

USP&E



32MW HFO MAN 18V3240 **New Surplus Power Plant**



HUGELY DISCOUNTED - PRICE NEGOTIABLE!

MUST SELL PLANT IN 2019 !!

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Overview

USP&E Global hereby presents a 32MW New Surplus HFO Power Plant. The 4 x MAN 18V32/40 Engines are currently located at the MAN Factory in Mannheim, Germany. The equipment in Germany include Generating Sets (4 x MAN generating sets) and Fuel treatment Modules (4 x 40' containers of fuel treatment, pumping and booster modules). Most of the Balance of Plant (BoP) equipment is in Jakarta, Indonesia and with a few containers of electrical panels (2 x 40' containers of electrical control panels) in Mumbai, India. The equipment in Indonesia include Engine Hall Overhead Crane, Medium Voltage (11kV) switchgear, Blackstart Genset, and locally fabricated mechanical modules. All the other imported equipment is in a warehouse near the main port in Jakarta in OEM packaging under clean and dry storage.

The main engine performance parameters (per engine) are as follows:

- Continuous power at 100% load – 8748kWe per ISO 3046
- Specific Fuel Consumption (SFOC) at 100% load – 192.9 g/kWhe (per ISO 3046 and using fuel with Net Calorific Value (NCV) of 42,700 kJ/kg.
- Lube Oil Consumption – 5.4kg/h

The equipment available is essentially a complete 32MW HFO power station. The only missing equipment are the buildings, tanks, some piping materials, general installation consumables and the civil works. Furthermore, localised engineering will be required to ensure compliance to local codes and regulations. Optional supply available is a complete 5-bay 150kV switchyard.



All equipment is brand new, never used or installed and is currently in original OEM packaging, under clean and dry storage or still packed in OEM packed containers. Majority of the equipment is complete and immediately available. The 18V32/40 CD engines were manufactured in 2010 for a large project in Brazil. The project was delayed and eventually cancelled. Since then, the engines have been under the care, maintenance and preservation by MAN. As part of the maintenance,

MAN replaced all the perishables and the fuel pumps were overhauled. Normal equipment OEM warranty and performance guarantees from MAN can be expected. The ABB 11kV alternators are brand new. The original Hyundai alternators were unsuitable for the 150kV application in parallel with the grid and hence were replaced with new ABB units. The only few equipment that has been erected at the original site is the structural steel frame for the Cooling Radiators. Some of the steel towers / gantries for the 150kV switchyard have been partly assembled. USP&E Global will determine the costs to disassemble and repack.

Many original OEM equipment warranties will be transferrable as all equipment is essentially new. Since there have been delays in the project overall, some warranties will start to expire in the next coming months. However, USP&E Global has obtained verbal assurances from nearly all suppliers to have the warranties extended. USP&E will work with the suppliers and manufacturers to ensure there is clear and defined associated costs included in the assessments. The most important warranty, being from MAN, will be assessed and costs clearly stated in writing.



The power plant comes with complete technical and engineering data including Single Line Diagrams (SLDs) along with the control architecture and the system Piping and Instrumentation Diagrams (P&IDs).

1. Plant Description and Operation

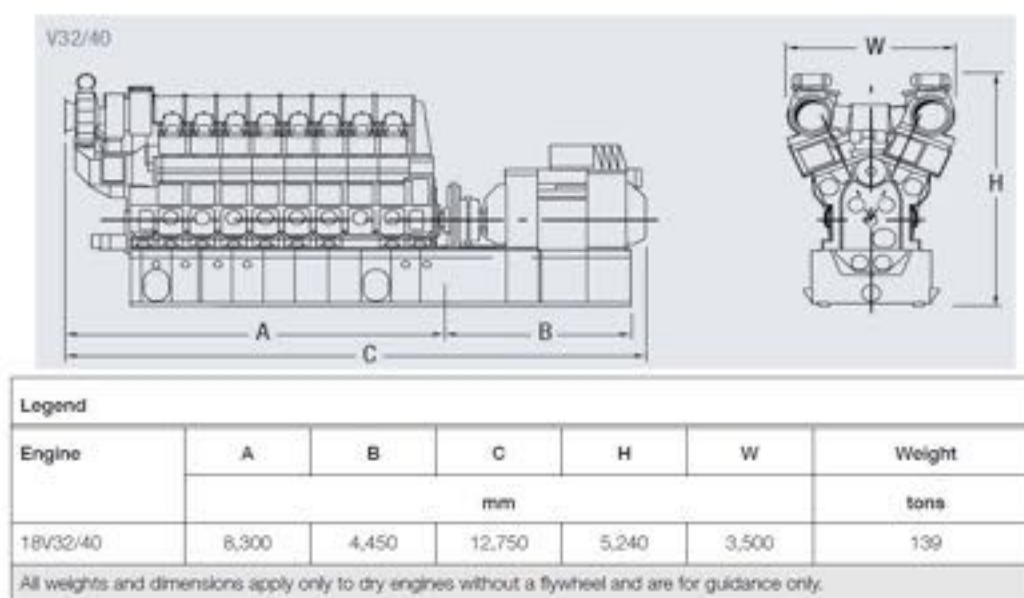
1.1 Engine Design

The 32/40 was designed for stationary applications and its suitability has been proven through extensive factory tests for Base load GenSet (grid parallel operation, island operation). With an electrical power output range of 4.3 to 8.7 MWe, the 32/40 engine is ideal for small- and medium-sized applications. The well proven 320 mm bore classic is in operation around the world – day in, day out. The interacting of all the important parts result in low wear rates and long maintenance intervals. The 32/40 engine can be operated with HFO (up to 700 cSt/50° C, RMK700), MDO (DMB) and MGO (DMA, DMZ) according ISO8217-2010. The engine's output is limited to 110 % of rated output for engines driving an alternator. Overload above 100 % is permitted briefly to prevent a frequency drop during sudden load application.



The cylinder head features optimised combustion chamber geometry for improved injection spray atomisation. This ensures balanced air/fuel mixture, reduces combustion residue, soot formation and improves fuel economy. High resistance to fatigue, effective heat removal and preventing excessive ignition pressures results in outstanding component reliability and a long service life.

The standard engine ratings of the MAN 18V32/40, 500 kw/cyl., 720 or 750 rpm, ISO-Standard-Output (as specified in DIN ISO 3046-1) is 9,000kW mech. and 8,730kW elec. The nominal alternator efficiency of the MAN V-type genset is 97.0%.



1.2 Lube oil consumption per engine

For the MAN 32/40 engine GenSet, 500 kW/cyl.; 720 or 750 rpm, the Specific lube oil consumption is 0.6 g/kWh. The total lube oil consumption is 5.4 kg/h (where Tolerance for warranty is +20 %).

1.3 Fuel oil consumption per engine

For the MAN 32/40 engine GenSet, 500 kW/cyl.; 720 or 750 rpm, the Fuel oil consumption at idle running [18V, Speed 720/750 rpm] is 134 kg/h. This is based on World Bank 2007/2008 (1,460

mg/Nm³ NO_x). The following table stipulates the fuel oil consumption per engine at various Genset percentage loading:

% Load	V32/40				
	100 ¹⁾	85	75	50	25
Spec. fuel consumption (g/kWh) with HFO/MDO without attached pumps ^{2) 3)}	187	186	190	197	208
For each attached cooling water pump (g/kWh)	+1.0	+1.5	+1.5	+2.0	+4.0
For all attached lube oil pumps (g/kWh)	+2.0	+2.5	+3.0	+4.0	+8.0
For operation with MGO (g/kWh)	+2.0				
For exhaust gas back pressure after turbine > 30 mbar	Every additional 1 mbar (0.1 kPa) backpressure addition of 0.05 g/kWh to be calculated.				
In case a charge air blow-off device is installed	Please consult MAN Diesel & Turbo				

1) Warranted fuel consumption at 100 % MCR.

2) Values under reference conditions. Tolerance +5 %. Note! The additions to fuel consumption must be considered before the tolerance for warranty is taken into account.

3) NO_x emissions according to World Bank 2007/2008.

Nm³ corresponds to one cubic meter of gas at 0° C and 101.32 kPa

1.4 General Mechanical Design Data of the Power Plant

All voltage levels and voltage variations are according to IEC 60038 Standard.

Geological and Environmental Data	Value
Altitude above sea level	< 360 m
Barometric Pressure	987 mbar
Air Dry bulb temperature	32 °C
Minimum ambient air temperature	21 °C
Maximum ambient air temperature	36 °C
Annual average ambient air temperature	26 °C
Maximum relative humidity	90%
Maximum wind velocity	64 km/h
Seismic Zone factor	<= 0.6g (zone 7 acc. to SNI 2012)

Design Temperatures	Value
Outside	
Minimum ambient air temperature	21 °C
Maximum ambient air temperature	36 °C
Powerhouse & Mechanical annex	
Maximum powerhouse temperature ceiling level	51 °C
Maximum powerhouse temperature floor level	46 °C
Powerhouse Generator cooling air	39 °C
Pump House	
Minimum pump house temperature	21 °C
Maximum pump house temperature	42 °C

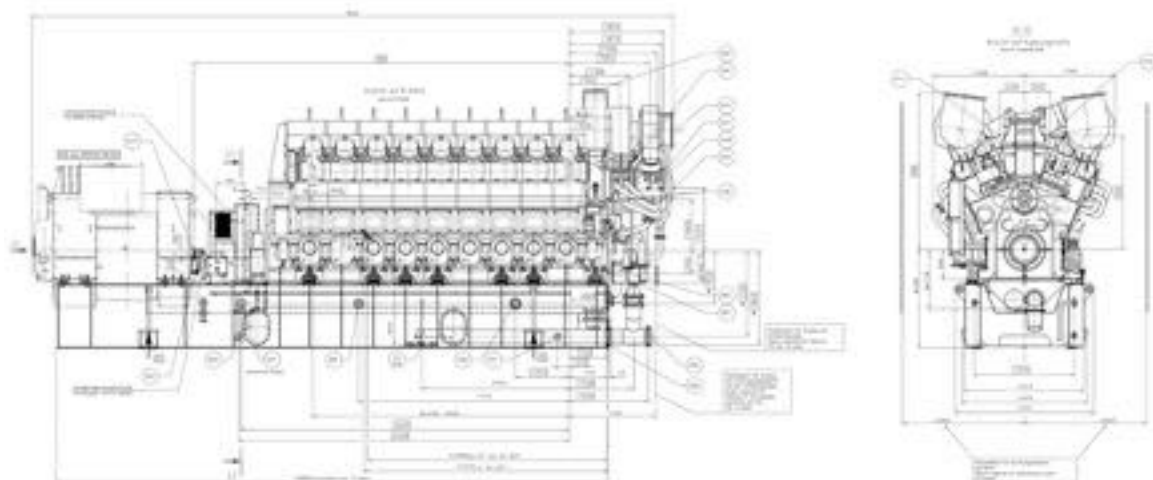
1.5 General Electrical Data of the Power Plant

All voltage levels and voltage variations are according to IEC 60038 Standard.

	Description
High Voltage Level (HV)	150kV. Earthing System: Solid grounding of the star point of HV side of Step-Up Transformer(s)
Medium Voltage Level (MV)	11kV. Earthing System: Earthed via NER(s) (normal conditions) via NES with 1 connected gen.-set per MV-Busbar, Isolated in case of earth fault for limited time
Low Voltage Level (LV)	400 VAC / 230 VAC, +/-10%, TN-S. Earthing System: Solid grounding of the star point of LV side of UAT(s) Transformer(s)
Lighting and Electrification Voltage Level (LV):	400 VAC / 230 VAC, +/-10%, TN-S
Panel Equipment Voltage Level (LV)	230 VAC, +/-10%, TN-S
Control Voltages	
MV-Switchgear, LV-MDP, HV-Switchyard	110 VDC Battery System, not earthed, in Redundant design with decoupling Diodes
Valves, flaps. Contactors, SCADA IT, Control Panel	230 VAC UPS System (Parallel Redundant UPS with Synchronizing Feature)
PLC, relays, instruments etc.	24 VDC (minus grounded) made from 230 VAC UPS System supply via Regulated Power Supply Unit (inside all Control cabinets). For Engine related control, with Regulated Power Supply Unit & Buffer Module. For Common related control, with 2 pcs. Regulated Power Supply & Redundancy Module
Earthing System	TN-S
Frequency	50 Hz (Clockwise L1-L2-L3)
Generator type	ABB AMG 1120MP08 DSE
Generator Exciter type	BASLER DECS-250 AVR with Profibus-DP interface
Rated capacity	2 Blocks with each 2 Gen.-Sets with each approx. 10.875kVA
Rated power factor	0.8
Engine type	MAN 18V 32/40 (LFO/HFO Engine)
Operation mode	- Island Mode operation (via a 150kV System) - Grid parallel mode operation (based on Dispatch Centre Load Demand)

1.6 Preliminary Layout of the Power Plant

The following diagrams represent engine installation drawings and preliminary power plant layouts.





2. Equipment Listing

2.1 Mechanical Equipment

Equipment Number	Equipment Description	Genset / Common	System	Area
MOD001-A	Engine A	Genset A	GENSET	Main Powerhouse
MOD001x-A	Engine Foundation Vibration Dampers and Spring Elements	Genset A	GENSET	Main Powerhouse
MOD001-B	Engine B	Genset B	GENSET	Main Powerhouse
MOD001x-B	Engine Foundation Vibration Dampers and Spring Elements	Genset B	GENSET	Main Powerhouse
MOD001-C	Engine C	Genset C	GENSET	Main Powerhouse
MOD001x-C	Engine Foundation Vibration Dampers and Spring Elements	Genset C	GENSET	Main Powerhouse
MOD001-D	Engine D	Genset D	GENSET	Main Powerhouse
MOD001x-D	Engine Foundation Vibration Dampers and Spring Elements	Genset D	GENSET	Main Powerhouse
MOD101-A	Engine Manual Turning Gear Module A	Genset A	GENSET	Main Powerhouse
MOD101-B	Engine Manual Turning Gear Module B	Genset B	GENSET	Main Powerhouse
MOD101-C	Engine Manual Turning Gear Module C	Genset C	GENSET	Main Powerhouse
MOD101-D	Engine Manual Turning Gear Module D	Genset D	GENSET	Main Powerhouse
MOD200-A	Generator A	Genset A	GENSET	Main Powerhouse
MOD200-B	Generator B	Genset B	GENSET	Main Powerhouse
MOD200-C	Generator C	Genset C	GENSET	Main Powerhouse
MOD200-D	Generator D	Genset D	GENSET	Main Powerhouse
MOD1001-A	Generator DE Bearing Lubrication Supply Module A	Genset A	GENSET	Main Powerhouse
MOD1001-B	Generator DE Bearing Lubrication Supply Module B	Genset B	GENSET	Main Powerhouse
MOD1001-C	Generator DE Bearing Lubrication Supply Module C	Genset C	GENSET	Main Powerhouse
MOD1001-D	Generator DE Bearing Lubrication Supply Module D	Genset D	GENSET	Main Powerhouse
1MOD002-A	Cooling Water Expansion Tanks Module A	Genset A	ENG-HT-CW / ENG-LT-CW	Silencer & WHRTO Heater
1MOD002-B	Cooling Water Expansion Tanks Module B	Genset B	ENG-HT-CW / ENG-LT-CW	Silencer & WHRTO Heater
1MOD002-C	Cooling Water Expansion Tanks Module C	Genset C	ENG-HT-CW / ENG-LT-CW	Silencer & WHRTO Heater
1MOD002-D	Cooling Water Expansion Tanks Module D	Genset D	ENG-HT-CW / ENG-LT-CW	Silencer & WHRTO Heater
2MOD002-A	Cooling Water Temperature & Flow Control Module A	Genset A	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-B	Cooling Water Temperature & Flow Control Module B	Genset B	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-C	Cooling Water Temperature & Flow Control Module C	Genset C	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-D	Cooling Water Temperature & Flow Control Module D	Genset D	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
MOD004-A	HT Cooling Water Pre-Heating Module A	Genset A	ENG-HT-CW	Main Powerhouse
MOD004-B	HT Cooling Water Pre-Heating Module B	Genset B	ENG-HT-CW	Main Powerhouse
MOD004-C	HT Cooling Water Pre-Heating Module C	Genset C	ENG-HT-CW	Main Powerhouse
MOD004-D	HT Cooling Water Pre-Heating Module D	Genset D	ENG-HT-CW	Main Powerhouse
MOD005-A	Nozzle Cooling Water Module A	Genset A	ENG-NCW	Main Powerhouse
MOD005-B	Nozzle Cooling Water Module B	Genset B	ENG-NCW	Main Powerhouse
MOD005-C	Nozzle Cooling Water Module C	Genset C	ENG-NCW	Main Powerhouse
MOD005-D	Nozzle Cooling Water Module D	Genset D	ENG-NCW	Main Powerhouse
MOD006-A	Lube Oil Separator Module / Lube Oil Fine Filter Module A	Genset A	ENG-LO-TREAT	Main Powerhouse
MOD006-B	Lube Oil Separator Module / Lube Oil Fine Filter Module B	Genset B	ENG-LO-TREAT	Main Powerhouse
MOD006-C	Lube Oil Separator Module / Lube Oil Fine Filter Module C	Genset C	ENG-LO-TREAT	Main Powerhouse
MOD006-D	Lube Oil Separator Module / Lube Oil Fine Filter Module D	Genset D	ENG-LO-TREAT	Main Powerhouse
MOD007-A	Lube Oil Cooler & Filter Module A	Genset A	ENG-LO	Main Powerhouse

Equipment Number	Equipment Description	Genset / Common	System	Area
MOD007-B	Lube Oil Cooler & Filter Module B	Genset B	ENG-LO	Main Powerhouse
MOD007-C	Lube Oil Cooler & Filter Module C	Genset C	ENG-LO	Main Powerhouse
MOD007-D	Lube Oil Cooler & Filter Module D	Genset D	ENG-LO	Main Powerhouse
MOD008-A	Fuel Oil Booster Module A	Genset A	ENG-FO	Main Powerhouse
MOD008-B	Fuel Oil Booster Module B	Genset B	ENG-FO	Main Powerhouse
MOD008-C	Fuel Oil Booster Module C	Genset C	ENG-FO	Main Powerhouse
MOD008-D	Fuel Oil Booster Module D	Genset D	ENG-FO	Main Powerhouse
MOD009-A	Lube Oil Replenishing Module A	Genset A	ENG-LO-TREAT	Main Powerhouse
MOD009-B	Lube Oil Replenishing Module B	Genset B	ENG-LO-TREAT	Main Powerhouse
MOD009-C	Lube Oil Replenishing Module C	Genset C	ENG-LO-TREAT	Main Powerhouse
MOD009-D	Lube Oil Replenishing Module D	Genset D	ENG-LO-TREAT	Main Powerhouse
MOD010-A	Combustion Air Intake Filter Module A	Genset A	ENG-INT_AIR	Main Powerhouse
MOD010-DUCT-A	Combustion Air Ducting A	Genset A	ENG-INT_AIR	Main Powerhouse
MOD010-B	Combustion Air Intake Filter Module B	Genset B	ENG-INT_AIR	Main Powerhouse
MOD010-DUCT-B	Combustion Air Ducting B	Genset B	ENG-INT_AIR	Main Powerhouse
MOD010-C	Combustion Air Intake Filter Module C	Genset C	ENG-INT_AIR	Main Powerhouse
MOD010-DUCT-C	Combustion Air Ducting C	Genset C	ENG-INT_AIR	Main Powerhouse
MOD010-D	Combustion Air Intake Filter Module D	Genset D	ENG-INT_AIR	Main Powerhouse
MOD010-DUCT-D	Combustion Air Ducting D	Genset D	ENG-INT_AIR	Main Powerhouse
MOD011-A	Engine Hall Ventilation & Filter Module (Including louvres) A	Genset A	GENSET	Main Powerhouse
MOD011-DUCT-A	Engine Hall Ventilation Ducting A	Genset A	GENSET	Main Powerhouse
MOD011-B	Engine Hall Ventilation & Filter Module (Including louvres) B	Genset B	GENSET	Main Powerhouse
MOD011-DUCT-B	Engine Hall Ventilation Ducting B	Genset B	GENSET	Main Powerhouse
MOD011-C	Engine Hall Ventilation & Filter Module (Including louvres) C	Genset C	GENSET	Main Powerhouse
MOD011-DUCT-C	Engine Hall Ventilation Ducting C	Genset C	GENSET	Main Powerhouse
MOD011-D	Engine Hall Ventilation & Filter Module (Including louvres) D	Genset D	GENSET	Main Powerhouse
MOD011-DUCT-D	Engine Hall Ventilation Ducting D	Genset D	GENSET	Main Powerhouse
1MOD012-A	Engine Cooling Radiator Fan Module 1	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
2MOD012-A	Engine Cooling Radiator Fan Module 2	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
3MOD012-A	Engine Cooling Radiator Fan Module 3	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
1MOD012-B	Engine Cooling Radiator Fan Module 1	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
2MOD012-B	Engine Cooling Radiator Fan Module 2	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
3MOD012-B	Engine Cooling Radiator Fan Module 3	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
1MOD012-C	Engine Cooling Radiator Fan Module 1	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
2MOD012-C	Engine Cooling Radiator Fan Module 2	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
3MOD012-C	Engine Cooling Radiator Fan Module 3	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
1MOD012-D	Engine Cooling Radiator Fan Module 1	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
2MOD012-D	Engine Cooling Radiator Fan Module 2	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
3MOD012-D	Engine Cooling Radiator Fan Module 3	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
MOD014	Diesel Unloading Pumps Module (HSD)	Common - Unloading	DO-SUP	Unloading
1MOD015	Diesel Ring-Line Feeder Module (HSD)	Common - Pumphouse	DO-SUP	Pumphouse
2MOD015	Diesel Ring-Line Pressure Control Module (HSD)	Common - Pumphouse	DO-SUP	Main Powerhouse
MOD017	Fuel Oil Unloading Pumps Module (HFO)	Common - Unloading	FO-SUP	Unloading
1MOD018	Fuel Oil Ring-Line Feeder Module (HFO)	Common - Pumphouse	FO-SUP	Pumphouse
2MOD018	Fuel Oil Ring-Line Pressure Control Module	Common - Pumphouse	FO-SUP	Main Powerhouse

