	561	STEERING GEAR	Lift incomming AC fuses 01 and 02	
0384	Port Steering Gear 1 - Filter Clogged	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit4	AM00LA-06 / ST01BA-05	561	STEERING GEAR	Lift one lead on Diff Pressure Sensor located on Steering Gear Hydraulic Tank	
0388	Port Steering Gear 1 - Motor Stopped	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit5	AM00LA-06	561	STEERING GEAR	Push Start and Stop buttons, confirm indication at CCAMS	
0387	Port Steering Gear 1 - Motor Running	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit6	AM00LA-06	561	STEERING GEAR	Push Start button, confirm run indication at CCAMS	
0382	Port Steering Gear 1 - Control Loss	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit7	AM00LA-06	561	STEERING GEAR	Set "Local/Remote" switch on each starter panel to "Local" position. Observe Control Disconnect indication.	
0381	Port Steering Gear 1 - Aux. DC Power Failure	NMEA 0183	190.1.1.161	NMEA_TCP_1, bit8	AM00LA-06	561	STEERING GEAR	Lift DC fuse 03 or 04	
0395	Port Steering Gear 2 - Hydraulic Oil Level Low	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit10	AM00KA-01 / ST02BA-04	561	STEERING GEAR	Lift one lead on Level Switch Sensor located on Steering Gear Hydraulic Tank	
0393	Port Steering Gear 2 - Control Power Failure	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit11	AM00KA-01	561	STEERING GEAR	Lift DC fuse 08 or 09	
0396	Port Steering Gear 2 - Motor Overload	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit12	AM00KA-01	561	STEERING GEAR	Lift lead 95 or 96 at overload ST00HC	
0389	Port Steering Gear 2 - AC Phase Failure	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit13	AM00KA-01	561	STEERING GEAR	Lift incomming AC fuse 01	
0390	Port Steering Gear 2 - AC Voltage Low	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit14	AM00KA-01	561	STEERING GEAR	Lift incomming AC fuses 01 and 02	
0394	Port Steering Gear 2 - Filter Clogged	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit4	AM00KA-01 / ST02BA-05	561	STEERING GEAR	Lift one lead on Diff Pressure Sensor located on Steering Gear Hydraulic Tank	
0398	Port Steering Gear 2 - Motor Stopped	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit5	AM00KA-01	561	STEERING GEAR	Push Start and Stop buttons, confirm indication at CCAMS	
0397	Port Steering Gear 2 - Motor Running	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit6	AM00KA-01	561	STEERING GEAR	Push Start button, confirm run indication at CCAMS	
0392	Port Steering Gear 2 - Control Loss	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit7	AM00KA-01	561	STEERING GEAR	Set "Local/Remote" switch on each starter panel to "Local" position. Observe Control Disconnect indication.	
0391	Port Steering Gear 2 - Aux. DC Power Failure	NMEA 0183	190.1.1.162	NMEA_TCP_1, bit8	AM00KA-01	561	STEERING GEAR	Lift DC fuse 03 or 04	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0502	Stbd Steering Gear 1 - Hydraulic Oil Level Low	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit10	AM00KA-02 / ST03BA-04	561	STEERING GEAR	Lift one lead on Level Switch Sensor located on Steering Gear Hydraulic Tank	
0499	Stbd Steering Gear 1 - Control Power Failure	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit11	AM00KA-02	561	STEERING GEAR	Lift DC fuse 08 or 09	
0503	Stbd Steering Gear 1 - Motor Overload	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit12	AM00KA-02	561	STEERING GEAR	Lift lead 95 or 96 at overload ST00HC	
0495	Stbd Steering Gear 1 - AC Phase Failure	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit13	AM00KA-02	561	STEERING GEAR	Lift incomming AC fuse 01	
0496	Stbd Steering Gear 1 - AC Voltage Low	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit14	AM00KA-02	561	STEERING GEAR	Lift incomming AC fuses 01 and 02	
0500	Stbd Steering Gear 1 - Filter Clogged	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit4	AM00KA-02 / ST03BA-05	561	STEERING GEAR	Lift one lead on Diff Pressure Sensor located on Steering Gear Hydraulic Tank	
0505	Stbd Steering Gear 1 - Motor Stopped	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit5	AM00KA-02	561	STEERING GEAR	Push Start and Stop buttons, confirm indication at CCAMS	
0504	Stbd Steering Gear 1 - Motor Running	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit6	AM00KA-02	561	STEERING GEAR	Push Start button, confirm run indication at CCAMS	
0498	Stbd Steering Gear 1 - Control Loss	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit7	AM00KA-02	561	STEERING GEAR	Set "Local/Remote" switch on each starter panel to "Local" position. Observe Control Disconnect indication.	
0497	Stbd Steering Gear 1 - Aux. DC Power Failure	NMEA 0183	190.1.1.163	NMEA_TCP_2, bit8	AM00KA-02	561	STEERING GEAR	Lift DC fuse 03 or 04	
0512	Stbd Steering Gear 2 - Hydraulic Oil Level Low	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit10	AM00LA-07 / ST04BA-04	561	STEERING GEAR	Lift one lead on Level Switch Sensor located on Steering Gear Hydraulic Tank	
0510	Stbd Steering Gear 2 - Control Power Failure	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit11	AM00LA-07	561	STEERING GEAR	Lift DC fuse 08 or 09	
0513	Stbd Steering Gear 2 - Motor Overload	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit12	AM00LA-07	561	STEERING GEAR	Lift lead 95 or 96 at overload ST00HC	
0506	Stbd Steering Gear 2 - AC Phase Failure	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit13	AM00LA-07	561	STEERING GEAR	Lift incomming AC fuse 01	
0507	Stbd Steering Gear 2 - AC Voltage Low	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit14	AM00LA-07	561	STEERING GEAR	Lift incomming AC fuses 01 and 02	
0511	Stbd Steering Gear 2 - Filter Clogged	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit4	AM00LA-07 / ST04BA-05	561	STEERING GEAR	Lift one lead on Diff Pressure Sensor located on Steering Gear Hydraulic Tank	
0515	Stbd Steering Gear 2 - Motor Stopped	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit5	AM00LA-07	561	STEERING GEAR	Push Start and Stop buttons, confirm indication at CCAMS	
0514	Stbd Steering Gear 2 - Motor Running	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit6	AM00LA-07	561	STEERING GEAR	Push Start button, confirm run indication at CCAMS	
0509	Stbd Steering Gear 2 - Control Loss	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit7	AM00LA-07	561	STEERING GEAR	Set "Local/Remote" switch on each starter panel to "Local" position. Observe Control Disconnect indication.	