Equipment Number	Equipment Description	Genset / Common	System	Area
	(HFO)			
1MOD019	Fuel Oil Separator Module (HFO) 1	Common - Pumphouse	FO-TREAT	Pumphouse
2MOD019	Fuel Oil Separator Module (HFO) 2	Common - Pumphouse	FO-TREAT	Pumphouse
1MOD020	Starting Air Compressor Module including Pressure Reducing Module	Common - Starting Air	START-AIR	Main Powerhouse
2MOD020	Starting Air Compressor Expansion Vessel Module	Common - Starting Air	START-AIR	Main Powerhouse
MOD023	Working Air Compressor Module including Filter Dryer	Common - Working Air	WORK-AIR	Main Powerhouse
1V024	Working Air Expansion Vessel - Workshop	Common - Working Air	WORK-AIR	Workshop
MOD026	Control Air Dryer Module including Filter Dryer	Common - Control Air	CTRL-AIR	Main Powerhouse
1V027	Control Air Expansion Vessel - Pumphouse	Common - Control Air	CTRL-AIR	Pumphouse
2V027	Control Air Expansion Vessel - Unloading	Common - Control Air	CTRL-AIR	Unloading
MOD035	Lube Oil Supply Module	Common - Lube Oil	LO-SUP	Radiator Area (Nth)
MOD041	Raw Water Sand & Carbon Filter Module	Common - Water	MOD049	WTP house
MOD042	Sulphate / Hardness Removal Module	Common - Water	MOD049	WTP house
MOD043	Raw Water Ultrafiltration Module	Common - Water	MOD049	WTP house
MOD044	Fresh Water Reverse-Osmosis Module	Common - Water	MOD049	WTP house
MOD045	Treated Water Supply Pumps Module	Common - Water	MOD049	WTP house
MOD046	Fire Fighting Water pH Adjuster Module	Common - Water	MOD049	WTP house
MOD047	Sewage Injection System Module	Common - Water	MOD049	WTP house
MOD049	Water Treatment Plant	Common - Water	MOD049	WTP house
MOD050	Process Water Supply Module	Common - Water	PROC-WATER	Radiator Area (Sth)
MOD063	Thermal Oil Unloading & Receiver Tank Module	Common - Thermal Oil	TO-WHR	Main Powerhouse
MOD065	Independent Thermal Oil Heater Module (ITOH)	Common - Thermal Oil	TO-WHR	Silencer & WHRTO Heater
MOD065-DUCT	Exhaust duct and stack for ITOH	Common - Thermal Oil	TO-WHR	Silencer & WHRTO Heater
MOD066-A	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) A	Genset A	ENG-EXH	Silencer & WHRTO Heater
MOD066-B	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) B	Genset B	ENG-EXH	Silencer & WHRTO Heater
MOD066-C	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) C	Genset C	ENG-EXH	Silencer & WHRTO Heater
MOD066-D	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) D	Genset D	ENG-EXH	Silencer & WHRTO Heater
MOD067	Thermal Oil Supply Module (TOS)	Common - Thermal Oil	TO-WHR	Silencer & WHRTO Heater
MOD069	Thermal Oil Tank Farm Temperature Control Module	Common - Thermal Oil	TO-WHR	Tank Farm
1MOD070	Fuel Leakage & Sludge Collecting Tank Module 1	Common - Sludge	SL-COL	Main Powerhouse
2MOD070	Fuel Leakage & Sludge Collecting Tank Module 2	Common - Sludge	SL-COL	Main Powerhouse
1MOD073 / 1P073	Sump Pit Drain Pump - Drain Pit Engine Hall Basement	Common - Sludge	SL-COL	Main Powerhouse
2MOD073 / 2P073	Sump Pit Drain Pump - Drain Pit Radiator / Air Intake	Common - Sludge	SL-COL	Main Powerhouse
3MOD073 / 3P073	Sump Pit Drain Pump - Drain Pit Pumphouse	Common - Sludge	SL-COL	Pumphouse
4MOD073 / 4P073	Sump Pit Drain Pump - Drain Pit Tank Farm	Common - Sludge	SL-COL	Tank Farm
5MOD073 / 5P073	Sump Pit Drain Pump - Drain Pit Unloading Station	Common - Sludge	SL-COL	Unloading
6MOD0073 / 6P073	Sump Pit Drain Pump - Drain Pit Workshop	Common - Sludge	SL-COL	Main Powerhouse
MOD075	Sludge Discharge Module	Common - Sludge	SL-TREAT	Unloading
MOD076	Sludge Treatment Plant Module (STP)	Common - Sludge	SL-TREAT	Tank Farm
MOD090-A	SCR Control Unit Module (Selective Catalytic Reactor) A	Genset A	ENG-EXH	Silencer & WHRTO Heater
MOD090-B	SCR Control Unit Module (Selective Catalytic Reactor) B	Genset B	ENG-EXH	Silencer & WHRTO Heater
MOD090-C	SCR Control Unit Module (Selective Catalytic Reactor) C	Genset C	ENG-EXH	Silencer & WHRTO Heater
MOD090-D	SCR Control Unit Module (Selective Catalytic Reactor) D	Genset D	ENG-EXH	Silencer & WHRTO Heater
MIX090-A	SCR Urea and Air Mixing Duct A	Genset A	ENG-EXH	Silencer & WHRTO

Equipment Number	Equipment Description	Genset / Common	System	Area
				Heater
MIX090-B	SCR Urea and Air Mixing Duct B	Genset B	ENG-EXH	Silencer & WHRTO Heater
MIX090-C	SCR Urea and Air Mixing Duct C	Genset C	ENG-EXH	Silencer & WHRTO Heater
MIX090-D	SCR Urea and Air Mixing Duct D	Genset D	ENG-EXH	Silencer & WHRTO Heater
MOD091-A	SCR Dosing Unit Module A	Genset A	ENG-EXH	Silencer & WHRTO Heater
MOD091-B	SCR Dosing Unit Module B	Genset B	ENG-EXH	Silencer & WHRTO Heater
MOD091-C	SCR Dosing Unit Module C	Genset C	ENG-EXH	Silencer & WHRTO Heater
MOD091-D	SCR Dosing Unit Module D	Genset D	ENG-EXH	Silencer & WHRTO Heater
1MOD093	SCR Compressed Air Compressor Module including Pressure Reducing & Dryer Module	Common - SCR Air	SCR-AIR	Main Powerhouse
2MOD093	SCR Compressed Air Pressure Expansion Vessel Module	Common - SCR Air	SCR-AIR	Main Powerhouse
MOD095	UREA Unloading & Mixing Module	Common - SCR	UREA-SUP	Urea Mixing and Storage
MOD096	UREA Supply Pumps Module	Common - SCR	UREA-SUP	Urea Mixing and Storage
MOD099	Continuous Emission Measurement System (CEMS)	Common - SCR	ENG-EXH	Silencer & WHRTO Heater
MOD100-A	Exhaust Silencer and Exhaust Stack Module A	Genset A	ENG-EXH	Silencer & WHRTO Heater
	Exhaust Ducting and Expansion Bellows	Genset A	ENG-EXH	Silencer & WHRTO Heater
MOD100-B	Exhaust Silencer and Exhaust Stack Module B	Genset B	ENG-EXH	Silencer & WHRTO Heater
	Exhaust Ducting and Expansion Bellows	Genset B	ENG-EXH	Silencer & WHRTO Heater
MOD100-C	Exhaust Silencer and Exhaust Stack Module C	Genset C	ENG-EXH	Silencer & WHRTO Heater
	Exhaust Ducting and Expansion Bellows	Genset C	ENG-EXH	Silencer & WHRTO Heater
MOD100-D	Exhaust Silencer and Exhaust Stack Module D	Genset D	ENG-EXH	Silencer & WHRTO Heater
	Exhaust Ducting and Expansion Bellows	Genset D	ENG-EXH	Silencer & WHRTO Heater
MOD115	CDG 5/6 Diesel Supply Module (HSD)	Common - HSD	DO-SUP	Pumphouse
FIFI-PE	Fire Water Pump - Electric	Common - Fire Fighting	FIFI	WTP house
FIFI-PD	Fire Water Pump - Diesel	Common - Fire Fighting	FIFI	WTP house
FIFI-JP	Fire Water Jockey Pump	Common - Fire Fighting	FIFI	WTP house
FIFI-XX	Deluge System for ITOH and WHRTOH	Common - Fire Fighting	FIFI	Silencer & WHRTO Heater
FIFI-XX	Deluge System for Pump and HFO Separator House	Common - Fire Fighting	FIFI	Pumphouse
FIFI-XX	Deluge System for HFO Settling Tank #1	Common - Fire Fighting	FIFI	Tank Farm
FIFI-XX	Deluge System for HFO Settling Tank #2	Common - Fire Fighting	FIFI	Tank Farm
FIFI-XX	Foam Proportioner, Bladder and Distribution	Common - Fire Fighting	FIFI	Tank Farm
FIFI-XX	Fire Hydrants, hose boxes, extinguishers, trolleys	Common - Fire Fighting	FIFI	Site Wide
MOD2000	Blackstart Generator	Common	N/A	Main Powerhouse
M200	Overhead Crane - Engine Hall	Common	N/A	Main Powerhouse
XXX	Electric Chain hoist - 2T	Common	N/A	Workshop
CDG-5	Containerized Diesel Genset #5	Common	CDG	CDG
CDG-6	Containerized Diesel Genset #6	Common	CDG	CDG
SIL-XXX-A	Charge air Silencer A	Genset A	ENG-INT_AIR	Main Powerhouse
SIL-XXX-B	Charge air Silencer B	Genset B	ENG-INT_AIR	Main Powerhouse
SIL-XXX-C	Charge air Silencer C	Genset C	ENG-INT_AIR	Main Powerhouse
SIL-XXX-D	Charge air Silencer D	Genset D	ENG-INT_AIR	Main Powerhouse
	TANKS			
T015	Diesel Oil Daily Tank (200KL)	Tank farm	DO-SUP	Tank Farm

Equipment Number	Equipment Description	Genset / Common	System	Area
T018	Fuel Oil Daily Tank (200KL)	Tank farm	FO-SUP	Tank Farm
T218	Fuel Oil Buffer Tank (100KL)	Tank farm	FO-SUP	Tank Farm
1T017	Fuel Oil Settling Tank 1 (1000KL)	Tank farm	FO-SUP	Tank Farm
2T017	Fuel Oil Settling Tank 2 (1000KL)	Tank farm	FO-SUP	Tank Farm
T074	Oily Water & Sludge Buffer Tank (200KL)	Tank farm	SL-TREAT	Tank Farm
T075	Sludge Treatment Tank (50KL)	Tank farm	SL-TREAT	Tank Farm
1T049	Raw Water Tank (500KL)	Tank farm	MOD049	Tank Farm
3T049	Fresh Water Tank (100KL)	Tank farm	MOD049	Tank Farm
4T049	UF Water Tank (100KL)	Tank farm	MOD049	Tank Farm
2T049	Buffer Water tank (50KL)	Tank farm	MOD049	Tank Farm
5T049	Sewage Tank (20KL)		MOD049	Tank Farm

2.2 Electrical Equipment

Equipment Number	Equipment Description	Genset / Common	System	Area
MEDIUM VOLTAGE				
UAT 1	Unit Auxiliary Transformer 1	Common	MV-DIST	UAT
UAT 2	Unit Auxiliary Transformer 2	Common	MV-DIST	UAT
GT#1	6.6/11.0kV Containerized Diesel Gensets Step Up Transformer (5MVA)	Common	MV-DIST	UAT
MV1-SWG	Medium Voltage Switchgear 11kV	Common	MV-DIST	MV Room
MV1-GEN#1	Incomer Genset #1	Common	MV-DIST	MV Room
MV1-GEN#2	Incomer Genset #2	Common	MV-DIST	MV Room
MV1-PT-DR#A	PT MV-SWG-A (Gen #1 and Gen#2)	Common	MV-DIST	MV Room
MV1-UAT#1	Feeder Unit Auxiliary Transformer UAT 1	Common	MV-DIST	MV Room
MV1-OUT#1	Feeder Step Up Transformer SUT 1	Common	MV-DIST	MV Room
MV1-BBC#1	Busbar Coupler #1 (SWG A to COMMON)	Common	MV-DIST	MV Room
MV1-PT-DR#COM	PT MV1-SWG-COM (Common)	Common	MV-DIST	MV Room
MV1-INC-GT#1	Incomer Containerized Diesel Gensets	Common	MV-DIST	MV Room
MV1-BBC#2	Busbar Coupler #2 (COMMON to SWG B)	Common	MV-DIST	MV Room
MV1-OUT#2	Feeder Step Up Transformer SUT 2	Common	MV-DIST	MV Room
MV1-UAT#2	Feeder Unit Auxiliary Transformer UAT 2	Common	MV-DIST	MV Room
MV1-PT-DR#B	PT MV1-SWG-B (Gen#3 and Gen#4)	Common	MV-DIST	MV Room
MV1-GEN#3	Incomer Genset #3	Common	MV-DIST	MV Room
MV1-GEN#4	Incomer Genset #4	Common	MV-DIST	MV Room
MV1-GEN-NE-SWG-A	11kV Medium Voltage Generator Neutral Earthing Switchgear #A (GEN A-B)	Common	MV-DIST	MV Room
MV1-GEN-NER-1	Generator Neutral Earthing Resistor #1	Common	MV-DIST	MV Room
MV1-GEN-NES-1	Generator Neutral Earthing Switch #1	Common	MV-DIST	MV Room
MV1-GEN-NES-2	Generator Neutral Earthing Switch #2	Common	MV-DIST	MV Room
MV1-GEN-NE-SWG-B	11kV Medium Voltage Generator Neutral Earthing Switchgear #B (GEN C-D)	Common	MV-DIST	MV Room
MV1-GEN-NER-2	Generator Neutral Earthing Resistor #2	Common	MV-DIST	MV Room
MV1-GEN-NES-3	Generator Neutral Earthing Switch #3	Common	MV-DIST	MV Room
MV1-GEN-NES-4	Generator Neutral Earthing Switch #4	Common	MV-DIST	MV Room
MV2-SWG-COM	6.6kV Medium Voltage Switchgear Containerized Diesel Gensets	Common	MV-DIST	CDG-MV Room
MV2-PT#COM	PT MV2-SWG-COM	Common	MV-DIST	CDG-MV Room
MV2-OUT-GT#1	Outgoing Containerized Diesel Gensets	Common	MV-DIST	CDG-MV Room
MV2-GEN#5	Incomer Containerized Diesel Genset #5	Common	MV-DIST	CDG-MV Room
MV2-GEN#6	Incomer Containerized Diesel Genset #6	Common	MV-DIST	CDG-MV Room
MV2-NER#3	Containerized Diesel Gensets NER (25A/10s)	Common	MV-DIST	CDG-MV Room
LOW VOLTAGE				
LV-MDP	Low Voltage Main Distribution Panel (18 Tiers)	Common	LV-DIST	LV Room
LV-BB-A	LV-MDP Bus A	Common	LV-DIST	LV Room
LV-BB-B	LV-MDP Bus B	Common	LV-DIST	LV Room
LV-BB-COM	LV-MDP Bus Common	Common	LV-DIST	LV Room
LV-UPSDP	Low Voltage UPS Distribution Panel	Common	LV-DIST	LV Room
LV-LE-PH	Low Voltage Lighting & Electrification Panel (Type 1)	Common	LV-DIST	Engine Hall
LV-LE-PT	LV Lighting & Electric. Pumphouse & Tank Farm (Type2)	Common	LV-DIST	Pumphouse
LVLE-ER	LV Lighting & Electric. Electrical Rooms (Type2)	Common	LV-DIST	LV Room
LVLE-WW	LV Lighting & Electric. Warehouse and Workshop (Type2)	Common	LV-DIST	Workshop / Warehouse
LVLE-OF	LV Lighting & Electric. Office Building (Type2)	Common	LV-DIST	Offices
LVLE-OA-A	LV Lighting & Electric. Outside Area A (Type3)	Common	LV-DIST	MPH-NW cnr
LVLE-OA-B	LV Lighting & Electric. Outside Area B (Type3)	Common	LV-DIST	
LVLE-SY	LV Lighting & Electric. Outside Switchyard (Type3)	Common	LV-DIST	150kV Switchyard
LV-CDG	LV Lighting & Electric. Containerized Diesel Genset (Type??)	Common	LV-DIST	CDG
LV-SS	LV-UPS Servo Stabilizer (Voltage Stabilizer)	Common	LV-DIST	LV Room
BSG	Blackstart Generator Battery Charger	Common	LV-DIST	MOD2000
UPS-A	Uninterruptible Power System A - 400Ah / 40kVA	Common	LV-DIST	LV Room
UPS-B	Uninterruptible Power System B - 400Ah / 40kVA	Common	LV-DIST	LV Room
BAT110-A	Stationary battery 110VDC, 200Ah A	Common	LV-DIST	Battery Room
BAT110-B	Stationary battery 110VDC, 200Ah B	Common	LV-DIST	Battery Room
LV-BAT-CH-A	110VDC Battery Charger Panel A	Common	LV-DIST	LV Room

LV-BAT-CH-B	110VDC Battery Charger Panel B	Common	LV-DIST	LV Room
BAT-DP-A	Distribution Panel 110VDC A	Common	LV-DIST	LV Room
BAT-DP-B	Distribution Panel 110VDC B	Common	LV-DIST	LV Room
1P073	Sump Pit Drain Pump Engine Basement Control Box	Common	LV-DIST	Main Engine Hall
2P073	Sump Pit Drain Pump Radiator / Air Intake Control Box	Common	LV-DIST	Main Engine Hall
3P073	Sump Pit Drain Pump Pumphouse Local Control Box	Common	LV-DIST	Pumphouse
4P073	Sump Pit Drain Pump Tank Farm Local Control Box	Common	LV-DIST	Tank Farm
5P073	Sump Pit Drain Unloading Area Local Control Box	Common	LV-DIST	Unloading
GENSET RELATED				
MOD200-A	Generator A	Genset A	GENSET	Generator A
MOD200-B	Generator B	Genset B	GENSET	Generator B
MOD200-C	Generator C	Genset C	GENSET	Generator C
MOD200-D	Generator D	Genset D	GENSET	Generator D
H1000-A	Generator Anticondensation Heater A	Genset A	GENSET	Generator A
H1000-B	Generator Anticondensation Heater B	Genset B	GENSET	Generator B
H1000-C	Generator Anticondensation Heater C	Genset C	GENSET	Generator C
H1000-D	Generator Anticondensation Heater D	Genset D	GENSET	Generator D
EM2470-A	Engine Cylinder Lubrication Oil Pump A	Genset A	GENSET	Engine A
EM2470-B	Engine Cylinder Lubrication Oil Pump B	Genset B	GENSET	Engine B
EM2470-C	Engine Cylinder Lubrication Oil Pump C	Genset C	GENSET	Engine C
EM2470-D	Engine Cylinder Lubrication Oil Pump D	Genset D	GENSET	Engine D
CONTROL PANELS				
CAP	Common Auxiliary Panel	Common	CONTROL	MPH - Auxiliaries
CAPP	Common Auxiliary Pumphouse Panel	Common	CONTROL	Pumphouse
CCP	Common Control Panel	Common	CONTROL	Control Room
CMP	Common Metering Panel	Common	CONTROL	Control Room
CUP	Common Unloading Panel	Common	CONTROL	Unloading
DGAP	Containerized Diesel Genset Auxiliary Panel	Common	CONTROL	CDG
DGIP	Containerized Diesel Genset Interface Panel	Common	CONTROL	CDG
DERP 5	Containerized Diesel Genset #5 Radiator Cooler Panel	Common	CONTROL	CDG
DERP 6	Containerized Diesel Genset #6 Radiator Cooler Panel	Common	CONTROL	CDG
ERP 1	Engine Radiator Panel A	Genset A	CONTROL	Radiator Area
ERP 2	Engine Radiator Panel B	Genset B	CONTROL	Radiator Area
ERP 3	Engine Radiator Panel C	Genset C	CONTROL	Radiator Area
ERP 4	Engine Radiator Panel D	Genset D	CONTROL	Radiator Area
ETAP 1	Exhaust Gas Treatment Auxiliary Panel A	Genset A	CONTROL	Silencer & WHRTO Heater
ETAP 2	Exhaust Gas Treatment Auxiliary Panel B	Genset B	CONTROL	Silencer & WHRTO Heater
ETAP 3	Exhaust Gas Treatment Auxiliary Panel C	Genset C	CONTROL	Silencer & WHRTO Heater
ETAP 4	Exhaust Gas Treatment Auxiliary Panel D	Genset D	CONTROL	Silencer & WHRTO Heater
GAP 1	Genset Auxiliary Panel A	Genset A	CONTROL	MPH - Auxiliaries
GAP 2	Genset Auxiliary Panel B	Genset B	CONTROL	MPH - Auxiliaries
GAP 3	Genset Auxiliary Panel C	Genset C	CONTROL	MPH - Auxiliaries
GAP 4	Genset Auxiliary Panel D	Genset D	CONTROL	MPH - Auxiliaries
GIP 1	Genset interface Panel A	Genset A	CONTROL	Genset 1
GIP 2	Genset interface Panel B	Genset B	CONTROL	Genset 1
GIP 3	Genset interface Panel C	Genset C	CONTROL	Genset 1
GIP 4	Genset interface Panel D	Genset D	CONTROL	Genset 1
HVCP	High Voltage Control Panel	Common	CONTROL	Genset 1
HVIP 1	High Voltage Interface Panel 1	Common	CONTROL	Control Room
HVIP 2	High Voltage Interface Panel 2	Common	CONTROL	Control Room
SIP	Substation Interface Panel	Common	CONTROL	Highlands Substation
PMS	Power Management System (Load shedding)	Common	CONTROL	Highlands Substation
SCADA AND COMMS				
SCADA	SCADA Server Panel	Control Room	SCADA	Control Room
OS1	Operator Station 1	Control Room	SCADA	Control Room
OS2	Operation Station 2	Control Room	SCADA	Control Room
PRI1	Printer 1	Control Room	SCADA	Control Room

PRI2	Printer 2	Control Room	SCADA	Control Room
ES	Engineering Station	Control Room	SCADA	Control Room
FSL	Field SCADA Laptop	Control Room	SCADA	Control Room
	Engineering Station Desk	Control Room	SCADA	Control Room
	Operator Station Desk 1	Control Room	SCADA	Control Room
	Operator Station Desk 2	Control Room	SCADA	Control Room
RMS	Remote Monitoring Station PC	Remote Support Supplier	SCADA	Control Room
MODULE CONTROL PANELS	(All on skid wiring will be completed - only interconnections required)			
1MOD002-A	Cooling Water Expansion Tanks Module A	Genset A	ENG-HT-CW / ENG-LT-CW	MPH Expansion Tanks
1MOD002-B	Cooling Water Expansion Tanks Module B	Genset B	ENG-HT-CW / ENG-LT-CW	MPH Expansion Tanks
1MOD002-C	Cooling Water Expansion Tanks Module C	Genset C	ENG-HT-CW / ENG-LT-CW	MPH Expansion Tanks
1MOD002-D	Cooling Water Expansion Tanks Module D	Genset D	ENG-HT-CW / ENG-LT-CW	MPH Expansion Tanks
2MOD002-A	Cooling Water Temperature & Flow Control Module A	Genset A	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-B	Cooling Water Temperature & Flow Control Module B	Genset B	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-C	Cooling Water Temperature & Flow Control Module C	Genset C	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
2MOD002-D	Cooling Water Temperature & Flow Control Module D	Genset D	ENG-HT-CW / ENG-LT-CW	Main Powerhouse
MOD004-A	HT Cooling Water Pre-Heating Module A	Genset A	ENG-HT-CW	Main Powerhouse
MOD004-B	HT Cooling Water Pre-Heating Module B	Genset B	ENG-HT-CW	Main Powerhouse
MOD004-C	HT Cooling Water Pre-Heating Module C	Genset C	ENG-HT-CW	Main Powerhouse
MOD004-D	HT Cooling Water Pre-Heating Module D	Genset D	ENG-HT-CW	Main Powerhouse
MOD005-A	Nozzle Cooling Water Module A	Genset A	ENG-NCW	Main Powerhouse
MOD005-B	Nozzle Cooling Water Module B	Genset B	ENG-NCW	Main Powerhouse
MOD005-C	Nozzle Cooling Water Module C	Genset C	ENG-NCW	Main Powerhouse
MOD005-D	Nozzle Cooling Water Module D	Genset D	ENG-NCW	Main Powerhouse
MOD006-A	Lube Oil Separator Module / Lube Oil Fine Filter Module A	Genset A	ENG-LO-TREAT	Main Powerhouse
MOD006-B	Lube Oil Separator Module / Lube Oil Fine Filter Module B	Genset B	ENG-LO-TREAT	Main Powerhouse
MOD006-C	Lube Oil Separator Module / Lube Oil Fine Filter Module C	Genset C	ENG-LO-TREAT	Main Powerhouse
MOD006-D	Lube Oil Separator Module / Lube Oil Fine Filter Module D	Genset D	ENG-LO-TREAT	Main Powerhouse
MOD007-A	Lube Oil Cooler & Filter Module A	Genset A	ENG-LO	Main Powerhouse
MOD007-B	Lube Oil Cooler & Filter Module B	Genset B	ENG-LO	Main Powerhouse
MOD007-C	Lube Oil Cooler & Filter Module C	Genset C	ENG-LO	Main Powerhouse
MOD007-D	Lube Oil Cooler & Filter Module D	Genset D	ENG-LO	Main Powerhouse
MOD008-A	Fuel Oil Booster Module A	Genset A	ENG-FO	Main Powerhouse
MOD008-B	Fuel Oil Booster Module B	Genset B	ENG-FO	Main Powerhouse
MOD008-C	Fuel Oil Booster Module C	Genset C	ENG-FO	Main Powerhouse
MOD008-D	Fuel Oil Booster Module D	Genset D	ENG-FO	Main Powerhouse
MOD009-A	Lube Oil Replenishing Module A	Genset A	ENG-LO-TREAT	Main Powerhouse
MOD009-B	Lube Oil Replenishing Module B	Genset B	ENG-LO-TREAT	Main Powerhouse
MOD009-C	Lube Oil Replenishing Module C	Genset C	ENG-LO-TREAT	Main Powerhouse
MOD009-D	Lube Oil Replenishing Module D	Genset D	ENG-LO-TREAT	Main Powerhouse
MOD010-A	Combustion Air Intake Filter Module A	Genset A	ENG-INT_AIR	Main Powerhouse
MOD010-B	Combustion Air Intake Filter Module B	Genset B	ENG-INT_AIR	Main Powerhouse
MOD010-C	Combustion Air Intake Filter Module C	Genset C	ENG-INT_AIR	Main Powerhouse
MOD010-D	Combustion Air Intake Filter Module D	Genset D	ENG-INT_AIR	Main Powerhouse
MOD011-A	Engine Hall Ventilation & Filter Module A	Genset A	GENSET	Main Powerhouse
MOD011-B	Engine Hall Ventilation & Filter Module B	Genset B	GENSET	Main Powerhouse
MOD011-C	Engine Hall Ventilation & Filter Module C	Genset C	GENSET	Main Powerhouse
MOD011-D	Engine Hall Ventilation & Filter Module D	Genset D	GENSET	Main Powerhouse
1M012-A	Engine A Radiator Cooling Fan 1	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area

2M012-A	Engine A Radiator Cooling Fan 2	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
3M012-A	Engine A Radiator Cooling Fan 3	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
4M012-A	Engine A Radiator Cooling Fan 4	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
5M012-A	Engine A Radiator Cooling Fan 5	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
6M012-A	Engine A Radiator Cooling Fan 6	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
7M012-A	Engine A Radiator Cooling Fan 7	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
8M012-A	Engine A Radiator Cooling Fan 8	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
9M012-A	Engine A Radiator Cooling Fan 9	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
10M012-A	Engine A Radiator Cooling Fan 10	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
11M012-A	Engine A Radiator Cooling Fan 11	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
12M012-A	Engine A Radiator Cooling Fan 12	Genset A	ENG-HT-CW / ENG-LT-CW	Radiator Area
1M012-B	Engine B Radiator Cooling Fan 1	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
2M012-B	Engine B Radiator Cooling Fan 2	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
3M012-B	Engine B Radiator Cooling Fan 3	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
4M012-B	Engine B Radiator Cooling Fan 4	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
5M012-B	Engine B Radiator Cooling Fan 5	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
6M012-B	Engine B Radiator Cooling Fan 6	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
7M012-B	Engine B Radiator Cooling Fan 7	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
8M012-B	Engine B Radiator Cooling Fan 8	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
9M012-B	Engine B Radiator Cooling Fan 9	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
10M012-B	Engine B Radiator Cooling Fan 10	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
11M012-B	Engine B Radiator Cooling Fan 11	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
12M012-B	Engine B Radiator Cooling Fan 12	Genset B	ENG-HT-CW / ENG-LT-CW	Radiator Area
1M012-C	Engine C Radiator Cooling Fan 1	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
2M012-C	Engine C Radiator Cooling Fan 2	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
3M012-C	Engine C Radiator Cooling Fan 3	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
4M012-C	Engine C Radiator Cooling Fan 4	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
5M012-C	Engine C Radiator Cooling Fan 5	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
6M012-C	Engine C Radiator Cooling Fan 6	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
7M012-C	Engine C Radiator Cooling Fan 7	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
8M012-C	Engine C Radiator Cooling Fan 8	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
9M012-C	Engine C Radiator Cooling Fan 9	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
10M012-C	Engine C Radiator Cooling Fan 10	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
11M012-C	Engine C Radiator Cooling Fan 11	Genset C	ENG-HT-CW /	Radiator Area

			ENG-LT-CW	
12M012-C	Engine C Radiator Cooling Fan 12	Genset C	ENG-HT-CW / ENG-LT-CW	Radiator Area
1M012-D	Engine D Radiator Cooling Fan 1	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
2M012-D	Engine D Radiator Cooling Fan 2	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
3M012-D	Engine D Radiator Cooling Fan 3	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
4M012-D	Engine D Radiator Cooling Fan 4	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
5M012-D	Engine D Radiator Cooling Fan 5	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
6M012-D	Engine D Radiator Cooling Fan 6	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
7M012-D	Engine D Radiator Cooling Fan 7	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
8M012-D	Engine D Radiator Cooling Fan 8	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
9M012-D	Engine D Radiator Cooling Fan 9	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
10M012-D	Engine D Radiator Cooling Fan 10	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
11M012-D	Engine D Radiator Cooling Fan 11	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
12M012-D	Engine D Radiator Cooling Fan 12	Genset D	ENG-HT-CW / ENG-LT-CW	Radiator Area
MOD014	Diesel Unloading Pumps Module (HSD)	Common - Unloading	DO-SUP	Unloading
1MOD015	Diesel Ring-Line Feeder Module (HSD)	Common - Pumphouse	DO-SUP	Pumphouse
MOD017	Fuel Oil Unloading Pumps Module (HFO)	Common - Unloading	FO-SUP	Unloading
1MOD018	Fuel Oil Ring-Line Feeder Module (HFO)	Common - Pumphouse	FO-SUP	Pumphouse
1MOD019	Fuel Oil Separator Module (HFO) 1	Common - Pumphouse	FO-TREAT	Pumphouse
2MOD019	Fuel Oil Separator Module (HFO) 2	Common - Pumphouse	FO-TREAT	Pumphouse
1MOD020	Starting Air Compressor Module including Pressure Reducing Module	Common - Starting Air	START-AIR	Main Powerhouse
MOD023	Working Air Compressor Module including Filter Dryer	Common - Working Air	WORK-AIR	Main Powerhouse
MOD026	Control Air Dryer Module including Filter Dryer	Common - Control Air	CTRL-AIR	Main Powerhouse
MOD035	Lube Oil Supply Module	Common - Lube Oil	LO-SUP	Radiator Area (Nth)
MOD041	Raw Water Sand & Carbon Filter Module	Common - Water	MOD049	WTP house
MOD042	Sulphate / Hardness Removal Module	Common - Water	MOD049	WTP house
MOD043	Raw Water Ultrafiltration Module	Common - Water	MOD049	WTP house
MOD044	Fresh Water Reverse-Osmosis Module	Common - Water	MOD049	WTP house
MOD045	Treated Water Supply Pumps Module	Common - Water	MOD049	WTP house
MOD046	Fire Fighting Water pH Adjuster Module	Common - Water	MOD049	WTP house
MOD047	Sewage Injector Module	Common - Water	MOD049	WTP house
MOD049	Water Treatment Plant	Common - Water	MOD049	WTP house
FIFI-EP	Fire Fighting Electric Pump Panel			
FIFI-DP	Fire Fighting Diesel Pump Panel			
FIFI-JP	Fire Fighting Jockey Pump Panel			
MOD050	Process Water Supply Module	Common -	PROC-WATER	Radiator Area (Sth)

		Water		
MOD063	Thermal Oil Unloading & Receiver Tank Module	Common - Thermal Oil	TO-WHR	Mech. Annex Roof
MOD065	Independent Thermal Oil Heater Module (ITOH)	Common - Thermal Oil	TO-WHR	Mech. Annex Roof
MOD066-A	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) A	Genset A	ENG-EXH	External Exhaust
MOD066-B	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) B	Genset B	ENG-EXH	External Exhaust
MOD066-C	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) C	Genset C	ENG-EXH	External Exhaust
MOD066-D	Waste Heat Exhaust Gas Thermal Oil Heater Module (WHTOH) D	Genset D	ENG-EXH	External Exhaust
MOD067	Thermal Oil Supply Module (TOS)	Common - Thermal Oil	TO-WHR	External Exhaust
MOD069	Thermal Oil Tank Farm Temperature Control module	Common - Thermal Oil	TO-WHR	Tank Farm
1MOD070	Fuel Leakage & Sludge Collecting Tank Module 1	Common - Sludge	SL-COL	MPH Basement
2MOD070	Fuel Leakage & Sludge Collecting Tank Module 2	Common - Sludge	SL-COL	MPH Basement
MOD075	Sludge Discharge Module	Common - Sludge	SL-TREAT	Unloading
MOD076	Sludge Treatment Plant Module (STP)	Common - Sludge	SL-TREAT	Tank Farm
MOD090-A	SCR Control Unit Module (Selective Catalytic Reactor) A	Genset A	ENG-EXH	External Exhaust
MOD090-B	SCR Control Unit Module (Selective Catalytic Reactor) B	Genset B	ENG-EXH	External Exhaust
MOD090-C	SCR Control Unit Module (Selective Catalytic Reactor) C	Genset C	ENG-EXH	External Exhaust
MOD090-D	SCR Control Unit Module (Selective Catalytic Reactor) D	Genset D	ENG-EXH	External Exhaust
MOD091-A	SCR Dosing Unit Module A	Genset A	ENG-EXH	External Exhaust
MOD091-B	SCR Dosing Unit Module B	Genset B	ENG-EXH	External Exhaust
MOD091-C	SCR Dosing Unit Module C	Genset C	ENG-EXH	External Exhaust
MOD091-D	SCR Dosing Unit Module D	Genset D	ENG-EXH	External Exhaust
1MOD093	SCR Compressed Air Compressor Module including Pressure Reducing & Dryer Module	Common - SCR Air	SCR-AIR	Main Powerhouse
MOD095	UREA Unloading & Mixing Module	Common - SCR	UREA-SUP	Urea Mixing House
MOD096	UREA Supply Pumps Module	Common - SCR	UREA-SUP	Urea Mixing House
MOD099	Continuous NOx Emission Measurement System (CEMS)	Common - SCR	ENG-EXH	External Exhaust
MOD115	CDG 5/6 Diesel Supply Module (HSD)	Common - HSD	DO-SUP	Main Powerhouse
M200	Engine Hall Overhead Crane	Common	N/A	Main Powerhouse
N/A	Electric Chain hoist - 2T	Common	N/A	Workshop / Warehouse
MOD2000	Blackstart Generator (BSG)	Common	LV-Dist	Main Powerhouse
CDG 5	Containerized Diesel Genset #5	Common	CDG	CDG
CDG 6	Containerized Diesel Genset #6	Common	CDG	CDG
AIR CONDITIONERS & VENTILATION	Does firefighting system drop out ventilation and aircons in fire?			
AC-CCR	Air Conditioners - Common Control Room			
AC-LV	Air Conditioners - LV Room			
AC-MV	Air Conditioners - MV Room			
	Air conditioner for Offices / Meeting Room / Prayer Room etc.			
AC-WH	Air Conditioners - Warehouse			
AC-WS1	Air Conditioners - Workshop Area 1			
AC-WS2	Air Conditioners - Workshop Area 2			
	Hot Water for Bathrooms / Pantry in MPH			
	Hot Water for Bathrooms / Pantry in Warehouse/Workshop			
LIGHTING				
	MPH - Engine Hall & Mech Annex			
	MPH- Electrical Annex Ground Floor			

	MPH- Electrical Annex First Floor			
	MPH - Exterior Lighting - Radiators			
	MPH - Exterior Lighting - UAT / Ventilation Intakes			
	MPH - Emergency Lighting			
	MPH - Exhaust and SCR			
	Pumphouse and Fuel Treatment House			
	Pumphouse/WTP/Tank Farm etc. Emergency lighting			
	WTP and FiFi house			
	Urea Mixing House			
	Tank Farm			
	Warehouse & Workshop			
	Unloading Station			
	Perimeter Lighting			
	Road Lighting			
	Containerized Genset			
LIGHTNING PROTECTION				
FIRE FIGHTING				
PABX / IT				
CCTV				
SOUND SYSTEM				
STRUCTURES AND BUILDINGS				
GROUNDING				
CABLE LADDER				
FIBRE OPTIC / PROFIBUS				