0508	Stbd Steering Gear 2 - Aux. DC Power Failure	NMEA 0183	190.1.1.164	NMEA_TCP_2, bit8	AM00LA-07	561	STEERING GEAR	Lift DC fuse 03 or 04	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0377	Port Main Steering Starter unit-Common Alarm	DI	AM.DRP04.02.DI-23	%G00967	AM04CB-07 via AM04CB-06	561	STEERING GEAR	Simulate any other alarm referenced for this Steering Gear starter, the "Common Alarm" will accompany it.	
0339	Port Aux. Steering Starter unit-Common Alarm	DI	AM.DRP04.02.DI-24	%G00968	AM04CB-08 via AM04CB-06	561	STEERING GEAR	Simulate any other alarm referenced for this Steering Gear starter, the "Common Alarm" will accompany it.	
0493	Stbd Main Steering Starter unit-Common Alarm	DI	AM.DRP04.02.DI-25	%G00969	AM04CB-09 via AM04CB-06	561	STEERING GEAR	Simulate any other alarm referenced for this Steering Gear starter, the "Common Alarm" will accompany it.	
0457	Stbd Aux. Steering Starter unit-Common Alarm	DI	AM.DRP04.02.DI-26	%G00970	AM04CB-10 via AM04CB-06	561	STEERING GEAR	Simulate any other alarm referenced for this Steering Gear starter, the "Common Alarm" will accompany it.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0079	Bilge MMR Port Aft Side Level High	DI	AM.DRP01.01.DI-16	%G00016	AM01BA-17	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0080	Bilge MMR Stbd Side Level High	DI	AM.DRP02.01.DI-16	%G00320	AM02BA-17	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0078	Bilge Aft Accomodation Frame 17 Port Side Level High	DI	AM.DRP03.01.DI-06	%G00614	AM03BA-06	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0676	Bilge Fwd Accomodation Frame 30 Port Side Level High	DI	AM.DRP03.01.DI-07	%G00615	AM03BA-07	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0077	Bilge Frame 16-17 Stbd Side Level High	DI	AM.DRP03.01.DI-08	%G00616	AM03BA-08	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0074	Bilge Bow Thruster Room Level High	DI	AM.DRP03.01.DI-09	%G00617	AM03BA-09	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0075	Bilge Chain Locker Level High	DI	AM.DRP03.01.DI-10	%G00618	AM03BA-10	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0076	Bilge Fore Peak Store Level High	DI	AM.DRP03.01.DI-11	%G00619	AM03BA-11	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0012	Elec.Oper.Valve (V520104)-Bilge AMR Port Valve Open	DI	AM.DRP03.03.DI-01	%G00673	AM03DA-02 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0013	Elec.Oper.Valve (V520104)-Bilge AMR Port Valve Close	DI	AM.DRP03.03.DI-02	%G00674	AM03DA-02 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0017	Elec.Oper.Valve (V520004)-Bilge AMR Stbd Valve Open	DI	AM.DRP03.03.DI-03	%G00675	AM03DA-03 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0015	Elec.Oper.Valve (V520004)-Bilge AMR Stbd Valve Close	DI	AM.DRP03.03.DI-04	%G00676	AM03DA-03 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0038	Elec.Oper.Valve (V520006)-Bilge MMR Stbd Valve Open	DI	AM.DRP03.03.DI-05	%G00677	AM03DA-04 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0036	Elec.Oper.Valve (V520006)-Bilge MMR Stbd Valve Close	DI	AM.DRP03.03.DI-06	%G00678	AM03DA-04 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0011	Elec.Oper.Valve (V520059)-Bilge Steering Compt. Valve Open	DI	AM.DRP03.03.DI-07	%G00679	AM03DA-05 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0009	Elec.Oper.Valve (V520059)-Bilge Steering Compt. Valve Close	DI	AM.DRP03.03.DI-08	%G00680	AM03DA-05 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0035	Elec.Oper.Valve (V520067)-Bilge MMR Port Valve Open	DI	AM.DRP03.03.DI-09	%G00681	AM03DA-06 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0033	Elec.Oper.Valve (V520067)-Bilge MMR Port Valve Close	DI	AM.DRP03.03.DI-10	%G00682	AM03DA-06 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0007	Elec.Oper.Valve (V520060)-Bilge Aft Accomodation Valve Open	DI	AM.DRP03.03.DI-11	%G00683	AM03DA-07 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0008	Elec.Oper.Valve (V520060)-Bilge Aft Accomodation Valve Close	DI	AM.DRP03.03.DI-12	%G00684	AM03DA-07 via AM03DA-01	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0032	Elec.Oper.Valve (V520105)-Bilge Forward Accomodation Valve Open	DI	AM.DRP03.03.DI-13	%G00685	AM03DA-08 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0030	Elec.Oper.Valve (V520105)-Bilge Forward Accomodation Valve Close	DI	AM.DRP03.03.DI-14	%G00686	AM03DA-08 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0026	Elec.Oper.Valve (V520073)-Bilge Chain Locker Rm Void Valve Open	DI	AM.DRP03.03.DI-15	%G00687	AM03DA-09 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0021	Elec.Oper.Valve (V520073)-Bilge Chain Locker Rm Void Valve Close	DI	AM.DRP03.03.DI-16	%G00688	AM03DA-09 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0020	Elec.Oper.Valve (V520048)-Bilge Bow Thruster Rm Valve Open	DI	AM.DRP03.03.DI-17	%G00689	AM03DB-02 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0019	Elec.Oper.Valve (V520048)-Bilge Bow Thruster Rm Valve Close	DI	AM.DRP03.03.DI-18	%G00690	AM03DB-02 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0025	Elec.Oper.Valve (V520058)-Bilge Chain Locker Valve Open	DI	AM.DRP03.03.DI-19	%G00691	AM03DB-03 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0023	Elec.Oper.Valve (V520058)-Bilge Chain Locker Valve Close	DI	AM.DRP03.03.DI-20	%G00692	