2.3 Instrumentation Equipment

Tag #	Service Description	Qty	Genset / Common	System
LI-T002-A	Level Inside HT cooling water expansion tank T002 level indicator		GENSET-A	ENG-HT-CW
LI-T102-A	Level Inside charge air cooling water expansion tank T102 level indicator		GENSET-A	ENG-LT-CW
LSHH-T002-A	HT cooling water expansion tank T002 Level high-high		GENSET-A	ENG-HT-CW
LSHH-T102-A	Charge air cooling water expansion tank T102 Level high-high		GENSET-A	ENG-LT-CW
LSLL-T002-A	HT cooling water expansion tank T002 Level high-high		GENSET-A	ENG-HT-CW
LSLL-T102-A	Charge air cooling water expansion tank T102 Level high-high		GENSET-A	ENG-LT-CW
LT-T002-A	Level Inside HT cooling water expansion tank T002		GENSET-A	ENG-HT-CW
LT-T102-A	Level Inside charge air cooling water expansion tank T102		GENSET-A	ENG-LT-CW
MSV-002-A	HT c.w expansion tank filling valve		GENSET-A	ENG-HT-CW
MSV-102-A	Charge air c.w expansion tank filling valve		GENSET-A	ENG-LT-CW
RSC-MSV002-A	HT c.w expansion tank T002 filling valve close position		GENSET-A	ENG-HT-CW
RSC-MSV102-A	Charge air c.w expansion tank T102 filling valve close position		GENSET-A	ENG-LT-CW
RSO-MSV002-A	HT c.w expansion tank T002 filling valve close position		GENSET-A	ENG-HT-CW
RSO-MSV102-A	Charge air c.w expansion tank T102 filling valve close position		GENSET-A	ENG-LT-CW
LI-T002-B	Level Inside HT cooling water expansion tank T002 level indicator		GENSET-B	ENG-HT-CW
LI-T102-B	Level Inside charge air cooling water expansion tank T102 level indicator		GENSET-B	ENG-LT-CW
LSHH-T002-B	HT cooling water expansion tank T002 Level high-high		GENSET-B	ENG-HT-CW
LSHH-T102-B	Charge air cooling water expansion tank T102 Level high-high		GENSET-B	ENG-LT-CW
LSLL-T002-B	HT cooling water expansion tank T002 Level high-high		GENSET-B	ENG-HT-CW
LSLL-T102-B	Charge air cooling water expansion tank T102 Level high-high		GENSET-B	ENG-LT-CW
LT-T002-B	Level Inside HT cooling water expansion tank T002		GENSET-B	ENG-HT-CW
LT-T102-B	Level Inside charge air cooling water expansion tank T102		GENSET-B	ENG-LT-CW
MSV-002-B	HT c.w expansion tank filling valve		GENSET-B	ENG-HT-CW
MSV-102-B	Charge air c.w expansion tank filling valve		GENSET-B	ENG-LT-CW
RSC-MSV002-B	HT c.w expansion tank T002 filling valve close position		GENSET-B	ENG-HT-CW
RSC-MSV102-B	Charge air c.w expansion tank T102 filling valve close position		GENSET-B	ENG-LT-CW
RSO-MSV002-B	HT c.w expansion tank T002 filling valve close position		GENSET-B	ENG-HT-CW
RSO-MSV102-B	Charge air c.w expansion tank T102 filling valve close position		GENSET-B	ENG-LT-CW
LI-T002-C	Level Inside HT cooling water expansion tank T002 level indicator		GENSET-C	ENG-HT-CW
LI-T102-C	Level Inside charge air cooling water expansion tank T102 level indicator		GENSET-C	ENG-LT-CW
LSHH-T002-C	HT cooling water expansion tank T002 Level high-high		GENSET-C	ENG-HT-CW
LSHH-T102-C	Charge air cooling water expansion tank T102 Level high-high		GENSET-C	ENG-LT-CW
LSLL-T002-C	HT cooling water expansion tank T002 Level high-high		GENSET-C	ENG-HT-CW
LSLL-T102-C	Charge air cooling water expansion tank T102 Level high-high		GENSET-C	ENG-LT-CW
LT-T002-C	Level Inside HT cooling water expansion tank T002		GENSET-C	ENG-HT-CW
LT-T102-C	Level Inside charge air cooling water expansion tank T102		GENSET-C	ENG-LT-CW
MSV-002-C	HT c.w expansion tank filling valve		GENSET-C	ENG-HT-CW
MSV-102-C	Charge air c.w expansion tank filling valve		GENSET-C	ENG-LT-CW
RSC-MSV002-C	HT c.w expansion tank T002 filling valve close position		GENSET-C	ENG-HT-CW
RSC-MSV102-C	Charge air c.w expansion tank T102 filling valve close position		GENSET-C	ENG-LT-CW
RSO-MSV002-C	HT c.w expansion tank T002 filling valve close position		GENSET-C	ENG-HT-CW
RSO-MSV102-C	Charge air c.w expansion tank T102 filling valve close position		GENSET-C	ENG-LT-CW
LI-T002-D	Level Inside HT cooling water expansion tank T002 level indicator		GENSET-D	ENG-HT-CW
LI-T102-D	Level Inside charge air cooling water expansion tank T102 level indicator		GENSET-D	ENG-LT-CW
LSHH-T002-D	HT cooling water expansion tank T002 Level high-high		GENSET-D	ENG-HT-CW
LSHH-T102-D	Charge air cooling water expansion tank T102 Level high-high		GENSET-D	ENG-LT-CW
LSLL-T002-D	HT cooling water expansion tank T002 Level high-high		GENSET-D	ENG-HT-CW
LSLL-T102-D	Charge air cooling water expansion tank T102 Level high-high		GENSET-D	ENG-LT-CW
LT-T002-D	Level Inside HT cooling water expansion tank T002		GENSET-D	ENG-HT-CW
LT-T102-D	Level Inside charge air cooling water expansion tank T102		GENSET-D	ENG-LT-CW
MSV-002-D	HT c.w expansion tank filling valve		GENSET-D	ENG-HT-CW
MSV-102-D	Charge air c.w expansion tank filling valve		GENSET-D	ENG-LT-CW
RSC-MSV002-D	HT c.w expansion tank T002 filling valve close position		GENSET-D	ENG-HT-CW
RSC-MSV102-D	Charge air c.w expansion tank T102 filling valve close position		GENSET-D	ENG-LT-CW
RSO-MSV002-D	HT c.w expansion tank T002 filling valve close position		GENSET-D	ENG-HT-CW
RSO-MSV102-D	Charge air c.w expansion tank T102 filling valve close position		GENSET-D	ENG-LT-CW
PDI-FIL-015	Diesel (HSD) ring-line duplex filter pressure differential indicator	1	Common	DO-SUP
PI-1P015	Diesel (HSD) ring-line feeder pump 1, pressure indicator	1	Common	DO-SUP

Tag #	Service Description	Qty	Genset / Common	System
PI-2P015	Diesel (HSD) ring-line feeder pump 2, pressure indicator	1	Common	DO-SUP
PI-5203	Diesel (HSD) ring-line duplex filter pressure indicator	1	Common	DO-SUP
POV-015	Diesel (HSD) ring-line feeder mod emerg shut-off valve	1	Common	DO-SUP
PSH-1P015	Diesel (HSD) ring-line feeder pump 1 pressure switch high	1	Common	DO-SUP
PSH-2P015	Diesel (HSD) ring-line feeder pump 2 pressure switch high	1	Common	DO-SUP
PT-5202	Pressure behind diesel (HSD) ring-line feeder pump(s) 1/2P015	1	Common	DO-SUP
RSC-POV-015	Diesel (HSD) ring-line feeder mod emerg shut-off valve close position	1	Common	DO-SUP
RSO-POV-015	Diesel (HSD) ring-line feeder mod emerg shut-off valve opened position	1	Common	DO-SUP
V-PI-1P015	Diesel (HSD) ring-line feeder pump 1, V - pressure indicator	1	Common	DO-SUP
V-PI-2P015	Diesel (HSD) ring-line feeder pump 2, V - pressure indicator	1	Common	DO-SUP
PDI-1FIL018	Fuel oil (MFO) automatic back-flush filter, pressure differential indicator	1	Common	FO-SUP
PDI-2FIL018	Fuel oil (MFO) simplex bypass-filter	1	Common	FO-SUP
PI-1P018	Fuel oil (MFO) ring-line feeder pump 1 pressure indicator	1	Common	FO-SUP
PI-2P018	Fuel oil (MFO) ring-line feeder pump 2 pressure indicator	1	Common	FO-SUP
PI-5703	Fuel oil (MFO) ring-line feeder mod emerg shut-off valve pressure indicator	1	Common	FO-SUP
POV-018	Fuel oil (MFO) emerg shut-off valve, Pneumatic operated valve	1	Common	FO-SUP
POV-118		1	Common	FO-SUP
POV-218		1	Common	FO-SUP
POV-318		1	Common	FO-SUP
PSH-1P018	Fuel oil (MFO) ring-line feeder pump 1 pressure switch high	1	Common	FO-SUP
PSH-2P018	Fuel oil (MFO) ring-line feeder pump 2 pressure switch high	1	Common	FO-SUP
PT-5702	Pressure behind fuel oil (MFO) ring-line feeder pump(s) 1/2P018	1	Common	FO-SUP
RSC-POV-018	Fuel oil (MFO) ring-line feeder mod emerg shut-off valve close position	1	Common	FO-SUP
RSO-POV-018	Fuel oil (MFO) ring-line feeder mod emerg shut-off valve open position	1	Common	FO-SUP
SOV-318		1	Common	FO-SUP
V-PI-1P018	Fuel oil (MFO) ring-line feeder pump 1 inlet pressure indicator	1	Common	FO-SUP
V-PI-2P018	Fuel oil (MFO) ring-line feeder pump 2 inlet pressure indicator	1	Common	FO-SUP
1PI-1C020	Starting air compressor 1, pressure indicator no 1	1	Common	START-AIR
1PI-2C020	Starting air compressor 2, pressure indicator no 1	1	Common	START-AIR
1PI-3C020	Starting air compressor 3, pressure indicator no 1	1	Common	START-AIR
1PSL-7102	Starting air compressor, pressure switch low 1	1	Common	START-AIR
2PI-1C020	Starting air compressor 1, pressure indicator no 2	1	Common	START-AIR
2PI-2C020	Starting air compressor 2, pressure indicator no 2	1	Common	START-AIR
2PI-3C020	Starting air compressor 3, pressure indicator no 2	1	Common	START-AIR
2PSL-7102	Starting air compressor, pressure switch low 2	1	Common	START-AIR
LSL-1C020	Starting air compressor 1 oil level switch low	1	Common	START-AIR
LSL-2C020	Starting air compressor 2 oil level switch low	1	Common	START-AIR
LSL-3C020	Starting air compressor 3 oil level switch low	1	Common	START-AIR
PI-1PCV021	Starting air pressure reducing module pressure control valve, pressure indicator	1	Common	START-AIR
PI-2PCV021	Starting air pressure reducing module pressure control valve, pressure indicator	1	Common	START-AIR
PI-7102	Starting air compressor, pressure indicator	1	Common	START-AIR
PSH-1C020	Starting air compressor 1 pressure switch high	1	Common	START-AIR
PSH-2C020	Starting air compressor 2 pressure switch high	1	Common	START-AIR
PSH-3C020	Starting air compressor 3 pressure switch high	1	Common	START-AIR
1PI-1C093	SCR compressed air compressor 1, pressure indicator	1	Common	SCR-AIR
1PI-2C093	SCR compressed air compressor 2, pressure indicator	1	Common	SCR-AIR
1PI-3C093	SCR compressed air compressor 3, pressure indicator	1	Common	SCR-AIR
1PSL-7502	SCR compressed air compressor pressure switch low 1	1	Common	SCR-AIR
2PSL-7502	SCR compressed air compressor pressure switch low 2	1	Common	SCR-AIR
LSL-1C093	SCR compressed air compressor 1 oil level switch low	1	Common	SCR-AIR
LSL-2C093	SCR compressed air compressor 2 oil level switch low	1	Common	SCR-AIR
LSL-3C093	SCR compressed air compressor 3 oil level switch low	1	Common	SCR-AIR
PI-1PCV094	SCR compressor air pressure reducing module pressure indicator 1	1	Common	SCR-AIR
PI-2PCV094	SCR compressor air pressure reducing module pressure indicator 2	1	Common	SCR-AIR

Tag #	Service Description	Qty	Genset / Common	System
PI-7502	SCR compressed air compressor pressure indicator	1	Common	SCR-AIR
PI-7602	Pressure in SCR compressed air supply main header, pressure indicator	1	Common	SCR-AIR
PSH-1C093	SCR compressed air compressor 1 pressure switch high	1	Common	SCR-AIR
PSH-2C093	SCR compressed air compressor 2 pressure switch high	1	Common	SCR-AIR
PSH-3C093	SCR compressed air compressor 3 pressure switch high	1	Common	SCR-AIR
PT-7602	Pressure in SCR compressed air supply main header	1	Common	SCR-AIR
1SOV-024	Working air pressure expansion vessel automatic condensate drain valve	1	Common	WORK-AIR
PI-1V024	Working air pressure expansion vessel pressure indicator	1	Common	WORK-AIR
1SOV-027	Ctrl & Instr. air pressure exp vessel pump house automatic condensate drain valve	1	Common	CONTROL-AIR
PI-1V027	Ctrl & Instr. air pressure exp vessel pressure indicator	1	Common	CONTROL-AIR
RSC-TCV-002-A	Charge air c.w temp control valve TCV002 end-position close		Genset-A	ENG-HT-CW
RSC-TCV-102-A	Charge air c.w temp control valve TCV102 end-position close		Genset-A	ENG-LT-CW
RSO-TCV-002-A	Charge air c.w temp control valve TCV002 end-position open		Genset-A	ENG-HT-CW
RSO-TCV-102-A	Charge air c.w temp control valve TCV102 end-position open		Genset-A	ENG-LT-CW
RT-TCV-002-A	HT c.w temperature control valve TCV002 position feedback		Genset-A	ENG-HT-CW
RT-TCV-102-A	Charge air c.w temperature control valve TCV102 position feedback		Genset-A	ENG-LT-CW
TCV-002-A	HT Cooling Water Temperature Control Valve		Genset-A	ENG-HT-CW
TCV-102-A	Charge Air Cooling Water Temperature Control Valve		Genset-A	ENG-LT-CW
PI-3101-A	HT cooling water pressure behind engine pressure indicator		Genset-A	ENG-HT-CW
PI-4101-A	LT cooling water pressure behind engine pressure indicator		Genset-A	ENG-LT-CW
PT-3101-A	HT cooling water pressure behind engine		Genset-A	ENG-HT-CW
PT-4101-A	LT cooling water pressure behind engine		Genset-A	ENG-LT-CW
TE-3103-A	HT cooling water temperature behind 3-way valve mixing point		Genset-A	ENG-HT-CW
TE-4103-A	LT cooling water temperature behind 3-way valve mixing point		Genset-A	ENG-LT-CW
TI-3101-A	HT cooling water pressure behind engine temperature indicator		Genset-A	ENG-HT-CW
TI-3102-A	HT cooling water temperature indicator		Genset-A	ENG-HT-CW
TI-3103-A	HT cooling water temperature behind 3-way valve mixing point temperature indicator		Genset-A	ENG-HT-CW
TI-4101-A	LT cooling water pressure behind engine temperature indicator		Genset-A	ENG-LT-CW
TI-4102-A			Genset-A	ENG-LT-CW
TI-4103-A	LT cooling water temperature behind 3-way valve mixing point		Genset-A	ENG-LT-CW
TI-4105-A			Genset-A	ENG-LT-CW
RSC-TCV-002-B	Charge air c.w temp control valve TCV002 end-position close		Genset-B	ENG-HT-CW
RSC-TCV-102-B	Charge air c.w temp control valve TCV102 end-position close		Genset-B	ENG-LT-CW
RSO-TCV-002-B	Charge air c.w temp control valve TCV002 end-position open		Genset-B	ENG-HT-CW
RSO-TCV-102-B	Charge air c.w temp control valve TCV102 end-position open		Genset-B	ENG-LT-CW
RT-TCV-002-B	HT c.w temperature control valve TCV002 position feedback		Genset-B	ENG-HT-CW
RT-TCV-102-B	Charge air c.w temperature control valve TCV102 position feedback		Genset-B	ENG-LT-CW
TCV-002-B	HT Cooling Water Temperature Control Valve		Genset-B	ENG-HT-CW
TCV-102-B	Charge Air Cooling Water Temperature Control Valve		Genset-B	ENG-LT-CW
PI-3101-B	HT cooling water pressure behind engine pressure indicator		Genset-B	ENG-HT-CW
PI-4101-B	LT cooling water pressure behind engine pressure indicator		Genset-B	ENG-LT-CW
PT-3101-B	HT cooling water pressure behind engine		Genset-B	ENG-HT-CW
PT-4101-B	LT cooling water pressure behind engine		Genset-B	ENG-LT-CW
TE-3103-B	HT cooling water temperature behind 3-way valve mixing point		Genset-B	ENG-HT-CW
TE-4103-B	LT cooling water temperature behind 3-way valve mixing point		Genset-B	ENG-LT-CW
TI-3101-B	HT cooling water pressure behind engine temperature indicator		Genset-B	ENG-HT-CW
TI-3102-B	HT cooling water temperature indicator		Genset-B	ENG-HT-CW
TI-3103-B	HT cooling water temperature behind 3-way valve mixing point temperature indicator		Genset-B	ENG-HT-CW
TI-4101-B	LT cooling water pressure behind engine temperature indicator		Genset-B	ENG-LT-CW
TI-4102-B			Genset-B	ENG-LT-CW
TI-4103-B	LT cooling water temperature behind 3-way valve mixing point		Genset-B	ENG-LT-CW
TI-4105-B			Genset-B	ENG-LT-CW
RSC-TCV-002-C	Charge air c.w temp control valve TCV002 end-position close		Genset-C	ENG-HT-CW
RSC-TCV-102-C	Charge air c.w temp control valve TCV102 end-position close		Genset-C	ENG-LT-CW
RSO-TCV-002-C	Charge air c.w temp control valve TCV002 end-position open		Genset-C	ENG-HT-CW
RSO-TCV-102-C	Charge air c.w temp control valve TCV102 end-position open		Genset-C	ENG-LT-CW
RT-TCV-002-C	HT c.w temperature control valve TCV002 position feedback		Genset-C	ENG-HT-CW

Tag #	Service Description	Qty	Genset / Common	System
RT-TCV-102-C	Charge air c.w temperature control valve TCV102 position feedback		Genset-C	ENG-LT-CW
TCV-002-C	HT Cooling Water Temperature Control Valve		Genset-C	ENG-HT-CW
TCV-102-C	Charge Air Cooling Water Temperature Control Valve		Genset-C	ENG-LT-CW
PI-3101-C	HT cooling water pressure behind engine pressure indicator		Genset-C	ENG-HT-CW
PI-4101-C	LT cooling water pressure behind engine pressure indicator		Genset-C	ENG-LT-CW
PT-3101-C	HT cooling water pressure behind engine		Genset-C	ENG-HT-CW
PT-4101-C	LT cooling water pressure behind engine		Genset-C	ENG-LT-CW
TE-3103-C	HT cooling water temperature behind 3-way valve mixing point		Genset-C	ENG-HT-CW
TE-4103-C	LT cooling water temperature behind 3-way valve mixing point		Genset-C	ENG-LT-CW
TI-3101-C	HT cooling water pressure behind engine temperature indicator		Genset-C	ENG-HT-CW
TI-3102-C	HT cooling water temperature indicator		Genset-C	ENG-HT-CW
TI-3103-C	HT cooling water temperature behind 3-way valve mixing point temperature indicator		Genset-C	ENG-HT-CW
TI-4101-C	LT cooling water pressure behind engine temperature indicator		Genset-C	ENG-LT-CW
TI-4102-C			Genset-C	ENG-LT-CW
TI-4103-C	LT cooling water temperature behind 3-way valve mixing point		Genset-C	ENG-LT-CW
TI-4105-C			Genset-C	ENG-LT-CW
RSC-TCV-002-D	Charge air c.w temp control valve TCV002 end-position close		Genset-D	ENG-HT-CW
RSC-TCV-102-D	Charge air c.w temp control valve TCV102 end-position close		Genset-D	ENG-LT-CW
RSO-TCV-002-D	Charge air c.w temp control valve TCV002 end-position open		Genset-D	ENG-HT-CW
RSO-TCV-102-D	Charge air c.w temp control valve TCV102 end-position open		Genset-D	ENG-LT-CW
RT-TCV-002-D	HT c.w temperature control valve TCV002 position feedback		Genset-D	ENG-HT-CW
RT-TCV-102-D	Charge air c.w temperature control valve TCV102 position feedback		Genset-D	ENG-LT-CW
TCV-002-D	HT Cooling Water Temperature Control Valve		Genset-D	ENG-HT-CW
TCV-102-D	Charge Air Cooling Water Temperature Control Valve		Genset-D	ENG-LT-CW
PI-3101-D	HT cooling water pressure behind engine pressure indicator		Genset-D	ENG-HT-CW
PI-4101-D	LT cooling water pressure behind engine pressure indicator		Genset-D	ENG-LT-CW
PT-3101-D	HT cooling water pressure behind engine		Genset-D	ENG-HT-CW
PT-4101-D	LT cooling water pressure behind engine		Genset-D	ENG-LT-CW
TE-3103-D	HT cooling water temperature behind 3-way valve mixing point		Genset-D	ENG-HT-CW
TE-4103-D	LT cooling water temperature behind 3-way valve mixing point		Genset-D	ENG-LT-CW
TI-3101-D	HT cooling water pressure behind engine temperature indicator		Genset-D	ENG-HT-CW
TI-3102-D	HT cooling water temperature indicator		Genset-D	ENG-HT-CW
TI-3103-D	HT cooling water temperature behind 3-way valve mixing point temperature indicator		Genset-D	ENG-HT-CW
TI-4101-D	LT cooling water pressure behind engine temperature indicator		Genset-D	ENG-LT-CW
TI-4102-D			Genset-D	ENG-LT-CW
TI-4103-D	LT cooling water temperature behind 3-way valve mixing point		Genset-D	ENG-LT-CW
TI-4105-D			Genset-D	ENG-LT-CW
1PT-5704	Pressure before fuel oil ring-line pressure control valve PCV018	1	Common	FO-SUP
1TE-5704	Temperature Element 1 before fuel oil ring-line pressure control valve PCV018	1	Common	FO-SUP
2PT-5704	Pressure before fuel oil ring-line pressure control valve PCV018	1	Common	FO-SUP
2TE5704	Temperature Element 2 before fuel oil ring-line pressure control valve PCV018	1	Common	FO-SUP
PI-5704	Pressure indicator before fuel oil ring-line control valve PCV018	1	Common	FO-SUP
TI-5704	Temperature Indicator before fuel oil-ring pressure control valve PCV018	1	Common	FO-SUP
1SOV-220	Starting air pressure expansion vessel automatic condensate drain valve 1	1	Common	START-AIR
2SOV-220	Starting air pressure expansion vessel automatic condensate drain valve 2	1	Common	START-AIR
PI-7103-A	Pressure indicator inside starting air pressure expansion vessel 1V120	1	Common	START-AIR
PI-7103-B	Pressure indicator inside starting air pressure expansion vessel 2V120	1	Common	START-AIR
PT-7103-B	Pressure inside starting air pressure expansion vessel 2V120	1	Common	START-AIR
PT-7103-A	Pressure inside starting air pressure expansion vessel 1V120	1	Common	START-AIR
1SOV-293	SCR compressed air pressure expansion vessel automatic condensate drain valve	1	Common	SCR-AIR
2SOV-293	SCR compressed air pressure expansion vessel automatic condensate drain valve	1	Common	SCR-AIR