AM03DB-03 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0029	Elec.Oper.Valve (V520062)-Bilge Fore Peak Store Valve Open	DI	AM.DRP03.03.DI-21	%G00693	AM03DB-04 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0027	Elec.Oper.Valve (V520062)-Bilge Fore Peak Store Valve Close	DI	AM.DRP03.03.DI-22	%G00694	AM03DB-04 via AM03DA-15	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0014	Elec.Oper.Valve (V520104)-Bilge AMR Port Valve Command	DO	AM.DRP03.08.DO-22	%M000406	AM03DA-02 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0016	Elec.Oper.Valve (V520004)-Bilge AMR Stbd Valve Command	DO	AM.DRP03.08.DO-23	%M000407	AM03DA-03 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0037	Elec.Oper.Valve (V520006)-Bilge MMR Stbd Valve Command	DO	AM.DRP03.08.DO-24	%M000408	AM03DA-04 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0010	Elec.Oper.Valve (V520059)-Bilge Steering Compt. Valve Command	DO	AM.DRP03.08.DO-25	%M000409	AM03DA-05 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0034	Elec.Oper.Valve (V520067)-Bilge MMR Port Valve Command	DO	AM.DRP03.08.DO-26	%M000410	AM03DA-06 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0006	Elec.Oper.Valve (V520060)-Bilge Aft Accomodation Valve Command	DO	AM.DRP03.08.DO-27	%M000411	AM03DA-07 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0031	Elec.Oper.Valve (V520105)-Bilge Forward Accomodation Valve Command	DO	AM.DRP03.08.DO-28	%M000412	AM03DA-08 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0024	Elec.Oper.Valve (V520073)-Bilge Chain Locker Rm Void Valve Command	DO	AM.DRP03.08.DO-29	%M000413	AM03DA-09 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0018	Elec.Oper.Valve (V520048)-Bilge Bow Thruster Rm Valve Command	DO	AM.DRP03.08.DO-30	%M000414	AM03DB-02 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0022	Elec.Oper.Valve (V520058)-Bilge Chain Locker Valve Command	DO	AM.DRP03.08.DO-31	%M000415	AM03DB-03 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0028	Elec.Oper.Valve (V520062)-Bilge Fore Peak Store Valve Command	DO	AM.DRP03.08.DO-32	%M000416	AM03DB-04 via AM03JB-06	520	BILGE AND BALLAST	Operate valve, observe open / close status indication locally and at CCAMS	
0042	Bilge Steering Compt. Level High	DI	AM.DRP04.01.DI-01	%G00913	AM04BA-01	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0072	Bilge AMR Port Aft Side Level High	DI	AM.DRP04.01.DI-02	%G00914	AM04BA-02	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	
0073	Bilge AMR Stbd Aft Side Level High	DI	AM.DRP04.01.DI-03	%G00915	AM04BA-03	520	BILGE AND BALLAST	Manually lift bilge sensor float to activate alarm	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0519	Steering Gear Door N°1 Open	DI	AM.DRP03.04.DI-01	%G00705	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0061	AMR Door N°2 Open	DI	AM.DRP03.04.DI-02	%G00706	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0300	MMR Door N°3 Open	DI	AM.DRP03.04.DI-03	%G00707	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0085	Bowthruster Room Door N°11 Open	DI	AM.DRP03.04.DI-04	%G00708	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0111	Corridor Door N°20 Open	DI	AM.DRP03.04.DI-05	%G00709	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0174	Escape Hatch Accomodation Open	DI	AM.DRP03.04.DI-06	%G00710	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0171	Entrance Hatch Fore Peak Open	DI	AM.DRP03.04.DI-07	%G00711	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0170	Entrance Hatch Chain Locker Open	DI	AM.DRP03.04.DI-08	%G00712	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0409	Service and Escape Hatch General Store Open	DI	AM.DRP03.04.DI-09	%G00713	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0173	Escape ER Hatch Open	DI	AM.DRP03.04.DI-10	%G00714	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0172	Escape AMR Hatch Open	DI	AM.DRP03.04.DI-11	%G00715	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0410	Service and Escape Hatch Steering Compartement Open	DI	AM.DRP03.04.DI-12	%G00716	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback and alarm after time minute delay	
0454	Staircase Door N°30 Maindeck Open	DI	AM.DRP03.04.DI-13	%G00717	AM03EA-01	555-D4	WATERTIGHT DOORS & VALVES	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0062	AMR HVAC Valve Closed	DI	AM.DRP03.04.DI-25	%G00729	AM03EA-02	555-D4	WATERTIGHT DOORS & VALVES	Operate Valve Locally - confirm indication feedback (indication only - no associated alarm)	
0063	AMR HVAC Valve Open	DI	AM.DRP03.04.DI-26	%G00730	AM03EA-02	555-D4	WATERTIGHT DOORS & VALVES	Operate Valve Locally - confirm indication feedback (indication only - no associated alarm)	
0039	MMR HVAC Valve Closed	DI	AM.DRP03.04.DI-27	%G00731	AM03EA-02	555-D4	WATERTIGHT DOORS & VALVES	Operate Valve Locally - confirm indication feedback (indication only - no associated alarm)	
0040	MMR HVAC Valve Open	DI	AM.DRP03.04.DI-28	%G00732	AM03EA-02	555-D4	WATERTIGHT DOORS & VALVES	Operate Valve Locally - confirm indication feedback (indication only - no associated alarm)	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0598	Fixed Fire Extinguishing Galley - Gas Released	DI	AM.DRP03.01.DI-21	%G00629	AM03BB-05	555-B	FIRE SUPRESSION	Manually trigger the outer microswitch at the control box on the cylinder	
0599	Fixed Fire Extinguishing Galley - Power Failure	DI	AM.DRP03.01.DI-23	%G00631	AM03BB-05	555-B	FIRE SUPRESSION	Disconnect the power supply to the system	
0187	Fixed Fire Extinguishing MMR - Power Failure	DI	AM.DRP03.02.DI-31	%G00671	AM03CB-13	555-B	FIRE SUPRESSION	Disconnect the power supply to the system	
0186	Fixed Fire Extinguishing MMR - Gas Released	DI	AM.DRP03.02.DI-32	%G00672	AM03CB-13	555-B	FIRE SUPRESSION	Pull up the stem on system pressure switch to manually operate the switch	
0112	Corridor Door N°31 Maindeck Open	DI	AM.DRP03.04.DI-14	%G00718	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0299	Messroom Door N°27 Maindeck Open	DI	AM.DRP03.04.DI-15	%G00719	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0110	Corridor Door N°20 Below Maindeck Open	DI	AM.DRP03.04.DI-16	%G00720	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0109	Corridor Door N°17 Below Maindeck Open	DI	AM.DRP03.04.DI-17	%G00721	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0453	Staircase Door N°18 Below Maindeck Open	DI	AM.DRP03.04.DI-18	%G00722	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0603	Galley Pass Trought Door Open	DI	AM.DRP03.04.DI-19	%G00723	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback (indication only - no associated alarm)	
0190	Fire Panel 120Vac Power Source 1 Failure	DI	AM.DRP03.04.DI-20	%G00724	AM03EB-01	555-D1	FIRE DETECTION	Open breaker for Source 1	
0191	Fire Panel 120Vac Power Source 2 Failure	DI	AM.DRP03.04.DI-21	%G00725	AM03EB-01	555-D1	FIRE DETECTION	Open breaker for Source 2	
0192	Fire Panel Failure	DI	AM.DRP03.04.DI-22	%G00726	AM03EB-01	555-D1	FIRE DETECTION	Open breakers for Source 1 and 2	
0189	Fire Doors Release Push Bouton	DI	AM.DRP03.04.DI-23	%G00727	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback	
0121	Doors & Hatches Position Monitoring Cabinet Power Failure	DI	AM.DRP03.04.DI-24	%G00728	AM03EA-02	555-D3	FIRE DOORS	Operate Door - confirm indication feedback	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0206	FO Storage Tank No.01 Level	AI 4-20	AM.DRP03.05.AI-08	%R000226	AM03FA-08 via AM03FA-20	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0202	FO Service Tank Port No.02 Level	AI 4-20	AM.DRP03.05.AI-09	%R000227	AM03FA-09 via AM03FA-21	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0203	FO Service Tank Stbd No.03 Level	AI 4-20	AM.DRP03.05.AI-10	%R000228	AM03FA-10 via AM03FA-22	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0411	Sewage Sludge Tank No.06 Level	AI 4-20	AM.DRP03.06.AI-01	%R000234	AM03GA-01 and AM03GA-10	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0270	Grey Water Tank No.07a Level	AI 4-20	AM.DRP03.06.AI-02	%R000235	AM03GA-02 and AM03GA-11	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0082	Black Water Tank No.07b Level	AI 4-20	AM.DRP03.06.AI-03	%R000236	AM03GA-03 and AM03GA-12	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0120	Dirty Oil & Sludge Tank No.15 Level	AI 4-20	AM.DRP03.06.AI-04	%R000237	AM03GA-04 and AM03GA-13	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0213	Fresh Water Tank No.11 Level	AI 4-20	AM.DRP03.06.AI-05	%R000238	AM03GA-05 and AM03GA-14	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0216	Fresh Water Tank No.12 Level	AI 4-20	AM.DRP03.06.AI-07	%R000240	AM03GA-07 and AM03GA-15	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0045	FO Storage / Overflow Tank No.09 Level High (90%)	DI	AM.DRP04.02.DI-01	%G00945	AM04CA-01	252-B1	TANK LEVEL SENSORS	Lift sensor out of tank top and trip manually.	
0205	FO Storage / Overflow Tank No.09 Level High High (96%)	DI	AM.DRP04.02.DI-02	%G00946	AM04CA-01	252-B1	TANK LEVEL SENSORS	Lift sensor out of tank top and trip manually.	
0197	FO Day Tank No.08a Level Low (30%)	DI	AM.DRP04.02.DI-03	%G00947	AM04CA-02A via AM04CA-02	252-B1	TANK LEVEL SENSORS	Adjust contents of tank to trip level sensor or simulate by wirebreak.	
0196	FO Day Tank No.08a Level High (96%)	DI	AM.DRP04.02.DI-04	%G00948	AM04CA-02B via AM04CA-02	252-B1	TANK LEVEL SENSORS	Adjust contents of tank to trip level sensor or simulate by wirebreak.	
0199	FO Emerg. Gen. Reservoir Level Low	DI	AM.DRP04.02.DI-07	%G00951	AM04CA-04A via AM04CA-04	252-B1	TANK LEVEL SENSORS	Adjust contents of tank to trip level sensor or simulate by wirebreak.	
0198	FO Emerg. Gen. Reservoir Level High	DI	AM.DRP04.02.DI-08	%G00952	AM04CA-04B via AM04CA-04	252-B1	TANK LEVEL SENSORS	Adjust contents of tank to trip level sensor or simulate by wirebreak.	
0081	Bilge Water Tank No.4	AI 4-20	AM.DRP04.04.AI-05	%R000317	AM04EA-05	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0298	ME Lube Oil Storage Tank No.05	AI 4-20	AM.DRP04.04.AI-06	%R000318	AM04EA-06	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0204	FO Storage / Overflow Tank No.09	AI 4-20	AM.DRP04.04.AI-09	%R000321	AM04EA-09	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0070	Ballast Tank No.16	AI 4-20	AM.DRP04.04.AI-10	%R000322	AM04EA-10	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	
0071	Ballast Tank No.17	AI 4-20	AM.DRP04.04.AI-11	%R000323	AM04EA-11	252-B1	TANK LEVEL SENSORS	Verify CCAMS readings to manual dip of tank contents.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0059	AHU Control Panel Failure	DI	AM.DRP03.01.DI-05	%G00613	AM03BA-05	510-A	HVAC - ACCOM	Disconnect AC power to the unit - observe alarm.	