Tag #	Service Description	Qty	Genset / Common	System
PI-7503-A	SCR compressed air pressure expansion vessel pressure indicator A	1	Common	SCR-AIR
PI-7503-B	SCR compressed air pressure expansion vessel pressure indicator B	1	Common	SCR-AIR
1PT-5204	Pressure before diesel ring-line pressure control valve PCV015	1	Common	DO-SUP
2PT-5204	Pressure before diesel ring-line pressure control valve PCV015	1	Common	DO-SUP
PI-5204	Pressure indicator before diesel ring-line pressure control valve PCV015	1	Common	DO-SUP
TI-5204	Temperature indicator before diesel ring-line pressure control valve PCV015	1	Common	DO-SUP
2SOV-027	Ctrl & Inst air pressure expansion vessel unloading set automatic condensate drain valve	1	Common	CONTROL-AIR
PI-2V027	Pressure indicator for Ctrl & Inst air pressure expansion vessel unloading station	1	Common	CONTROL-AIR
LSHH-T015	Level Switch High - Diesel Oil Daily Tank (T015)	1	Common	DO-SUP
LTI-T015	Level Transmitter Indicator - Diesel Oil Daily Tank (T015)	1	Common	DO-SUP
1TE-6570-A1-A	Exhaust Gas temperature cylinder A1		Genset-A	ENG-EXH
1TE-6570-A2-A	Exhaust Gas temperature cylinder A2		Genset-A	ENG-EXH
1TE-6570-A3-A	Exhaust Gas temperature cylinder A3		Genset-A	ENG-EXH
1TE-6570-A4-A	Exhaust Gas temperature cylinder A4		Genset-A	ENG-EXH
1TE-6570-A5-A	Exhaust Gas temperature cylinder A5		Genset-A	ENG-EXH
1TE-6570-A6-A	Exhaust Gas temperature cylinder A6		Genset-A	ENG-EXH
1TE-6570-A7-A	Exhaust Gas temperature cylinder A7		Genset-A	ENG-EXH
1TE-6570-A8-A	Exhaust Gas temperature cylinder A8		Genset-A	ENG-EXH
1TE-6570-A9-A	Exhaust Gas temperature cylinder A9		Genset-A	ENG-EXH
1TE-6570-B1-A	Exhaust Gas temperature cylinder B1		Genset-A	ENG-EXH
1TE-6570-B2-A	Exhaust Gas temperature cylinder B2		Genset-A	ENG-EXH
1TE-6570-B3-A	Exhaust Gas temperature cylinder B3		Genset-A	ENG-EXH
1TE-6570-B4-A	Exhaust Gas temperature cylinder B4		Genset-A	ENG-EXH
1TE-6570-B5-A	Exhaust Gas temperature cylinder B5		Genset-A	ENG-EXH
1TE-6570-B6-A	Exhaust Gas temperature cylinder B6		Genset-A	ENG-EXH
1TE-6570-B7-A	Exhaust Gas temperature cylinder B7		Genset-A	ENG-EXH
1TE-6570-B8-A	Exhaust Gas temperature cylinder B8		Genset-A	ENG-EXH
1TE-6570-B9-A	Exhaust Gas temperature cylinder B9		Genset-A	ENG-EXH
1TE-6575-A-A	Exhaust gas temperature before turbo charger A		Genset-A	ENG-EXH
1TE-6575-B-A	Exhaust gas temperature before turbo charger B		Genset-A	ENG-EXH
1TE-6580-A-A	Exhaust gas temperature after turbo charger A		Genset-A	ENG-EXH
1TE-6580-B-A	Exhaust gas temperature after turbo charger B		Genset-A	ENG-EXH
FQ-099-A	NOx Quantity Emission Measuring Probe A		Genset-A	ENG-EXH
FQ-099-B	NOx Quantity Emission Measuring Probe B		Genset-B	ENG-EXH
FQ-099-C	NOx Quantity Emission Measuring Probe C		Genset-C	ENG-EXH
FQ-099-D	NOx Quantity Emission Measuring Probe D		Genset-D	ENG-EXH
TE-6604-A	Exhaust gas temperature after exhaust gas silencer		Genset-A	ENG-EXH
1TE-6570-A1-B	Exhaust Gas temperature cylinder A1		Genset-B	ENG-EXH
1TE-6570-A2-B	Exhaust Gas temperature cylinder A2		Genset-B	ENG-EXH
1TE-6570-A3-B	Exhaust Gas temperature cylinder A3		Genset-B	ENG-EXH
1TE-6570-A4-B	Exhaust Gas temperature cylinder A4		Genset-B	ENG-EXH
1TE-6570-A5-B	Exhaust Gas temperature cylinder A5		Genset-B	ENG-EXH
1TE-6570-A6-B	Exhaust Gas temperature cylinder A6		Genset-B	ENG-EXH
1TE-6570-A7-B	Exhaust Gas temperature cylinder A7		Genset-B	ENG-EXH
1TE-6570-A8-B	Exhaust Gas temperature cylinder A8		Genset-B	ENG-EXH
1TE-6570-A9-B	Exhaust Gas temperature cylinder A9		Genset-B	ENG-EXH
1TE-6570-B1-B	Exhaust Gas temperature cylinder B1		Genset-B	ENG-EXH
1TE-6570-B2-B	Exhaust Gas temperature cylinder B2		Genset-B	ENG-EXH
1TE-6570-B3-B	Exhaust Gas temperature cylinder B3		Genset-B	ENG-EXH
1TE-6570-B4-B	Exhaust Gas temperature cylinder B4		Genset-B	ENG-EXH
1TE-6570-B5-B	Exhaust Gas temperature cylinder B5		Genset-B	ENG-EXH
1TE-6570-B6-B	Exhaust Gas temperature cylinder B6		Genset-B	ENG-EXH
1TE-6570-B7-B	Exhaust Gas temperature cylinder B7		Genset-B	ENG-EXH
1TE-6570-B8-B	Exhaust Gas temperature cylinder B8		Genset-B	ENG-EXH
1TE-6570-B9-B	Exhaust Gas temperature cylinder B9		Genset-B	ENG-EXH
1TE-6575-A-B	Exhaust gas temperature before turbo charger A		Genset-B	ENG-EXH
1TE-6575-B-B	Exhaust gas temperature before turbo charger B		Genset-B	ENG-EXH
1TE-6580-A-B	Exhaust gas temperature after turbo charger A		Genset-B	ENG-EXH

Tag #	Service Description	Qty	Genset / Common	System
1TE-6580-B-B	Exhaust gas temperature after turbo charger B		Genset-B	ENG-EXH
TE-6604-B	Exhaust gas temperature after exhaust gas silencer		Genset-B	ENG-EXH
1TE-6570-A1-C	Exhaust Gas temperature cylinder A1		Genset-C	ENG-EXH
1TE-6570-A2-C	Exhaust Gas temperature cylinder A2		Genset-C	ENG-EXH
1TE-6570-A3-C	Exhaust Gas temperature cylinder A3		Genset-C	ENG-EXH
1TE-6570-A4-C	Exhaust Gas temperature cylinder A4		Genset-C	ENG-EXH
1TE-6570-A5-C	Exhaust Gas temperature cylinder A5		Genset-C	ENG-EXH
1TE-6570-A6-C	Exhaust Gas temperature cylinder A6		Genset-C	ENG-EXH
1TE-6570-A7-C	Exhaust Gas temperature cylinder A7		Genset-C	ENG-EXH
1TE-6570-A8-C	Exhaust Gas temperature cylinder A8		Genset-C	ENG-EXH
1TE-6570-A9-C	Exhaust Gas temperature cylinder A9		Genset-C	ENG-EXH
1TE-6570-B1-C	Exhaust Gas temperature cylinder B1		Genset-C	ENG-EXH
1TE-6570-B2-C	Exhaust Gas temperature cylinder B2		Genset-C	ENG-EXH
1TE-6570-B3-C	Exhaust Gas temperature cylinder B3		Genset-C	ENG-EXH
1TE-6570-B4-C	Exhaust Gas temperature cylinder B4		Genset-C	ENG-EXH
1TE-6570-B5-C	Exhaust Gas temperature cylinder B5		Genset-C	ENG-EXH
1TE-6570-B6-C	Exhaust Gas temperature cylinder B6		Genset-C	ENG-EXH
1TE-6570-B7-C	Exhaust Gas temperature cylinder B7		Genset-C	ENG-EXH
1TE-6570-B8-C	Exhaust Gas temperature cylinder B8		Genset-C	ENG-EXH
1TE-6570-B9-C	Exhaust Gas temperature cylinder B9		Genset-C	ENG-EXH
1TE-6575-A-C	Exhaust gas temperature before turbo charger A		Genset-C	ENG-EXH
1TE-6575-B-C	Exhaust gas temperature before turbo charger B		Genset-C	ENG-EXH
1TE-6580-A-C	Exhaust gas temperature after turbo charger A		Genset-C	ENG-EXH
1TE-6580-B-C	Exhaust gas temperature after turbo charger B		Genset-C	ENG-EXH
TE-6604-C	Exhaust gas temperature after exhaust gas silencer		Genset-C	ENG-EXH
1TE-6570-A1-D	Exhaust Gas temperature cylinder A1		Genset-D	ENG-EXH
1TE-6570-A2-D	Exhaust Gas temperature cylinder A2		Genset-D	ENG-EXH
1TE-6570-A3-D	Exhaust Gas temperature cylinder A3		Genset-D	ENG-EXH
1TE-6570-A4-D	Exhaust Gas temperature cylinder A4		Genset-D	ENG-EXH
1TE-6570-A5-D	Exhaust Gas temperature cylinder A5		Genset-D	ENG-EXH
1TE-6570-A6-D	Exhaust Gas temperature cylinder A6		Genset-D	ENG-EXH
1TE-6570-A7-D	Exhaust Gas temperature cylinder A7		Genset-D	ENG-EXH
1TE-6570-A8-D	Exhaust Gas temperature cylinder A8		Genset-D	ENG-EXH
1TE-6570-A9-D	Exhaust Gas temperature cylinder A9		Genset-D	ENG-EXH
1TE-6570-B1-D	Exhaust Gas temperature cylinder B1		Genset-D	ENG-EXH
1TE-6570-B2-D	Exhaust Gas temperature cylinder B2		Genset-D	ENG-EXH
1TE-6570-B3-D	Exhaust Gas temperature cylinder B3		Genset-D	ENG-EXH
1TE-6570-B4-D	Exhaust Gas temperature cylinder B4		Genset-D	ENG-EXH
1TE-6570-B5-D	Exhaust Gas temperature cylinder B5		Genset-D	ENG-EXH
1TE-6570-B6-D	Exhaust Gas temperature cylinder B6		Genset-D	ENG-EXH
1TE-6570-B7-D	Exhaust Gas temperature cylinder B7		Genset-D	ENG-EXH
1TE-6570-B8-D	Exhaust Gas temperature cylinder B8		Genset-D	ENG-EXH
1TE-6570-B9-D	Exhaust Gas temperature cylinder B9		Genset-D	ENG-EXH
1TE-6575-A-D	Exhaust gas temperature before turbo charger A		Genset-D	ENG-EXH
1TE-6575-B-D	Exhaust gas temperature before turbo charger B		Genset-D	ENG-EXH
1TE-6580-A-D	Exhaust gas temperature after turbo charger A		Genset-D	ENG-EXH
1TE-6580-B-D	Exhaust gas temperature after turbo charger B		Genset-D	ENG-EXH
TE-6604-D	Exhaust gas temperature after exhaust gas silencer		Genset-D	ENG-EXH
PI-5070-A	Pressure Indicator - Fuel Oil Supply to Engine		Genset-A	ENG-FO
PT-5070-A	Pressure Transmitter - Fuel Oil Supply to Engine		Genset-A	ENG-FO
TE-5070-A	Temperature Element - Fuel Oil Supply to Engine		Genset-A	ENG-FO
PI-5070-B	Pressure Indicator - Fuel Oil Supply to Engine		Genset-B	ENG-FO
PT-5070-B	Pressure Transmitter - Fuel Oil Supply to Engine		Genset-B	ENG-FO
TE-5070-B	Temperature Element - Fuel Oil Supply to Engine		Genset-B	ENG-FO
PI-5070-C	Pressure Indicator - Fuel Oil Supply to Engine		Genset-C	ENG-FO
PT-5070-C	Pressure Transmitter - Fuel Oil Supply to Engine		Genset-C	ENG-FO
TE-5070-C	Temperature Element - Fuel Oil Supply to Engine		Genset-C	ENG-FO
PI-5070-D	Pressure Indicator - Fuel Oil Supply to Engine		Genset-D	ENG-FO
PT-5070-D	Pressure Transmitter - Fuel Oil Supply to Engine		Genset-D	ENG-FO
TE-5070-D	Temperature Element - Fuel Oil Supply to Engine		Genset-D	ENG-FO
1PT-3170-A	HT Cooling Water to Engine Pressure Transmitter 1		Genset-A	ENG-HT-CW
1TE-3180-A	HT Cooling Water from Engine Temperature Element 1		Genset-A	ENG-HT-CW
2PT-3170-A	HT Cooling Water to Engine Pressure Transmitter 2		Genset-A	ENG-HT-CW
2TE-3180-A	HT Cooling Water from Engine Temperature Element 2		Genset-A	ENG-HT-CW

Tag #	Service Description	Qty	Genset / Common	System
PI-3170-A	HT Cooling Water to Engine Pressure Indicator		Genset-A	ENG-HT-CW
TE-3101-A	HT Cooling Water Radiators Inlet Temperature Element		Genset-A	ENG-HT-CW
TE-3102-A	HT Cooling Water Radiators Outlet Temperature Element		Genset-A	ENG-HT-CW
TE-3168-A	HT Cooling Water to Engine (before preheater) Temperature Element		Genset-A	ENG-HT-CW
TE-3170-A	HT Cooling Water to Engine (after preheater) Temperature Element		Genset-A	ENG-HT-CW
TE-4104-A	LT Cooling Water Radiators Inlet Temperature Element		Genset-A	ENG-HT-CW
TE-4105-A	LT Cooling Water Radiators Outlet Temperature Element		Genset-A	ENG-HT-CW
1PT-3170-B	HT Cooling Water to Engine Pressure Transmitter 1		Genset-B	ENG-HT-CW
1TE-3180-B	HT Cooling Water from Engine Temperature Element 1		Genset-B	ENG-HT-CW
2PT-3170-B	HT Cooling Water to Engine Pressure Transmitter 2		Genset-B	ENG-HT-CW
2TE-3180-B	HT Cooling Water from Engine Temperature Element 2		Genset-B	ENG-HT-CW
PI-3170-B	HT Cooling Water to Engine Pressure Indicator		Genset-B	ENG-HT-CW
TE-3101-B	HT Cooling Water Radiators Inlet Temperature Element		Genset-B	ENG-HT-CW
TE-3102-B	HT Cooling Water Radiators Outlet Temperature Element		Genset-B	ENG-HT-CW
TE-3168-B	HT Cooling Water to Engine (before preheater) Temperature Element		Genset-B	ENG-HT-CW
TE-3170-B	HT Cooling Water to Engine (after preheater) Temperature Element		Genset-B	ENG-HT-CW
TE-4104-B	LT Cooling Water Radiators Inlet Temperature Element		Genset-B	ENG-HT-CW
TE-4105-B	LT Cooling Water Radiators Outlet Temperature Element		Genset-B	ENG-HT-CW
1PT-3170-C	HT Cooling Water to Engine Pressure Transmitter 1		Genset-C	ENG-HT-CW
1TE-3180-C	HT Cooling Water from Engine Temperature Element 1		Genset-C	ENG-HT-CW
2PT-3170-C	HT Cooling Water to Engine Pressure Transmitter 2		Genset-C	ENG-HT-CW
2TE-3180-C	HT Cooling Water from Engine Temperature Element 2		Genset-C	ENG-HT-CW
PI-3170-C	HT Cooling Water to Engine Pressure Indicator		Genset-C	ENG-HT-CW
TE-3101-C	HT Cooling Water Radiators Inlet Temperature Element		Genset-C	ENG-HT-CW
TE-3102-C	HT Cooling Water Radiators Outlet Temperature Element		Genset-C	ENG-HT-CW
TE-3168-C	HT Cooling Water to Engine (before preheater) Temperature Element		Genset-C	ENG-HT-CW
TE-3170-C	HT Cooling Water to Engine (after preheater) Temperature Element		Genset-C	ENG-HT-CW
TE-4104-C	LT Cooling Water Radiators Inlet Temperature Element		Genset-C	ENG-HT-CW
TE-4105-C	LT Cooling Water Radiators Outlet Temperature Element		Genset-C	ENG-HT-CW
1PT-3170-D	HT Cooling Water to Engine Pressure Transmitter 1		Genset-D	ENG-HT-CW
1TE-3180-D	HT Cooling Water from Engine Temperature Element 1		Genset-D	ENG-HT-CW
2PT-3170-D	HT Cooling Water to Engine Pressure Transmitter 2		Genset-D	ENG-HT-CW
2TE-3180-D	HT Cooling Water from Engine Temperature Element 2		Genset-D	ENG-HT-CW
PI-3170-D	HT Cooling Water to Engine Pressure Indicator		Genset-D	ENG-HT-CW
TE-3101-D	HT Cooling Water Radiators Inlet Temperature Element		Genset-D	ENG-HT-CW
TE-3102-D	HT Cooling Water Radiators Outlet Temperature Element		Genset-D	ENG-HT-CW
TE-3168-D	HT Cooling Water to Engine (before preheater) Temperature Element		Genset-D	ENG-HT-CW
TE-3170-D	HT Cooling Water to Engine (after preheater) Temperature Element		Genset-D	ENG-HT-CW
TE-4104-D	LT Cooling Water Radiators Inlet Temperature Element		Genset-D	ENG-HT-CW
TE-4105-D	LT Cooling Water Radiators Outlet Temperature Element		Genset-D	ENG-HT-CW
1HT-6000	Outside Ambient Relative Humidity - Gensets A & B	1	Common	ENG-INT-AIR
1TT-6000	Outside Ambient Temperature - Gensets A & B	1	Common	ENG-INT-AIR
2HT-6000	Outside Ambient Relative Humidity - Gensets C & D	1	Common	ENG-INT-AIR
2TT-6000	Outside Ambient Temperature - Gensets C & D	1	Common	ENG-INT-AIR
1PI-6180-A	Charge Air Pressure after intercooler Pressure Indicator		Genset-A	ENG-INT-AIR
1PT-6180-A	Charge Air Pressure after intercooler Pressure Transmitter		Genset-A	ENG-INT-AIR
1TE-6180-A-A	Charge Air Temperature after intercooler A-Bank		Genset-A	ENG-INT-AIR
1TE-6180-B-A	Charge Air Temperature after intercooler B-Bank		Genset-A	ENG-INT-AIR
2PT-6180-A-A	Charge Air Pressure before cylinder A-Bank Pressure Indicator		Genset-A	ENG-INT-AIR
2PT-6180-B-A	Charge Air Pressure before cylinder B-Bank Pressure Indicator		Genset-A	ENG-INT-AIR
2TE-6180-A-A	Charge Air Temperature after intercooler A-Bank		Genset-A	ENG-INT-AIR
2TE-6180-B-A	Charge Air Temperature after intercooler B-Bank		Genset-A	ENG-INT-AIR
BFF1030-A	Charge Air Blow-Off Flap		Genset-A	ENG-INT-AIR
PDIT-6001-A	Combustion Air Intake Filter Differential Pressure Transmitter		Genset-A	ENG-INT-AIR
PDSH-6001-A	Combustion Air Intake Filter Pressure Differential Switch - High		Genset-A	ENG-INT-AIR
PT-6100-A	Suction air pressure after air intake filter		Genset-A	ENG-INT-AIR

Tag #	Service Description	Qty	Genset / Common	System
RSC-RT-BFF1030-A	Charge Air Blow-Off Flap - Remote Feedback - Closed		Genset-A	ENG-INT-AIR
RSO-RT-BFF1030-A	Charge Air Blow-Off Flap - Remote Feedback - Open		Genset-A	ENG-INT-AIR
TE-6001-A	Combustion Air Intake Filter Inlet Temperature Element		Genset-A	ENG-INT-AIR
TE-6100-A	Air Intake Temperature before compressor		Genset-A	ENG-INT-AIR
1PI-6180-B	Charge Air Pressure after intercooler Pressure Indicator		Genset-B	ENG-INT-AIR
1PT-6180-B	Charge Air Pressure after intercooler Pressure Transmitter		Genset-B	ENG-INT-AIR
1TE-6180-A-B	Charge Air Temperature after intercooler A-Bank		Genset-B	ENG-INT-AIR
1TE-6180-B-B	Charge Air Temperature after intercooler B-Bank		Genset-B	ENG-INT-AIR
2PT-6180-A-B	Charge Air Pressure before cylinder A-Bank Pressure Indicator		Genset-B	ENG-INT-AIR
2PT-6180-B-B	Charge Air Pressure before cylinder B-Bank Pressure Indicator		Genset-B	ENG-INT-AIR
2TE-6180-A-B	Charge Air Temperature after intercooler A-Bank		Genset-B	ENG-INT-AIR
2TE-6180-B-B	Charge Air Temperature after intercooler B-Bank		Genset-B	ENG-INT-AIR
BFF1030-B	Charge Air Blow-Off Flap		Genset-B	ENG-INT-AIR
PDIT-6001-B	Combustion Air Intake Filter Differential Pressure Transmitter		Genset-B	ENG-INT-AIR
PDSH-6001-B	Combustion Air Intake Filter Pressure Differential Switch - High		Genset-B	ENG-INT-AIR
PT-6100-B	Suction air pressure after air intake filter		Genset-B	ENG-INT-AIR
RSC-RT-BFF1030-B	Charge Air Blow-Off Flap - Remote Feedback - Closed		Genset-B	ENG-INT-AIR
RSO-RT-BFF1030-B	Charge Air Blow-Off Flap - Remote Feedback - Open		Genset-B	ENG-INT-AIR
TE-6001-B	Combustion Air Intake Filter Inlet Temperature Element		Genset-B	ENG-INT-AIR
TE-6100-B	Air Intake Temperature before compressor		Genset-B	ENG-INT-AIR
1PI-6180-C	Charge Air Pressure after intercooler Pressure Indicator		Genset-C	ENG-INT-AIR
1PT-6180-C	Charge Air Pressure after intercooler Pressure Transmitter		Genset-C	ENG-INT-AIR
1TE-6180-A-C	Charge Air Temperature after intercooler A-Bank		Genset-C	ENG-INT-AIR
1TE-6180-B-C	Charge Air Temperature after intercooler B-Bank		Genset-C	ENG-INT-AIR
2PT-6180-A-C	Charge Air Pressure before cylinder A-Bank Pressure Indicator		Genset-C	ENG-INT-AIR
2PT-6180-B-C	Charge Air Pressure before cylinder B-Bank Pressure Indicator		Genset-C	ENG-INT-AIR
2TE-6180-A-C	Charge Air Temperature after intercooler A-Bank		Genset-C	ENG-INT-AIR
2TE-6180-B-C	Charge Air Temperature after intercooler B-Bank		Genset-C	ENG-INT-AIR
BFF1030-C	Charge Air Blow-Off Flap		Genset-C	ENG-INT-AIR
PDIT-6001-C	Combustion Air Intake Filter Differential Pressure Transmitter		Genset-C	ENG-INT-AIR
PDSH-6001-C	Combustion Air Intake Filter Pressure Differential Switch - High		Genset-C	ENG-INT-AIR
PT-6100-C	Suction air pressure after air intake filter		Genset-C	ENG-INT-AIR
RSC-RT-BFF1030-C	Charge Air Blow-Off Flap - Remote Feedback - Closed		Genset-C	ENG-INT-AIR
RSO-RT-BFF1030-C	Charge Air Blow-Off Flap - Remote Feedback - Open		Genset-C	ENG-INT-AIR
TE-6001-C	Combustion Air Intake Filter Inlet Temperature Element		Genset-C	ENG-INT-AIR
TE-6100-C	Air Intake Temperature before compressor		Genset-C	ENG-INT-AIR
1PI-6180-D	Charge Air Pressure after intercooler Pressure Indicator		Genset-D	ENG-INT-AIR
1PT-6180-D	Charge Air Pressure after intercooler Pressure Transmitter		Genset-D	ENG-INT-AIR
1TE-6180-A-D	Charge Air Temperature after intercooler A-Bank		Genset-D	ENG-INT-AIR
1TE-6180-B-D	Charge Air Temperature after intercooler B-Bank		Genset-D	ENG-INT-AIR
2PT-6180-A-D	Charge Air Pressure before cylinder A-Bank Pressure Indicator		Genset-D	ENG-INT-AIR
2PT-6180-B-D	Charge Air Pressure before cylinder B-Bank Pressure Indicator		Genset-D	ENG-INT-AIR
2TE-6180-A-D	Charge Air Temperature after intercooler A-Bank		Genset-D	ENG-INT-AIR
2TE-6180-B-D	Charge Air Temperature after intercooler B-Bank		Genset-D	ENG-INT-AIR
BFF1030-D	Charge Air Blow-Off Flap		Genset-D	ENG-INT-AIR
PDIT-6001-D	Combustion Air Intake Filter Differential Pressure Transmitter		Genset-D	ENG-INT-AIR
PDSH-6001-D	Combustion Air Intake Filter Pressure Differential Switch - High		Genset-D	ENG-INT-AIR
PT-6100-D	Suction air pressure after air intake filter		Genset-D	ENG-INT-AIR
RSC-RT-BFF1030-D	Charge Air Blow-Off Flap - Remote Feedback - Closed		Genset-D	ENG-INT-AIR
RSO-RT-BFF1030-D	Charge Air Blow-Off Flap - Remote Feedback - Open		Genset-D	ENG-INT-AIR
TE-6001-D	Combustion Air Intake Filter Inlet Temperature Element		Genset-D	ENG-INT-AIR
TE-6100-D	Air Intake Temperature before compressor		Genset-D	ENG-INT-AIR
1PT-4170-A	LT Cooling Water to Engine Pressure Transmitter		Genset-A	ENG-LT-CW
PI-4170-A	LT Cooling Water to Engine Pressure Indicator		Genset-A	ENG-LT-CW
TE-4170-A	LT Cooling Water to Engine Temperature Element		Genset-A	ENG-LT-CW
TE-4180-A	LT Cooling Water from Engine Temperature Element		Genset-A	ENG-LT-CW

Tag #	Service Description	Qty	Genset / Common	System
1PT-4170-B	LT Cooling Water to Engine Pressure Transmitter		Genset-B	ENG-LT-CW
PI-4170-B	LT Cooling Water to Engine Pressure Indicator		Genset-B	ENG-LT-CW
TE-4170-B	LT Cooling Water to Engine Temperature Element		Genset-B	ENG-LT-CW
TE-4180-B	LT Cooling Water from Engine Temperature Element		Genset-B	ENG-LT-CW
1PT-4170-C	LT Cooling Water to Engine Pressure Transmitter		Genset-C	ENG-LT-CW
PI-4170-C	LT Cooling Water to Engine Pressure Indicator		Genset-C	ENG-LT-CW
TE-4170-C	LT Cooling Water to Engine Temperature Element		Genset-C	ENG-LT-CW
TE-4180-C	LT Cooling Water from Engine Temperature Element		Genset-C	ENG-LT-CW
1PT-4170-D	LT Cooling Water to Engine Pressure Transmitter		Genset-D	ENG-LT-CW
PI-4170-D	LT Cooling Water to Engine Pressure Indicator		Genset-D	ENG-LT-CW
TE-4170-D	LT Cooling Water to Engine Temperature Element		Genset-D	ENG-LT-CW
TE-4180-D	LT Cooling Water from Engine Temperature Element		Genset-D	ENG-LT-CW
PI-3470-A	Nozzle Cooling Water to Engine Pressure Indicator		Genset-A	ENG-NCW
PT-3470-A	Nozzle Cooling Water to Engine Pressure Transmitter 1		Genset-A	ENG-NCW
TE-3470-A	Nozzle Cooling Water from Engine Temperature Element		Genset-A	ENG-NCW
PI-3470-B	Nozzle Cooling Water to Engine Pressure Indicator		Genset-B	ENG-NCW
PT-3470-B	Nozzle Cooling Water to Engine Pressure Transmitter 1		Genset-B	ENG-NCW
TE-3470-B	Nozzle Cooling Water from Engine Temperature Element		Genset-B	ENG-NCW
PI-3470-C	Nozzle Cooling Water to Engine Pressure Indicator		Genset-C	ENG-NCW
PT-3470-C	Nozzle Cooling Water to Engine Pressure Transmitter 1		Genset-C	ENG-NCW
TE-3470-C	Nozzle Cooling Water from Engine Temperature Element		Genset-C	ENG-NCW
PI-3470-D	Nozzle Cooling Water to Engine Pressure Indicator		Genset-D	ENG-NCW
PT-3470-D	Nozzle Cooling Water to Engine Pressure Transmitter 1		Genset-D	ENG-NCW
TE-3470-D	Nozzle Cooling Water from Engine Temperature Element		Genset-D	ENG-NCW
1MOV-017	Fuel Oil Settling Tank Filling Selection Valve	1	Common	FO-SUP
2MOV-017	Fuel Oil Settling Tank Separator Bypass Selection Valve	1	Common	FO-SUP
3MOV-017	Fuel Oil Settling Tank Separator Re-Circulation Selection Valve	1	Common	FO-SUP
4MOV-017	Fuel Oil Settling Tank Discharge Selection Valve	1	Common	FO-SUP
LSHH-1T017	Level Switch High - Fuel Oil Settling Tank 1 (1T017)	1	Common	FO-SUP
LSHH-2T017	Level Switch High - Fuel Oil Settling Tank 2 (2T017)	1	Common	FO-SUP
LSHH-T018	Level Switch High - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
LSHH-T218	Level Switch High - Fuel Oil Buffer Tank (T218)	1	Common	FO-SUP
LSLL-1T017	Level Switch Low - Fuel Oil Settling Tank 1 (1T017)	1	Common	FO-SUP
LSLL-2T017	Level Switch Low - Fuel Oil Settling Tank 2 (2T017)	1	Common	FO-SUP
LSLL-T018	Level Switch Low - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
LSLL-T218	Level Switch Low - Fuel Oil Buffer Tank (T218)	1	Common	FO-SUP
LTI-1T017	Level Transmitter Indicator - Fuel Oil Settling Tank 1 (1T017)	1	Common	FO-SUP
LTI-2T017	Level Transmitter Indicator - Fuel Oil Settling Tank 2 (2T017)	1	Common	FO-SUP
LTI-T018	Level Transmitter Indicator - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
LTI-T218	Level Transmitter Indicator - Fuel Oil Buffer Tank (T218)	1	Common	FO-SUP
RSC-1MOV017	Fuel Oil Settling Tank Filling Selection Valve - Remote Feedback Switch - Closed	1	Common	FO-SUP
RSC-2MOV017	Fuel Oil Settling Tank Separator Bypass Selection Valve - Remote Feedback Switch - Closed	1	Common	FO-SUP
RSC-3MOV017	Fuel Oil Settling Tank Separator Re-Circulation Selection Valve - Remote Feedback Switch - Closed	1	Common	FO-SUP
RSC-4MOV017	Fuel Oil Settling Tank Discharge Selection Valve - Remote Feedback Switch - Closed	1	Common	FO-SUP
RSO-1MOV017	Fuel Oil Settling Tank Filling Selection Valve - Remote Feedback Switch - Open	1	Common	FO-SUP
RSO-2MOV017	Fuel Oil Settling Tank Separator Bypass Selection Valve - Remote Feedback Switch - Open	1	Common	FO-SUP
RSO-3MOV017	Fuel Oil Settling Tank Separator Re-Circulation Selection Valve - Remote Feedback Switch - Open	1	Common	FO-SUP
RSO-4MOV017	Fuel Oil Settling Tank Discharge Selection Valve - Remote Feedback Switch - Open	1	Common	FO-SUP
TE-1T017	Temperature Element - Fuel Oil Settling Tank 1 (1T017)	1	Common	FO-SUP
TE-2T017	Temperature Element - Fuel Oil Settling Tank 2 (2T017)	1	Common	FO-SUP
TE-T018	Temperature Element - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
TE-T218	Temperature Element - Fuel Oil Buffer Tank (T218)	1	Common	FO-SUP
TI-1T017	Temperature Indicator - Fuel Oil Settling Tank 1 (1T017)	1	Common	FO-SUP
TI-2T017	Temperature Indicator - Fuel Oil Settling Tank 2 (2T017)	1	Common	FO-SUP
TI-T018	Temperature Indicator - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
TI-T218	Temperature Indicator - Fuel Oil Buffer Tank (T218)	1	Common	FO-SUP

Tag #	Service Description	Qty	Genset / Common	System
LCV-018	Fuel Oil Daily Tank Level Control Valve	1	Common	FO-SUP
RSC-LCV018	Level Control Valve - Remote Feedback Switch - Closed - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
RSO-LCV018	Level Control Valve - Remote Feedback Switch - Open - Fuel Oil Daily Tank (T018)	1	Common	FO-SUP
TE-6200-A	Ambient Engine Hall Temperature Over Genset		Genset-A	GENSET
1TE-6500-A	Temperature in Engine Terminal box		Genset-A	GENSET
1TE-GEN-DE-A	Generator drive-end bearing temperature		Genset-A	GENSET
1TE-GEN-NDE-A	Generator non-drive-end bearing temperature		Genset-A	GENSET
1TE-GEN-U-A	Generator stator winding temperature U		Genset-A	GENSET
1TE-GEN-V-A	Generator stator winding temperature V		Genset-A	GENSET
1TE-GEN-W-A	Generator stator winding temperature W		Genset-A	GENSET
2TE-6500-A	Temperature in Engine Terminal box		Genset-A	GENSET
2TE-GEN-DE-A	Generator drive-end bearing temperature		Genset-A	GENSET
2TE-GEN-NDE-A	Generator non-drive-end bearing temperature		Genset-A	GENSET
2TE-GEN-U-A	Generator stator winding temperature U		Genset-A	GENSET
2TE-GEN-V-A	Generator stator winding temperature V		Genset-A	GENSET
2TE-GEN-W-A	Generator stator winding temperature W		Genset-A	GENSET
VSHH-1AIR011-A	Engine Hall Ventilation Blower 1 Vibration High Switch		Genset-A	GENSET
VSHH-2AIR011-A	Engine Hall Ventilation Blower 2 Vibration High Switch		Genset-A	GENSET
TE-6200-B	Ambient Engine Hall Temperature Over Genset		Genset-B	GENSET
1TE-6500-B	Temperature in Engine Terminal box		Genset-B	GENSET
1TE-GEN-DE-B	Generator drive-end bearing temperature		Genset-B	GENSET
1TE-GEN-NDE-B	Generator non-drive-end bearing temperature		Genset-B	GENSET
1TE-GEN-U-B	Generator stator winding temperature U		Genset-B	GENSET
1TE-GEN-V-B	Generator stator winding temperature V		Genset-B	GENSET
1TE-GEN-W-B	Generator stator winding temperature W		Genset-B	GENSET
2TE-6500-B	Temperature in Engine Terminal box		Genset-B	GENSET
2TE-GEN-DE-B	Generator drive-end bearing temperature		Genset-B	GENSET
2TE-GEN-NDE-B	Generator non-drive-end bearing temperature		Genset-B	GENSET
2TE-GEN-U-B	Generator stator winding temperature U		Genset-B	GENSET
2TE-GEN-V-B	Generator stator winding temperature V		Genset-B	GENSET
2TE-GEN-W-B	Generator stator winding temperature W		Genset-B	GENSET
VSHH-1AIR011-B	Engine Hall Ventilation Blower 1 Vibration High Switch		Genset-B	GENSET
VSHH-2AIR011-B	Engine Hall Ventilation Blower 2 Vibration High Switch		Genset-B	GENSET
TE-6200-C	Ambient Engine Hall Temperature Over Genset		Genset-C	GENSET
1TE-6500-C	Temperature in Engine Terminal box		Genset-C	GENSET
1TE-GEN-DE-C	Generator drive-end bearing temperature		Genset-C	GENSET
1TE-GEN-NDE-C	Generator non-drive-end bearing temperature		Genset-C	GENSET
1TE-GEN-U-C	Generator stator winding temperature U		Genset-C	GENSET
1TE-GEN-V-C	Generator stator winding temperature V		Genset-C	GENSET
1TE-GEN-W-C	Generator stator winding temperature W		Genset-C	GENSET
2TE-6500-C	Temperature in Engine Terminal box		Genset-C	GENSET
2TE-GEN-DE-C	Generator drive-end bearing temperature		Genset-C	GENSET
2TE-GEN-NDE-C	Generator non-drive-end bearing temperature		Genset-C	GENSET
2TE-GEN-U-C	Generator stator winding temperature U		Genset-C	GENSET
2TE-GEN-V-C	Generator stator winding temperature V		Genset-C	GENSET
2TE-GEN-W-C	Generator stator winding temperature W		Genset-C	GENSET
VSHH-1AIR011-C	Engine Hall Ventilation Blower 1 Vibration High Switch		Genset-C	GENSET
VSHH-2AIR011-C	Engine Hall Ventilation Blower 2 Vibration High Switch		Genset-C	GENSET
TE-6200-D	Ambient Engine Hall Temperature Over Genset		Genset-D	GENSET
1TE-6500-D	Temperature in Engine Terminal box		Genset-D	GENSET
1TE-GEN-DE-D	Generator drive-end bearing temperature		Genset-D	GENSET
1TE-GEN-NDE-D	Generator non-drive-end bearing temperature		Genset-D	GENSET
1TE-GEN-U-D	Generator stator winding temperature U		Genset-D	GENSET
1TE-GEN-V-D	Generator stator winding temperature V		Genset-D	GENSET
1TE-GEN-W-D	Generator stator winding temperature W		Genset-D	GENSET
2TE-6500-D	Temperature in Engine Terminal box		Genset-D	GENSET
2TE-GEN-DE-D	Generator drive-end bearing temperature		Genset-D	GENSET
2TE-GEN-NDE-D	Generator non-drive-end bearing temperature		Genset-D	GENSET
2TE-GEN-U-D	Generator stator winding temperature U		Genset-D	GENSET
2TE-GEN-V-D	Generator stator winding temperature V		Genset-D	GENSET
2TE-GEN-W-D	Generator stator winding temperature W		Genset-D	GENSET
VSHH-1AIR011-D	Engine Hall Ventilation Blower 1 Vibration High Switch		Genset-D	GENSET