0060	AIS System Failure	DI	AM.DRP03.01.DI-17	%G00625	AM03BB-01	420-C	AIS	Turn power off to AIS system (EM2-15) or lift one of the leads on cable AM03BB-01 at relay K15 in the J4N cabinet.	
0064	Atmospheric Pressure Indicaton	AI 4-20	AM.DRP03.05.AI-06	%R000224	AM03FA-06	510-C	HVAC - MACHY FANS	Check the atm. pressure indicated at CCAM with a separate barometer	
0065	Autopilot Failure	DI	AM.DRP03.01.DI-19	%G00627	AM03BB-03	420-I	AUTOPILOT	Turn power off to Autopilot system (EM2-06) or lift conductor on terminal 9 of Module 74707.	
0066	Auxiliary alarm Group LED	DO	AM.DRP03.07.DO-05	%M000357	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0083	Bow Thruster Room Fan Local / Remote	DI	AM.DRP03.02.DI-21	%G00661	AM03CB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0084	Bow Thruster Room Fan Running	DI	AM.DRP03.02.DI-20	%G00660	AM03CB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0586	Bow Thruster Room Fan Start (P-403)	DO	AM.DRP03.08.DO-07	%M000391	AM03CB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0587	Bow Thruster Room Fan Stop (P-403)	DO	AM.DRP03.08.DO-08	%M000392	AM03CB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0086	Bridge Silence Push Button	DI	AM.DRP03.01.DI-28	%G00636	AM03HC-01	252-A4	CCAMS SYSTEM	Functional test of silence button upon receipt of an alarm.	
0087	Buzzer Bridge	DO	AM.DRP03.07.DO-09	%M000361	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0088	Buzzer Chief Eng Cabin	DO	AM.DRP03.07.DO-12	%M000364	AM03HA-02	252-A2	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0089	Buzzer MCS	DO	AM.DRP03.07.DO-10	%M000362	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0090	Buzzer Mess	DO	AM.DRP03.07.DO-11	%M000363	AM03HA-01	252-A2	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0091	Buzzer Second Eng Cabin	DO	AM.DRP03.07.DO-13	%M000365	AM03HA-03	252-A2	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0094	CCAMS Drop 04 Supply Failure	DI	AM.DRP04.01.DI-32	%G00944	INTERNAL	252-A2	CCAMS SYSTEM	Open fuse FU01-AM04AA or FU03-AM04AA in the AM04 CCAMS Panel.	
0113	Dead Man Alarm Column Group Light	DO	AM.DRP03.07.DO-18	%M000370	AM03HB-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality at alarm columns by activating an associated alarm.	
0114	Dead Man alarm Group LED	DO	AM.DRP03.07.DO-07	%M000359	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0115	Dead Man AMR Indicator Lamp	DO	AM.DRP04.07.DO-32	%M000560	AM04CA-05	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0116	Dead Man AMR Reset	DI	AM.DRP04.02.DI-10	%G00954	AM04CA-05	252-A4	CCAMS SYSTEM	Push the reset button on the AMR deadman panel	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0117	Dead Man MMR Indicator Lamp	DO	AM.DRP03.07.DO-16	%M000368	AM03BA-14	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0119	Dead Man MMR Reset	DI	AM.DRP03.01.DI-15	%G00623	AM03BA-14	252-A4	CCAMS SYSTEM	Operate to confirm functionality - observe CCAMS indication.	
0118	Dead Man On	DI	AM.DRP03.01.DI-14	%G00622	AM03BA-14	252-A4	CCAMS SYSTEM	Operate to confirm functionality - observe CCAMS indication.	
0122	Dual Axis Inclinometer Position Indication Input1	AI 4-20	AM.DRP04.04.AI-01	%R000313	AM04EA-01	252-A4	CCAMS SYSTEM	Compare values to ship's actual heel and trim	
0123	Dual Axis Inclinometer Position Indication Input2	AI 4-20	AM.DRP04.04.AI-02	%R000314	AM04EA-01	252-A4	CCAMS SYSTEM	Compare values to ship's actual heel and trim	
0150	Electrical alarm Group LED	DO	AM.DRP03.07.DO-04	%M000356	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0178	Exhaust Fan AMR Local / Remote	DI	AM.DRP04.01.DI-28	%G00940	AM04BB-11	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0179	Exhaust Fan AMR Running	DI	AM.DRP04.01.DI-27	%G00939	AM04BB-11	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0180	Exhaust Fan AMR Start	DO	AM.DRP04.07.DO-21	%M000549	AM04BB-11	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0181	Exhaust Fan AMR Stop	DO	AM.DRP04.07.DO-22	%M000550	AM04BB-11	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0182	Exhaust Fan MMR Local / Remote	DI	AM.DRP04.01.DI-26	%G00938	AM04BB-09	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0183	Exhaust Fan MMR Running	DI	AM.DRP04.01.DI-25	%G00937	AM04BB-09	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0184	Exhaust Fan MMR Start	DO	AM.DRP04.07.DO-19	%M000547	AM04BB-09	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0185	Exhaust Fan MMR Stop	DO	AM.DRP04.07.DO-20	%M000548	AM04BB-09	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0673	Filling Station - Top Bridge Red Rotating Light & Sounder	DO	AM.DRP03.07.DO-29	%M000381	AM03HB-13	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0188	Fire alarm Group LED	DO	AM.DRP03.07.DO-06	%M000358	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0767	FO Coalescer / Transfer Pump Common Alarm	DI	AM.DRP02.01.DI-18	%G00322	AM02BB-02	541	FUEL OIL	Adjust the alarm points at the differential pressure gauge to "0" and alarm has to occur after designated time delay	
0768	FO Pressure After Coalescer - Low	DI	AM.DRP02.01.DI-19	%G00323	AM02BB-03	541	FUEL OIL	Disconnect any one terminal cable at the pressure switch at coalescer outlet	
0200	FO Service / Transfer Main Pump Local / Remote	DI	AM.DRP04.01.DI-09	%G00921	AM04BA-08	541	FUEL OIL	Operate Pump from CCAMS - confirm functionality and indication feedback	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0201	FO Service / Transfer Main Pump Running	DI	AM.DRP04.01.DI-08	%G00920	AM04BA-08	541	FUEL OIL	Operate Pump from CCAMS - confirm functionality and indication feedback	
0600	FO Service / Transfer Main Pump Start	DO	AM.DRP04.07.DO-05	%M000533	AM04BA-08	541	FUEL OIL	Operate Pump from CCAMS - confirm functionality and indication feedback	
0601	FO Service / Transfer Main Pump Stop	DO	AM.DRP04.07.DO-06	%M000534	AM04BA-08	541	FUEL OIL	Operate Pump from CCAMS - confirm functionality and indication feedback	
0207	Freezer Room Temperature	AI 4-20	AM.DRP03.05.AI-03	%R000221	AM03FA-03	516	PROVISION PLANT	Verify CCAMS temperature reading with that taken by a calibrated infra-red temperature gun or thermometer.	
0208	Fresh Water Port Tank No.11 Temperature	AI RTD	AM.DRP01.03.AI-03	%R00033	AM01DA-03	530	SANIT. FRESH WATER	Disconnect sensor cables and connect it to a temperature calibrator/simulator and select sensor type to be "RTD" and simulate	
0209	Fresh Water Stbd Tank No.12 Temperature	AI RTD	AM.DRP02.03.AI-03	%R00127	AM02DA-03	530	SANIT. FRESH WATER	Disconnect sensor cables and connect it to a temperature calibrator/simulator and select sensor type to be "RTD" and simulate temperature	
0210	Fresh Water Tank No. 11 Heater Starter Low Level Cut Out	DO	AM.DRP04.07.DO-25	%M000553	AM04CA-06	530	SANIT. FRESH WATER	Decrease fluid level in tank, ensure heater cuts out while it is still submerged.	
0211	Fresh Water Tank No. 12 Heater Starter Low Level Cut Out	DO	AM.DRP04.07.DO-26	%M000554	AM04CA-07	530	SANIT. FRESH WATER	Decrease fluid level in tank, ensure heater cuts out while it is still submerged.	
0212	Fresh Water Tank No.11 Heater Starter Failure	DI	AM.DRP04.02.DI-12	%G00956	AM04CA-06	530	SANIT. FRESH WATER	Turn off power at the MCC for the Tank 11 Immersion Heater, MCC Stbd ID	
0214	Fresh Water Tank No.11 Salinity Concentration	AI 4-20	AM.DRP03.06.AI-06	%R000239	AM03GA-06	530	SANIT. FRESH WATER	Disconnect channel cable and connect it to a 4-20mA signal generator and simulate	
0215	Fresh Water Tank No.12 Heater Starter Failure	DI	AM.DRP04.02.DI-13	%G00957	AM04CA-07	530	SANIT. FRESH WATER	Turn off power at the MCC for the Tank 12 Immersion Heater, MCC Port 2G	
0217	Fresh Water Tank No.12 Salinity Concentration	AI 4-20	AM.DRP03.06.AI-08	%R000241	AM03GA-06	530	SANIT. FRESH WATER	Disconnect channel cable and connect it to a 4-20mA signal generator and simulate	
0268	Generators Cooling Water Low Pressure	DI	AM.DRP02.01.DI-09	%G00313	AM02BA-10	256	SEA WATER COOLING	Initial calibration with pressure pump and calibrated gauge. Subsequent testing via wire break.	
1015	Grey Water Transfer Pump Fault	DI	AM.DRP03.02.DI-08	%G00648	AM03CA-03B	593-A	BLACK AND GREY WATER	Open terminal 21-22 at the grey water transfer station or manually activate the contactor 7K3 at the grey water transfer station	
0271	Gyro Compass Failure	DI	AM.DRP03.01.DI-18	%G00626	AM03BB-02	426-A	COMPASS (GYRO and MAGNETIC)	Turn power off to power to Gyro Compass (EM2-08) or lift conductor on terminal 3 of TB8 in the Gyro Interface and Power Supply Unit.	
0272	H2S Concentration High (In Sewage Treatment Area)	DI	AM.DRP02.01.DI-17	%G00321	AM02BB-01	436-B	H2S DETECTION	Initial calibration with test gas sample. Subsequent test with vendor supplied test magnet.	
0821	Hot Water Calorifier Failure	DI	AM.DRP03.03.DI-28	%G00700	AM03DB-12	530	SANIT. FRESH WATER	Open lead 3 or 5 (Contactor K01) at the calorifier control panel	
0823	Hot Water Calorifier High Pressure	DI	AM.DRP03.03.DI-30	%G00702	AM03DB-12	530	SANIT. FRESH WATER	Open lead 3 or 5 (Contactor K03) at the calorifier control panel	
0822	Hot Water Calorifier High Temperature	DI	AM.DRP03.03.DI-29	%G00701	AM03DB-12	530	SANIT. FRESH WATER	Open lead 3 or 5 (Contactor K02) at the calorifier control panel	
0625	HPU - Hydraulic Oil Level Low	DI	AM.DRP03.02.DI-02	%G00642	AM03CA-01	556	HYDRAULIC SYSTEMS	Open lead 1 or 3 at the level switch	

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0624	HPU - Hydraulic Oil Level Low - Low	DI	AM.DRP03.02.DI-03	%G00643	AM03CA-01	556	HYDRAULIC SYSTEMS	Open lead 2 or G at the level switch	
0273	HPU - Hydraulic Oil Temperature High	DI	AM.DRP03.02.DI-04	%G00644	AM03CA-01	556	HYDRAULIC SYSTEMS	Disconnect sensor cable and connect it to a temperature calibrator/simulator and select sensor type to be "RTD" and simulate temperature	
0805	HVAC CONDENSING UNIT CONTROL PANEL FAILURE	DI	AM.DRP03.01.DI-03	%G00611	AM03BA-03	510-A	HVAC - ACCOM	Disconnect AC power to the unit - observe alarm.	