Tag #	Service Description	Qty	Genset / Common	System
VSHH-2AIR011-D	Engine Hall Ventilation Blower 2 Vibration High Switch		Genset-D	GENSET
RSC-TCV-004-A	HT c.w pre-heating temp control valve TCV004 end-position close		Genset-A	ENG-HT-CW
RSO-TCV-004-A	HT c.w pre-heating temp control valve TCV004 end-position open		Genset-A	ENG-HT-CW
RT-TCV-004-A	HT c.w pre-heating temp control valve TCV102 position feedback		Genset-A	ENG-HT-CW
TCV-004-A	HT c.w pre-heating temp control valve		Genset-A	ENG-HT-CW
PI-3203-A	HT c.w pre-heating module electrical heater pressure indicator		Genset-A	ENG-HT-CW
PI-8303-A	HT c.w pre-heat module thermal - oil heater pressure indicator		Genset-A	ENG-HT-CW
PI-P004-A	HT c.w pre-heating module circulation pump outlet pressure indicator		Genset-A	ENG-HT-CW
PSH-P004-A	HT c.w pre-heating module circulation pump pressure switch high		Genset-A	ENG-HT-CW
TE-3203-A	HT cooling water pre-heating temperature module MOD004 outlet		Genset-A	ENG-HT-CW
TI-3202-A	HT c.w pre-heating module circulation pump outlet temperature indicator		Genset-A	ENG-HT-CW
TI-3203-A	HT c.w pre-heating module electrical heater temperature indicator		Genset-A	ENG-HT-CW
TI-8302-A	HT c.w pre-heating temp control valve TCV004 outlet temperature indicator		Genset-A	ENG-HT-CW
TI-8303-A	HT c.w pre-heat module thermal - oil heater temperature indicator		Genset-A	ENG-HT-CW
TSH-H104-A	HT c.w pre-heating module electrical heater temperature switch high		Genset-A	ENG-HT-CW
V-PI-P004-A	HT c.w pre-heating module circulation pump inlet pressure indicator		Genset-A	ENG-HT-CW
RSC-TCV-004-B	HT c.w pre-heating temp control valve TCV004 end-position close		Genset-B	ENG-HT-CW
RSO-TCV-004-B	HT c.w pre-heating temp control valve TCV004 end-position open		Genset-B	ENG-HT-CW
RT-TCV-004-B	HT c.w pre-heating temp control valve TCV102 position feedback		Genset-B	ENG-HT-CW
TCV-004-B	HT c.w pre-heating temp control valve		Genset-B	ENG-HT-CW
PI-3203-B	HT c.w pre-heating module electrical heater pressure indicator		Genset-B	ENG-HT-CW
PI-8303-B	HT c.w pre-heat module thermal - oil heater pressure indicator		Genset-B	ENG-HT-CW
PI-P004-B	HT c.w pre-heating module circulation pump outlet pressure indicator		Genset-B	ENG-HT-CW
PSH-P004-B	HT c.w pre-heating module circulation pump pressure switch high		Genset-B	ENG-HT-CW
TE-3203-B	HT cooling water pre-heating temperature module MOD004 outlet		Genset-B	ENG-HT-CW
TI-3202-B	HT c.w pre-heating module circulation pump outlet temperature indicator		Genset-B	ENG-HT-CW
TI-3203-B	HT c.w pre-heating module electrical heater temperature indicator		Genset-B	ENG-HT-CW
TI-8302-B	HT c.w pre-heating temp control valve TCV004 outlet temperature indicator		Genset-B	ENG-HT-CW
TI-8303-B	HT c.w pre-heat module thermal - oil heater temperature indicator		Genset-B	ENG-HT-CW
TSH-H104-B	HT c.w pre-heating module electrical heater temperature switch high		Genset-B	ENG-HT-CW
V-PI-P004-B	HT c.w pre-heating module circulation pump inlet pressure indicator		Genset-B	ENG-HT-CW
RSC-TCV-004-C	HT c.w pre-heating temp control valve TCV004 end-position close		Genset-C	ENG-HT-CW
RSO-TCV-004-C	HT c.w pre-heating temp control valve TCV004 end-position open		Genset-C	ENG-HT-CW
RT-TCV-004-C	HT c.w pre-heating temp control valve TCV102 position feedback		Genset-C	ENG-HT-CW
TCV-004-C	HT c.w pre-heating temp control valve		Genset-C	ENG-HT-CW
PI-3203-C	HT c.w pre-heating module electrical heater pressure indicator		Genset-C	ENG-HT-CW
PI-8303-C	HT c.w pre-heat module thermal - oil heater pressure indicator		Genset-C	ENG-HT-CW
PI-P004-C	HT c.w pre-heating module circulation pump outlet pressure indicator		Genset-C	ENG-HT-CW
PSH-P004-C	HT c.w pre-heating module circulation pump pressure switch high		Genset-C	ENG-HT-CW
TE-3203-C	HT cooling water pre-heating temperature module MOD004 outlet		Genset-C	ENG-HT-CW
TI-3202-C	HT c.w pre-heating module circulation pump outlet temperature indicator		Genset-C	ENG-HT-CW
TI-3203-C	HT c.w pre-heating module electrical heater temperature indicator		Genset-C	ENG-HT-CW
TI-8302-C	HT c.w pre-heating temp control valve TCV004 outlet temperature indicator		Genset-C	ENG-HT-CW
TI-8303-C	HT c.w pre-heat module thermal - oil heater temperature		Genset-C	ENG-HT-CW

Tag #	Service Description	Qty	Genset / Common	System
	indicator			
TSH-H104-C	HT c.w pre-heating module electrical heater temperature switch high		Genset-C	ENG-HT-CW
V-PI-P004-C	HT c.w pre-heating module circulation pump inlet pressure indicator		Genset-C	ENG-HT-CW
RSC-TCV-004-D	HT c.w pre-heating temp control valve TCV004 end-position close		Genset-D	ENG-HT-CW
RSO-TCV-004-D	HT c.w pre-heating temp control valve TCV004 end-position open		Genset-D	ENG-HT-CW
RT-TCV-004-D	HT c.w pre-heating temp control valve TCV102 position feedback		Genset-D	ENG-HT-CW
TCV-004-D	HT c.w pre-heating temp control valve		Genset-D	ENG-HT-CW
PI-3203-D	HT c.w pre-heating module electrical heater pressure indicator		Genset-D	ENG-HT-CW
PI-8303-D	HT c.w pre-heat module thermal - oil heater pressure indicator		Genset-D	ENG-HT-CW
PI-P004-D	HT c.w pre-heating module circulation pump outlet pressure indicator		Genset-D	ENG-HT-CW
PSH-P004-D	HT c.w pre-heating module circulation pump pressure switch high		Genset-D	ENG-HT-CW
TE-3203-D	HT cooling water pre-heating temperature module MOD004 outlet		Genset-D	ENG-HT-CW
TI-3202-D	HT c.w pre-heating module circulation pump outlet temperature indicator		Genset-D	ENG-HT-CW
TI-3203-D	HT c.w pre-heating module electrical heater temperature indicator		Genset-D	ENG-HT-CW
TI-8302-D	HT c.w pre-heating temp control valve TCV004 outlet temperature indicator		Genset-D	ENG-HT-CW
TI-8303-D	HT c.w pre-heat module thermal - oil heater temperature indicator		Genset-D	ENG-HT-CW
TSH-H104-D	HT c.w pre-heating module electrical heater temperature switch high		Genset-D	ENG-HT-CW
V-PI-P004-D	HT c.w pre-heating module circulation pump inlet pressure indicator		Genset-D	ENG-HT-CW
RSC-TCV-005-A	Nozzle c.w temperature control valve close position		Genset-A	ENG-NCW
RSO-TCV-005-A	Nozzle c.w temperature control valve open position		Genset-A	ENG-NCW
RT-TCV-005-A	Nozzle c.w temperature control valve TCV005 position feedback		Genset-A	ENG-NCW
TCV-005-A	Nozzle c.w temperature control valve		Genset-A	ENG-NCW
FSL-3403-A	Nozzle cooling water module MOD005 flow switch low		Genset-A	ENG-NCW
PSH-P005	Nozzle cooling water module circulation pump pressure switch high			
PI-P005-A	Nozzle cooling water module circulation pump pressure indicator		Genset-A	ENG-NCW
PI-V005-A	Nozzle cooling water buffer tank pressure indicator		Genset-A	ENG-NCW
TE-3401-A	Nozzle cooling water temperature module MOD005 inlet		Genset-A	ENG-NCW
TE-3403-A	Nozzle cooling water temperature module MOD005 outlet		Genset-A	ENG-NCW
TI-3401-A	Nozzle cooling water temperature indicator module MOD005 inlet		Genset-A	ENG-NCW
TI-3402-A	Temperature indicator before nozzle c.w temperature control valve TCV005		Genset-A	ENG-NCW
TI-3403-A	Nozzle cooling water temperature indicator module MOD005 outlet		Genset-A	ENG-NCW
TI-4121-A	Nozzle cooling water module cooler inlet temperature indicator		Genset-A	ENG-NCW
TI-4122-A	Nozzle cooling water module cooler outlet temperature indicator		Genset-A	ENG-NCW
RSC-TCV-005-B	Nozzle c.w temperature control valve close position		Genset-B	ENG-NCW
RSO-TCV-005-B	Nozzle c.w temperature control valve open position		Genset-B	ENG-NCW
RT-TCV-005-B	Nozzle c.w temperature control valve TCV005 position feedback		Genset-B	ENG-NCW
TCV-005-B	Nozzle c.w temperature control valve		Genset-B	ENG-NCW
FSL-3403-B	Nozzle cooling water module MOD005 flow switch low		Genset-B	ENG-NCW
PI-P005-B	Nozzle cooling water module circulation pump pressure indicator		Genset-B	ENG-NCW
PI-V005-B	Nozzle cooling water buffer tank pressure indicator		Genset-B	ENG-NCW
TE-3401-B	Nozzle cooling water temperature module MOD005 inlet		Genset-B	ENG-NCW
TE-3403-B	Nozzle cooling water temperature module MOD005 outlet		Genset-B	ENG-NCW
TI-3401-B	Nozzle cooling water temperature indicator module MOD005 inlet		Genset-B	ENG-NCW
TI-3402-B	Temperature indicator before nozzle c.w temperature control valve TCV005		Genset-B	ENG-NCW
TI-3403-B	Nozzle cooling water temperature indicator module MOD005 outlet		Genset-B	ENG-NCW
TI-4121-B	Nozzle cooling water module cooler inlet temperature indicator		Genset-B	ENG-NCW
TI-4122-B	Nozzle cooling water module cooler outlet temperature indicator		Genset-B	ENG-NCW
RSC-TCV-005-C	Nozzle c.w temperature control valve close position		Genset-C	ENG-NCW
RSO-TCV-005-C	Nozzle c.w temperature control valve open position		Genset-C	ENG-NCW

Tag #	Service Description	Qty	Genset / Common	System
RT-TCV-005-C	Nozzle c.w temperature control valve TCV005 position feedback		Genset-C	ENG-NCW
TCV-005-C	Nozzle c.w temperature control valve		Genset-C	ENG-NCW
FSL-3403-C	Nozzle cooling water module MOD005 flow switch low		Genset-C	ENG-NCW
PI-P005-C	Nozzle cooling water module circulation pump pressure indicator		Genset-C	ENG-NCW
PI-V005-C	Nozzle cooling water buffer tank pressure indicator		Genset-C	ENG-NCW
TE-3401-C	Nozzle cooling water temperature module MOD005 inlet		Genset-C	ENG-NCW
TE-3403-C	Nozzle cooling water temperature module MOD005 outlet		Genset-C	ENG-NCW
TI-3401-C	Nozzle cooling water temperature indicator module MOD005 inlet		Genset-C	ENG-NCW
TI-3402-C	Temperature indicator before nozzle c.w temperature control valve TCV005		Genset-C	ENG-NCW
TI-3403-C	Nozzle cooling water temperature indicator module MOD005 outlet		Genset-C	ENG-NCW
TI-4121-C	Nozzle cooling water module cooler inlet temperature indicator		Genset-C	ENG-NCW
TI-4122-C	Nozzle cooling water module cooler outlet temperature indicator		Genset-C	ENG-NCW
RSC-TCV-005-D	Nozzle c.w temperature control valve close position		Genset-D	ENG-NCW
RSO-TCV-005-D	Nozzle c.w temperature control valve open position		Genset-D	ENG-NCW
RT-TCV-005-D	Nozzle c.w temperature control valve TCV005 position feedback		Genset-D	ENG-NCW
TCV-005-D	Nozzle c.w temperature control valve		Genset-D	ENG-NCW
FSL-3403-D	Nozzle cooling water module MOD005 flow switch low		Genset-D	ENG-NCW
PI-P005-D	Nozzle cooling water module circulation pump pressure indicator		Genset-D	ENG-NCW
PI-V005-D	Nozzle cooling water buffer tank pressure indicator		Genset-D	ENG-NCW
TE-3401-D	Nozzle cooling water temperature module MOD005 inlet		Genset-D	ENG-NCW
TE-3403-D	Nozzle cooling water temperature module MOD005 outlet		Genset-D	ENG-NCW
TI-3401-D	Nozzle cooling water temperature indicator module MOD005 inlet		Genset-D	ENG-NCW
TI-3402-D	Temperature indicator before nozzle c.w temperature control valve TCV005		Genset-D	ENG-NCW
TI-3403-D	Nozzle cooling water temperature indicator module MOD005 outlet		Genset-D	ENG-NCW
TI-4121-D	Nozzle cooling water module cooler inlet temperature indicator		Genset-D	ENG-NCW
TI-4122-D	Nozzle cooling water module cooler outlet temperature indicator		Genset-D	ENG-NCW
TCV-006-A	L.O separator module temp ctrl valve		Genset-A	ENG-LO-TREAT
1TE-2204-A	L.O separator oil circulation selection valve temperature 1		Genset-A	ENG-LO-TREAT
2TE-2204-A	L.O separator oil circulation selection valve temperature 2		Genset-A	ENG-LO-TREAT
CS-CF006-A			Genset-A	ENG-LO-TREAT
IAT-CF006-A	Lube oil separator centrifuge CF006-A intake air temperature		Genset-A	ENG-LO-TREAT
LSH-T006-A	Lube oil separator Sludge collecting tank level switch high		Genset-A	ENG-LO-TREAT
LSHH-T006-A	Lube oil separator Sludge collecting tank level switch high-high		Genset-A	ENG-LO-TREAT
PI-2205-A	Pressure indicator after Lube oil separator centrifuge		Genset-A	ENG-LO-TREAT
PI-3001-A	Pressure before Lube oil separator centrifuge		Genset-A	ENG-LO-TREAT
PI-7306-A	Pressure before lube oil separator Sludge collecting tank		Genset-A	ENG-LO-TREAT
PI-P006-A	Pressure after Lube oil separator feed pump P006		Genset-A	ENG-LO-TREAT
POV-006-A	L.O separator oil circulation selection valve		Genset-A	ENG-LO-TREAT
PT-2204-A	Pressure after L.O. separator oil circulation selection valve		Genset-A	ENG-LO-TREAT
PT-2205-A	Pressure after Lube oil separator centrifuge		Genset-A	ENG-LO-TREAT
PT-CF006-A	Pressure inside Lube oil separator centrifuge CF006-A		Genset-A	ENG-LO-TREAT
SOV-006-A	L.O separator oil circulation selection valve		Genset-A	ENG-LO-TREAT
SOV-106-A	Sludge drain discharge pneumatic pump		Genset-A	ENG-LO-TREAT
SOV-206-A	L.O separator displacement -and filling water solenoid valve		Genset-A	ENG-LO-TREAT
SOV-306-A	L.O separator operating water solenoid valve		Genset-A	ENG-LO-TREAT
SOV-406-A	L.O separator water circulation solenoid valve		Genset-A	ENG-LO-TREAT
SOV-506-A	L.O separator water discharge solenoid valve		Genset-A	ENG-LO-TREAT
ST-CF006-A	Speed for Lube oil separator centrifuge		Genset-A	ENG-LO-TREAT
TI-2203-A	Temperature before Lube oil separator lube oil heater H006		Genset-A	ENG-LO-TREAT
TI-2204-A	Temperature after Lube oil separator lube oil heater H006		Genset-A	ENG-LO-TREAT
V-PI-P006-A	Pressure before Lube oil separator feed pump P006		Genset-A	ENG-LO-TREAT
VT-CF006-A	Vibration for Lube oil separator centrifuge		Genset-A	ENG-LO-TREAT
TCV-006-B	L.O separator module temp ctrl valve		Genset-B	ENG-LO-TREAT
1TE-2204-B	L.O separator oil circulation selection valve temperature 1		Genset-B	ENG-LO-TREAT
2TE-2204-B	L.O separator oil circulation selection valve temperature 2		Genset-B	ENG-LO-TREAT
CS-CF006-B			Genset-B	ENG-LO-TREAT
IAT-CF006-B	Lube oil separator centrifuge CF006-B intake air temperature		Genset-B	ENG-LO-TREAT
LSH-T006-B	Lube oil separator Sludge collecting tank level switch high		Genset-B	ENG-LO-TREAT
LSHH-T006-B	Lube oil separator Sludge collecting tank level switch high-high		Genset-B	ENG-LO-TREAT
PI-2205-B	Pressure indicator after Lube oil separator centrifuge		Genset-B	ENG-LO-TREAT

Tag #	Service Description	Qty	Genset / Common	System
PI-3001-B	Pressure before Lube oil separator centrifuge		Genset-B	ENG-LO-TREAT
PI-7306-B	Pressure before lube oil separator Sludge collecting tank		Genset-B	ENG-LO-TREAT
PI-P006-B	Pressure after Lube oil separator feed pump P006		Genset-B	ENG-LO-TREAT
POV-006-B	L.O separator oil circulation selection valve		Genset-B	ENG-LO-TREAT
PT-2204-B	Pressure after L.O. separator oil circulation selection valve		Genset-B	ENG-LO-TREAT
PT-2205-B	Pressure after Lube oil separator centrifuge		Genset-B	ENG-LO-TREAT
PT-CF006-B	Pressure inside Lube oil separator centrifuge CF006-B		Genset-B	ENG-LO-TREAT
SOV-006-B	L.O separator oil circulation selection valve		Genset-B	ENG-LO-TREAT
SOV-106-B	Sludge drain discharge pneumatic pump		Genset-B	ENG-LO-TREAT
SOV-206-B	L.O separator displacement -and filling water solenoid valve		Genset-B	ENG-LO-TREAT
SOV-306-B	L.O separator operating water solenoid valve		Genset-B	ENG-LO-TREAT
SOV-406-B	L.O separator water circulation solenoid valve		Genset-B	ENG-LO-TREAT
SOV-506-B	L.O separator water discharge solenoid valve		Genset-B	ENG-LO-TREAT
ST-CF006-B	Speed for Lube oil separator centrifuge		Genset-B	ENG-LO-TREAT
TI-2203-B	Temperature before Lube oil separator lube oil heater H006		Genset-B	ENG-LO-TREAT
TI-2204-B	Temperature after Lube oil separator lube oil heater H006		Genset-B	ENG-LO-TREAT
V-PI-P006-B	Pressure before Lube oil separator feed pump P006		Genset-B	ENG-LO-TREAT
VT-CF006-B	Vibration for Lube oil separator centrifuge		Genset-B	ENG-LO-TREAT
TCV-006-C	L.O separator module temp ctrl valve		Genset-C	ENG-LO-TREAT
1TE-2204-C	L.O separator oil circulation selection valve temperature 1		Genset-C	ENG-LO-TREAT
2TE-2204-C	L.O separator oil circulation selection valve temperature 2		Genset-C	ENG-LO-TREAT
CS-CF006-C			Genset-C	ENG-LO-TREAT
IAT-CF006-C	Lube oil separator centrifuge CF006-C intake air temperature		Genset-C	ENG-LO-TREAT
LSH-T006-C	Lube oil separator Sludge collecting tank level switch high		Genset-C	ENG-LO-TREAT
LSHH-T006-C	Lube oil separator Sludge collecting tank level switch high-high		Genset-C	ENG-LO-TREAT
PI-2205-C	Pressure indicator after Lube oil separator centrifuge		Genset-C	ENG-LO-TREAT
PI-3001-C	Pressure before Lube oil separator centrifuge		Genset-C	ENG-LO-TREAT
PI-7306-C	Pressure before lube oil separator Sludge collecting tank		Genset-C	ENG-LO-TREAT
PI-P006-C	Pressure after Lube oil separator feed pump P006		Genset-C	ENG-LO-TREAT
POV-006-C	L.O separator oil circulation selection valve		Genset-C	ENG-LO-TREAT
PT-2204-C	Pressure after L.O. separator oil circulation selection valve		Genset-C	ENG-LO-TREAT
PT-2205-C	Pressure after Lube oil separator centrifuge		Genset-C	ENG-LO-TREAT
PT-CF006-C	Pressure inside Lube oil separator centrifuge CF006-C		Genset-C	ENG-LO-TREAT
SOV-006-C	L.O separator oil circulation selection valve		Genset-C	ENG-LO-TREAT
SOV-106-C	Sludge drain discharge pneumatic pump		Genset-C	ENG-LO-TREAT
SOV-206-C	L.O separator displacement -and filling water solenoid valve		Genset-C	ENG-LO-TREAT
SOV-306-C	L.O separator operating water solenoid valve		Genset-C	ENG-LO-TREAT
SOV-406-C	L.O separator water circulation solenoid valve		Genset-C	ENG-LO-TREAT
SOV-506-C	L.O separator water discharge solenoid valve		Genset-C	ENG-LO-TREAT
ST-CF006-C	Speed for Lube oil separator centrifuge		Genset-C	ENG-LO-TREAT
TI-2203-C	Temperature before Lube oil separator lube oil heater H006		Genset-C	ENG-LO-TREAT
TI-2204-C	Temperature after Lube oil separator lube oil heater H006		Genset-C	ENG-LO-TREAT
V-PI-P006-C	Pressure before Lube oil separator feed pump P006		Genset-C	ENG-LO-TREAT
VT-CF006-C	Vibration for Lube oil separator centrifuge		Genset-C	ENG-LO-TREAT
TCV-006-D	L.O separator module temp ctrl valve		Genset-D	ENG-LO-TREAT
1TE-2204-D	L.O separator oil circulation selection valve temperature 1		Genset-D	ENG-LO-TREAT
2TE-2204-D	L.O separator oil circulation selection valve temperature 2		Genset-D	ENG-LO-TREAT
CS-CF006-D			Genset-D	ENG-LO-TREAT
IAT-CF006-D	Lube oil separator centrifuge CF006-D intake air temperature		Genset-D	ENG-LO-TREAT
LSH-T006-D	Lube oil separator Sludge collecting tank level switch high		Genset-D	ENG-LO-TREAT
LSHH-T006-D	Lube oil separator Sludge collecting tank level switch high-high		Genset-D	ENG-LO-TREAT
PI-2205-D	Pressure indicator after Lube oil separator centrifuge		Genset-D	ENG-LO-TREAT
PI-3001-D	Pressure before Lube oil separator centrifuge		Genset-D	ENG-LO-TREAT
PI-7306-D	Pressure before lube oil separator Sludge collecting tank		Genset-D	ENG-LO-TREAT
PI-P006-D	Pressure after Lube oil separator feed pump P006		Genset-D	ENG-LO-TREAT
POV-006-D	L.O separator oil circulation selection valve		Genset-D	ENG-LO-TREAT
PT-2204-D	Pressure after L.O. separator oil circulation selection valve		Genset-D	ENG-LO-TREAT
PT-2205-D	Pressure after Lube oil separator centrifuge		Genset-D	ENG-LO-TREAT
PT-CF006-D	Pressure inside Lube oil separator centrifuge CF006-D		Genset-D	ENG-LO-TREAT
SOV-006-D	L.O separator oil circulation selection valve		Genset-D	ENG-LO-TREAT
SOV-106-D	Sludge drain discharge pneumatic pump		Genset-D	ENG-LO-TREAT
SOV-206-D	L.O separator displacement -and filling water solenoid valve		Genset-D	ENG-LO-TREAT
SOV-306-D	L.O separator operating water solenoid valve		Genset-D	ENG-LO-TREAT
SOV-406-D	L.O separator water circulation solenoid valve		Genset-D	ENG-LO-TREAT