0581	IICS Backup 240Vac In Use	DI	AM.DRP04.02.DI-20	%G00964	AM04CB-01	430-A4	GENERAL ALARM	Turn off main 240 AC supply (L1-10) - observe CCAMS indication.	
0582	IICS Backup 240Vac Supply Alarm	DI	AM.DRP04.02.DI-18	%G00962	AM04CB-01	430-A4	GENERAL ALARM	Turn off backup 240 AC supply (E-226) - observe CCAMS indication.	
0275	IICS General Alarm	DI	AM.DRP03.01.DI-16	%G00624	AM03BA-16	430-A3	PUBLIC ADDRESS	Turn off power to General Alarm	
0629	IICS Main 240Vac In Use	DI	AM.DRP04.02.DI-19	%G00963	AM04CB-01	430-A4	GENERAL ALARM	Turn on main 240 AC supply (L1-10) - observe CCAMS indication.	
0630	IICS Main 240Vac Supply Alarm	DI	AM.DRP04.02.DI-17	%G00961	AM04CB-01	430-A4	GENERAL ALARM	Turn off main 240 AC supply (L1-10) - observe CCAMS indication.	
0276	Inlet Fan AMR Port Local / Remote	DI	AM.DRP04.01.DI-17	%G00929	AM04BA-16	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0277	Inlet Fan AMR Port Running	DI	AM.DRP04.01.DI-16	%G00928	AM04BA-16	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0278	Inlet Fan AMR Port Start	DO	AM.DRP04.07.DO-15	%M000543	AM04BA-16	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0279	Inlet Fan AMR Port Stop	DO	AM.DRP04.07.DO-16	%M000544	AM04BA-16	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0280	Inlet Fan AMR Stbd Local / Remote	DI	AM.DRP04.01.DI-19	%G00931	AM04BB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0281	Inlet Fan AMR Stbd Running	DI	AM.DRP04.01.DI-18	%G00930	AM04BB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0282	Inlet Fan AMR Stbd Start	DO	AM.DRP04.07.DO-17	%M000545	AM04BB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0283	Inlet Fan AMR Stbd Stop	DO	AM.DRP04.07.DO-18	%M000546	AM04BB-02	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0288	Inlet Fan MMR Port Local / Remote	DI	AM.DRP04.01.DI-15	%G00927	AM04BA-14	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0289	Inlet Fan MMR Port Running	DI	AM.DRP04.01.DI-14	%G00926	AM04BA-14	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0290	Inlet Fan MMR Port Start	DO	AM.DRP04.07.DO-13	%M000541	AM04BA-14	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0291	Inlet Fan MMR Port Stop	DO	AM.DRP04.07.DO-14	%M000542	AM04BA-14	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0284	Inlet Fan MMR Stbd Local / Remote	DI	AM.DRP04.01.DI-13	%G00925	AM04BA-12	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0285	Inlet Fan MMR Stbd Running	DI	AM.DRP04.01.DI-12	%G00924	AM04BA-12	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0286	Inlet Fan MMR Stbd Start	DO	AM.DRP04.07.DO-11	%M000539	AM04BA-12	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0287	Inlet Fan MMR Stbd Stop	DO	AM.DRP04.07.DO-12	%M000540	AM04BA-12	510-C	HVAC - MACHY FANS	Operate Fan from CCAMS - confirm functionality and indication feedback	
0292	LO Transfer Pump Local / Remote	DI	AM.DRP04.02.DI-22	%G00966	AM04CB-05	264	LUB OIL	Switch from Local to Remote - confirm indication at CCAMS	
0293	LO Transfer Pump Running	DI	AM.DRP04.02.DI-21	%G00965	AM04CB-05	264	LUB OIL	Start pump and confirm indication at CCAMS	
0294	LO Transfer Pump Start	DO	AM.DRP04.07.DO-09	%M000537	AM04CB-05	264	LUB OIL	CCAMS Output - confirm functionality	
0295	LO Transfer Pump Stop	DO	AM.DRP04.07.DO-10	%M000538	AM04CB-05	264	LUB OIL	CCAMS Output - confirm functionality	
0296	Machinery Alarm Column Group Light	DO	AM.DRP03.07.DO-17	%M000369	AM03HB-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality at alarm columns by activating an associated alarm.	
0297	MCR Silence Push Button	DI	AM.DRP03.01.DI-29	%G00637	AM03HC-01	252-A4	CCAMS SYSTEM	Functional test of silence button upon receipt of an alarm.	
0541	On Demand Water Heater Temperature	AI RTD	AM.DRP02.04.AI-04	%R00132	AM02EA-04	530	SANIT. FRESH WATER	Disconnect sensor cables and connect it to a temperature calibrator/simulator and select sensor type to be "RTD" and simulate temperature	
0301	Panel L1 Earth Fault on 120Vac	DI	AM.DRP04.02.DI-14	%G00958	AM04CA-09	324-A2a	L1 POWER DIST SWBD	Push the insulation fault module test button.	
0302	Panel L1 Earth Fault on 240Vac BUS A	DI	AM.DRP04.02.DI-15	%G00959	AM04CA-09	324-A2a	L1 POWER DIST SWBD	Push the insulation fault module test button.	
0303	Panel L1 Earth Fault on 240Vac BUS B	DI	AM.DRP04.02.DI-16	%G00960	AM04CA-09	324-A2a	L1 POWER DIST SWBD	Push the insulation fault module test button.	
0350	Port EOT Controller Failure	DI	AM.DRP03.02.DI-22	%G00662	Internal cable within MCR Console	252-C	ENGINE TELEGRAPH	Disconnect DC power feed to EOT Controller	
0378	Port Propulsion alarm Group LED	DO	AM.DRP03.07.DO-01	%M000353	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0399	Port Stern Tube Water Flow Low	DI	AM.DRP03.03.DI-31	%G00703	AM03DB-15	256	SEA WATER COOLING	Use valve at outlet to reduce flow below setpoint.	
0274	Reefer Condensing Unit 1 Failure	DI	AM.DRP01.01.DI-17	%G00017	AM01BB-01	516	PROVISION PLANT	Disconnect AC power to the unit - observe alarm.	
0677	Reefer Condensing Unit 2 Failure	DI	AM.DRP01.01.DI-18	%G00018	AM01BB-01	516	PROVISION PLANT	Disconnect AC power to the unit - observe alarm.	
0402	Refrigeration Room Temperature	AI 4-20	AM.DRP03.05.AI-04	%R000222	AM03FA-04	516	PROVISION PLANT	Verify CCAMS temperature reading with that taken by a calibrated infra-red temperature gun or thermometer.	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0403	Reverse Osmosis Plant 1 Fault	DI	AM.DRP03.02.DI-16	%G00656	AM03CA-05	530	SANIT. FRESH WATER	Open contact of the alarm interface relay located inside the RO plant control panel	
0406	Reverse Osmosis Plant 2 Fault	DI	AM.DRP03.02.DI-19	%G00659	AM03CB-01	530	SANIT. FRESH WATER	Open contact of the alarm interface relay located inside the RO plant control panel	
0412	Sewage Treatment Plant Fault	DI	AM.DRP03.02.DI-09	%G00649	AM03CA-03	593-A	BLACK AND GREY WATER	Make jumper S1/1 and S1/2 terminals at the sew unit control panel	
0455	Starting Air AMR Compressor Common Alarm	DI	AM.DRP04.02.DI-32	%G00976	AM04CB-16	551	COMPRESSED AIR	Open terminal X16 or X17 at the compressor starter panel	
0456	Starting Air MMR Compressor Common Alarm	DI	AM.DRP02.01.DI-31	%G00335	AM02BB-16	551	COMPRESSED AIR	Open terminal X16 or X17 at the compressor starter panel	
0655	Starting Air Pressure	AI 4-20	AM.DRP03.05.AI-15	%R000233	AM03FA-15, 16, 17, 18	551	COMPRESSED AIR	Disconnect sensor cable and connect it to a 4-20mA signal generator and simulate	
0467	Stbd EOT Controller Failure	DI	AM.DRP03.02.DI-24	%G00664	Internal cable within MCR Console	252-C	ENGINE TELEGRAPH	Disconnect DC power feed to EOT Controller	
0494	STBD Propulsion alarm Group LED	DO	AM.DRP03.07.DO-02	%M000354	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0516	Stbd Stern Tube Water Flow Low	DI	AM.DRP03.03.DI-32	%G00704	AM03DB-16	256	SEA WATER COOLING	Use valve at outlet to reduce flow below setpoint.	
0660	SW Service Cooling Pump #1 Local / Remote	DI	AM.DRP04.01.DI-07	%G00919	AM04BA-06	256	SEA WATER COOLING	Switch from Local to Remote - confirm indication at CCAMS	
0003	SW Service Cooling Pump #1 Running	DI	AM.DRP04.01.DI-06	%G00918	AM04BA-06	256	SEA WATER COOLING	Start pump and confirm indication at CCAMS	
0661	SW Service Cooling Pump #1 Status Relay	DI	AM.DRP04.01.DI-20	%G00932	AM04BA-06	256	SEA WATER COOLING	Choose lead / stand-by, confirm Indication at CCAMS.	
0663	SW Service Cooling Pump #2 Local / Remote	DI	AM.DRP04.01.DI-11	%G00923	AM04BA-10	256	SEA WATER COOLING	Switch from Local to Remote - confirm indication at CCAMS	
0004	SW Service Cooling Pump #2 Running	DI	AM.DRP04.01.DI-10	%G00922	AM04BA-10	256	SEA WATER COOLING	Start pump and confirm indication at CCAMS	
0662	SW Service Cooling Pump #2 Status Relay	DI	AM.DRP04.01.DI-21	%G00933	AM04BA-10	256	SEA WATER COOLING	Choose lead / stand-by, confirm Indication at CCAMS.	
0664	SW Services Cooling Pump #1 Start	DO	AM.DRP04.07.DO-03	%M000531	AM04BA-06	256	SEA WATER COOLING	CCAMS Output - confirm functionality	
0665	SW Services Cooling Pump #1 Stop	DO	AM.DRP04.07.DO-04	%M000532	AM04BA-06	256	SEA WATER COOLING	CCAMS Output - confirm functionality	
0666	SW Services Cooling Pump #2 Start	DO	AM.DRP04.07.DO-07	%M000535	AM04BA-10	256	SEA WATER COOLING	CCAMS Output - confirm functionality	
0667	SW Services Cooling Pump #2 Stop	DO	AM.DRP04.07.DO-08	%M000536	AM04BA-10	256	SEA WATER COOLING	CCAMS Output - confirm functionality	
0528	Tank alarm Group LED	DO	AM.DRP03.07.DO-08	%M000360	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	

Signal ID	Signal Description	Channel Type	Channel ID	PLC Register	Cable #	ISI System No.	SYSTEM DESC	TEST PROCEDURE	COMMENTS
0529	Thruster alarm Group LED	DO	AM.DRP03.07.DO-03	%M000355	AM03HC-01	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality of LED at alarm panels	
0530	To IICS module for Loudhailer	DO	AM.DRP03.07.DO-30	%M000382	AM03HB-14	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0535	Under Pressure in MMR	AI 4-20	AM.DRP03.05.AI-07	%R000225	AM03FA-07	510-C	HVAC - MACHY FANS	Disconnect channel cable and connect it to a 4-20mA signal generator and simulate	
0005	Unoccupied - Top Bridge Yellow Rotating Light	DO	AM.DRP03.07.DO-28	%M000380	AM03HB-12	252-A4	CCAMS SYSTEM	CCAMS Output - confirm functionality	
0536	Unoccupied Vessel Key Switch	DI	AM.DRP03.01.DI-13	%G00621	AM03BA-13	252-A4	CCAMS SYSTEM	Operate to confirm functionality - observe CCAMS indication.	
0537	Vaccum Collecting Unit Fault	DI	AM.DRP03.02.DI-12	%G00652	AM03CA-04	593-A	BLACK AND GREY WATER	Open jumper 6-7 from the vaccum unit starter panel	
0542	Whistle Supply Failure	DI	AM.DRP03.01.DI-20	%G00628	AM03BB-04	420-G	WHISTLE	Turn off whistle supply (E2-20)	