Tag #	Service Description	Qty	Genset / Common	System
SOV-506-D	L.O separator water discharge solenoid valve		Genset-D	ENG-LO-TREAT
ST-CF006-D	Speed for Lube oil separator centrifuge		Genset-D	ENG-LO-TREAT
TI-2203-D	Temperature before Lube oil separator lube oil heater H006		Genset-D	ENG-LO-TREAT
TI-2204-D	Temperature after Lube oil separator lube oil heater H006		Genset-D	ENG-LO-TREAT
V-PI-P006-D	Pressure before Lube oil separator feed pump P006		Genset-D	ENG-LO-TREAT
VT-CF006-D	Vibration for Lube oil separator centrifuge		Genset-D	ENG-LO-TREAT
RSC-TCV-007-A	Lube oil temperature control valve TCV007 end-position close		Genset-A	ENG-LO
RSO-TCV-007-A	Lube oil temperature control valve TCV007 end-position open		Genset-A	ENG-LO
RT-TCV-007-A	Lube oil temperature control valve TCV007 position feedback		Genset-A	ENG-LO
TCV-007-A	Lube Oil Temperature Control Valve		Genset-A	ENG-LO
PDI-FIL-007-A	Lube oil automatic filter pressure differential indicator		Genset-A	ENG-LO
PI-2101-A	Pressure indicator before lube oil engine inlet pressure control valve PCV007		Genset-A	ENG-LO
PI-2103-A	Pressure indicator before lube oil automatic filter		Genset-A	ENG-LO
PI-2104-A	Pressure indicator after lube oil automatic filter		Genset-A	ENG-LO
PI-4104-A	Pressure after Lube oil cooler		Genset-A	ENG-LO
PI-P007-A	Lube oil pressure indicator behind lube oil priming pump P007		Genset-A	ENG-LO
PSH-P007-A	Lube oil pressure switch high behind lube oil priming pump P007		Genset-A	ENG-LO
PT-2103-A	Pressure before lube oil automatic filter		Genset-A	ENG-LO
TE-2101-A	Lube oil temperature before lube oil cooler HE007		Genset-A	ENG-LO
TE-2102-A	Lube oil temperature behind lube oil cooler HE007		Genset-A	ENG-LO
TE-2103-A	Lube oil temperature behind lube oil temperature control valve TCV007		Genset-A	ENG-LO
TI-2101-A	Lube oil temperature indicator before lube oil cooler HE007		Genset-A	ENG-LO
TI-2102-A	Lube oil temperature indicator behind lube oil cooler HE007		Genset-A	ENG-LO
TI-2103-A	Lube oil temperature indicator behind lube oil temperature control valve TCV007		Genset-A	ENG-LO
TI-4103-A	Temperature before Lube oil cooler		Genset-A	ENG-LO
TI-4104-A	Temperature after Lube oil cooler		Genset-A	ENG-LO
V-PI-P007-A	Pressure before pre-lubrication pump		Genset-A	ENG-LO
RSC-TCV-007-B	Lube oil temperature control valve TCV007 end-position close		Genset-B	ENG-LO
RSO-TCV-007-B	Lube oil temperature control valve TCV007 end-position open		Genset-B	ENG-LO
RT-TCV-007-B	Lube oil temperature control valve TCV007 position feedback		Genset-B	ENG-LO
TCV-007-B	Lube Oil Temperature Control Valve		Genset-B	ENG-LO
PDI-FIL-007-B	Lube oil automatic filter pressure differential indicator		Genset-B	ENG-LO
PI-2101-B	Pressure indicator before lube oil engine inlet pressure control valve PCV007		Genset-B	ENG-LO
PI-2103-B	Pressure indicator before lube oil automatic filter		Genset-B	ENG-LO
PI-2104-B	Pressure indicator after lube oil automatic filter		Genset-B	ENG-LO
PI-4104-B	Pressure after Lube oil cooler		Genset-B	ENG-LO
PI-P007-B	Lube oil pressure indicator behind lube oil priming pump P007		Genset-B	ENG-LO
PSH-P007-B	Lube oil pressure switch high behind lube oil priming pump P007		Genset-B	ENG-LO
PT-2103-B	Pressure before lube oil automatic filter		Genset-B	ENG-LO
TE-2101-B	Lube oil temperature before lube oil cooler HE007		Genset-B	ENG-LO
TE-2102-B	Lube oil temperature behind lube oil cooler HE007		Genset-B	ENG-LO
TE-2103-B	Lube oil temperature behind lube oil temperature control valve TCV007		Genset-B	ENG-LO
TI-2101-B	Lube oil temperature indicator before lube oil cooler HE007		Genset-B	ENG-LO
TI-2102-B	Lube oil temperature indicator behind lube oil cooler HE007		Genset-B	ENG-LO
TI-2103-B	Lube oil temperature indicator behind lube oil temperature control valve TCV007		Genset-B	ENG-LO
TI-4103-B	Temperature before Lube oil cooler		Genset-B	ENG-LO
TI-4104-B	Temperature after Lube oil cooler		Genset-B	ENG-LO
V-PI-P007-B	Pressure before pre-lubrication pump		Genset-B	ENG-LO
RSC-TCV-007-C	Lube oil temperature control valve TCV007 end-position close		Genset-C	ENG-LO
RSO-TCV-007-C	Lube oil temperature control valve TCV007 end-position open		Genset-C	ENG-LO
RT-TCV-007-C	Lube oil temperature control valve TCV007 position feedback		Genset-C	ENG-LO
TCV-007-C	Lube Oil Temperature Control Valve		Genset-C	ENG-LO
PDI-FIL-007-C	Lube oil automatic filter pressure differential indicator		Genset-C	ENG-LO
PI-2101-C	Pressure indicator before lube oil engine inlet pressure control valve PCV007		Genset-C	ENG-LO
PI-2103-C	Pressure indicator before lube oil automatic filter		Genset-C	ENG-LO
PI-2104-C	Pressure indicator after lube oil automatic filter		Genset-C	ENG-LO
PI-4104-C	Pressure after Lube oil cooler		Genset-C	ENG-LO

Tag #	Service Description	Qty	Genset / Common	System
PI-P007-C	Lube oil pressure indicator behind lube oil priming pump P007		Genset-C	ENG-LO
PSH-P007-C	Lube oil pressure switch high behind lube oil priming pump P007		Genset-C	ENG-LO
PT-2103-C	Pressure before lube oil automatic filter		Genset-C	ENG-LO
TE-2101-C	Lube oil temperature before lube oil cooler HE007		Genset-C	ENG-LO
TE-2102-C	Lube oil temperature behind lube oil cooler HE007		Genset-C	ENG-LO
TE-2103-C	Lube oil temperature behind lube oil temperature control valve TCV007		Genset-C	ENG-LO
TI-2101-C	Lube oil temperature indicator before lube oil cooler HE007		Genset-C	ENG-LO
TI-2102-C	Lube oil temperature indicator behind lube oil cooler HE007		Genset-C	ENG-LO
TI-2103-C	Lube oil temperature indicator behind lube oil temperature control valve TCV007		Genset-C	ENG-LO
TI-4103-C	Temperature before Lube oil cooler		Genset-C	ENG-LO
TI-4104-C	Temperature after Lube oil cooler		Genset-C	ENG-LO
V-PI-P007-C	Pressure before pre-lubrication pump		Genset-C	ENG-LO
RSC-TCV-007-D	Lube oil temperature control valve TCV007 end-position close		Genset-D	ENG-LO
RSO-TCV-007-D	Lube oil temperature control valve TCV007 end-position open		Genset-D	ENG-LO
RT-TCV-007-D	Lube oil temperature control valve TCV007 position feedback		Genset-D	ENG-LO
TCV-007-D	Lube Oil Temperature Control Valve		Genset-D	ENG-LO
PDI-FIL-007-D	Lube oil automatic filter pressure differential indicator		Genset-D	ENG-LO
PI-2101-D	Pressure indicator before lube oil engine inlet pressure control valve PCV007		Genset-D	ENG-LO
PI-2103-D	Pressure indicator before lube oil automatic filter		Genset-D	ENG-LO
PI-2104-D	Pressure indicator after lube oil automatic filter		Genset-D	ENG-LO
PI-4104-D	Pressure after Lube oil cooler		Genset-D	ENG-LO
PI-P007-D	Lube oil pressure indicator behind lube oil priming pump P007		Genset-D	ENG-LO
PSH-P007-D	Lube oil pressure switch high behind lube oil priming pump P007		Genset-D	ENG-LO
PT-2103-D	Pressure before lube oil automatic filter		Genset-D	ENG-LO
TE-2101-D	Lube oil temperature before lube oil cooler HE007		Genset-D	ENG-LO
TE-2102-D	Lube oil temperature behind lube oil cooler HE007		Genset-D	ENG-LO
TE-2103-D	Lube oil temperature behind lube oil temperature control valve TCV007		Genset-D	ENG-LO
TI-2101-D	Lube oil temperature indicator before lube oil cooler HE007		Genset-D	ENG-LO
TI-2102-D	Lube oil temperature indicator behind lube oil cooler HE007		Genset-D	ENG-LO
TI-2103-D	Lube oil temperature indicator behind lube oil temperature control valve TCV007		Genset-D	ENG-LO
TI-4103-D	Temperature before Lube oil cooler		Genset-D	ENG-LO
TI-4104-D	Temperature after Lube oil cooler		Genset-D	ENG-LO
V-PI-P007-D	Pressure before pre-lubrication pump		Genset-D	ENG-LO
RSC-TCV-008-A	Fuel oil temperature control valve TCV008 end-position close		Genset-A	ENG-FO
RSO-TCV-008-A	Fuel oil temperature control valve TCV008 end-position open		Genset-A	ENG-FO
RT-TCV-008-A	Fuel oil temperature control valve TCV008 position feedback		Genset-A	ENG-FO
TCV-008-A	Fuel oil booster module temp ctrl valve		Genset-A	ENG-FO
CT-5804-A	Fuel booster module temperature behind heater H008		Genset-A	ENG-FO
FQI-5801-A	Fuel oil booster module flow quantity indicator		Genset-A	ENG-FO
FQS-5801-A	Fuel oil booster module flow quantity counter pulse signal		Genset-A	ENG-FO
FQT-5801-A	Fuel booster module actual flow rate		Genset-A	ENG-FO
LSH-T008-A	Fuel oil booster module mixing tank T008 level high		Genset-A	ENG-FO
LSL-T008-A	Fuel oil booster module mixing tank T008 level low		Genset-A	ENG-FO
MOV-108-A	F.O booster module fuel selection valve		Genset-A	ENG-FO
MOV-208-A	F.O booster module diesel cooler selection valve		Genset-A	ENG-FO
MSV-008-A	Fuel oil booster module flushing valve		Genset-A	ENG-FO
PDI-FIL-008-A	Fuel oil booster module duplex filter pressure differential		Genset-A	ENG-FO
PI-1P008-A	Fuel oil booster pump 1 pressure indicator		Genset-A	ENG-FO
PI-2P008-A	Fuel oil booster pump 2 pressure indicator		Genset-A	ENG-FO
PI-4112-A	Pressure indicator after fuel oil booster module diesel cooler		Genset-A	ENG-FO
PI-5802-A	Fuel oil booster module mixing tank T008 pressure indicator		Genset-A	ENG-FO
PI-5806-A	Fuel booster module pressure indicator behind duplex filter FIL008		Genset-A	ENG-FO
PI-8303-A	Pressure indicator after fuel oil booster module fuel oil heater		Genset-A	ENG-FO
POV-008-A	F.O booster module supply emerg shut-off valve		Genset-A	ENG-FO
PSH-1P008-A	Fuel oil booster pump 1 pressure switch high		Genset-A	ENG-FO
PSH-2P008-A	Fuel oil booster pump 2 pressure switch high		Genset-A	ENG-FO
PT-5803-A	Fuel booster module pressure behind booster pumps 1/2P008		Genset-A	ENG-FO
PT-5806-A	Fuel booster module pressure behind duplex filter FIL008		Genset-A	ENG-FO

Tag #	Service Description	Qty	Genset / Common	System
RSC-MOV-008-A			Genset-A	ENG-FO
RSC-MOV-108-A	Fuel oil booster module fuel selection valve in HSD close position		Genset-A	ENG-FO
RSC-MSV-008-A	Fuel oil booster module flushing valve flushing close position		Genset-A	ENG-FO
RSC-POV-008-A	Fuel oil booster module emergency shut-off valve close position		Genset-A	ENG-FO
RSO-MOV-008-A			Genset-A	ENG-FO
RSO-MOV-108-A	Fuel oil booster module fuel selection valve in MFO close position		Genset-A	ENG-FO
RSO-MSV-008-A	Fuel oil booster module flushing valve re-circulation close position		Genset-A	ENG-FO
RSO-POV-008-A	Fuel oil booster module emergency shut-off valve open position		Genset-A	ENG-FO
SOV-008-A			Genset-A	ENG-FO
TE-5802-A	Fuel booster module temperature inside mixing tank T008		Genset-A	ENG-FO
TI-4111-A	Temperature indicator before fuel oil booster module diesel cooler		Genset-A	ENG-FO
TI-4112-A	Temperature indicator after fuel oil booster module diesel cooler		Genset-A	ENG-FO
TI-5801-A	Temperature indicator before fuel oil booster module flushing valve		Genset-A	ENG-FO
TI-5802-A	Fuel booster module temperature indicator inside mixing tank T008		Genset-A	ENG-FO
TI-5805-A			Genset-A	ENG-FO
TI-5810-A			Genset-A	ENG-FO
TI-8302-A	Temperature indicator before fuel oil booster module fuel oil heater		Genset-A	ENG-FO
TI-8303-A	Temperature indicator after fuel oil booster module fuel oil heater		Genset-A	ENG-FO
TT-5804-A	Fuel booster module temperature behind heater H008		Genset-A	ENG-FO
RSC-TCV-008-B	Fuel oil temperature control valve TCV008 end-position close		Genset-B	ENG-FO
RSO-TCV-008-B	Fuel oil temperature control valve TCV008 end-position open		Genset-B	ENG-FO
RT-TCV-008-B	Fuel oil temperature control valve TCV008 position feedback		Genset-B	ENG-FO
TCV-008-B	Fuel oil booster module temp ctrl valve		Genset-B	ENG-FO
CT-5804-B	Fuel booster module temperature behind heater H008		Genset-B	ENG-FO
FQI-5801-B	Fuel oil booster module flow quantity indicator		Genset-B	ENG-FO
FQS-5801-B	Fuel oil booster module flow quantity counter pulse signal		Genset-B	ENG-FO
FQT-5801-B	Fuel booster module actual flow rate		Genset-B	ENG-FO
LSH-T008-B	Fuel oil booster module mixing tank T008 level high		Genset-B	ENG-FO
LSL-T008-B	Fuel oil booster module mixing tank T008 level low		Genset-B	ENG-FO
MOV-108-B	F.O booster module fuel selection valve		Genset-B	ENG-FO
MOV-208-B	F.O booster module diesel cooler selection valve		Genset-B	ENG-FO
MSV-008-B	Fuel oil booster module flushing valve		Genset-B	ENG-FO
PDI-FIL-008-B	Fuel oil booster module duplex filter pressure differential		Genset-B	ENG-FO
PI-1P008-B	Fuel oil booster pump 1 pressure indicator		Genset-B	ENG-FO
PI-2P008-B	Fuel oil booster pump 2 pressure indicator		Genset-B	ENG-FO
PI-4112-B	Pressure indicator after fuel oil booster module diesel cooler		Genset-B	ENG-FO
PI-5802-B	Fuel oil booster module mixing tank T008 pressure indicator		Genset-B	ENG-FO
PI-5806-B	Fuel booster module pressure indicator behind duplex filter FIL008		Genset-B	ENG-FO
PI-8303-B	Pressure indicator after fuel oil booster module fuel oil heater		Genset-B	ENG-FO
POV-008-B	F.O booster module supply emerg shut-off valve		Genset-B	ENG-FO
PSH-1P008-B	Fuel oil booster pump 1 pressure switch high		Genset-B	ENG-FO
PSH-2P008-B	Fuel oil booster pump 2 pressure switch high		Genset-B	ENG-FO
PT-5803-B	Fuel booster module pressure behind booster pumps 1/2P008		Genset-B	ENG-FO
PT-5806-B	Fuel booster module pressure behind duplex filter FIL008		Genset-B	ENG-FO
RSC-MOV-008-B			Genset-B	ENG-FO
RSC-MOV-108-B	Fuel oil booster module fuel selection valve in HSD close position		Genset-B	ENG-FO
RSC-MSV-008-B	Fuel oil booster module flushing valve flushing close position		Genset-B	ENG-FO
RSC-POV-008-B	Fuel oil booster module emergency shut-off valve close position		Genset-B	ENG-FO
RSO-MOV-008-B			Genset-B	ENG-FO
RSO-MOV-108-B	Fuel oil booster module fuel selection valve in MFO close position		Genset-B	ENG-FO
RSO-MSV-008-B	Fuel oil booster module flushing valve re-circulation close position		Genset-B	ENG-FO
RSO-POV-008-B	Fuel oil booster module emergency shut-off valve open position		Genset-B	ENG-FO
SOV-008-B			Genset-B	ENG-FO
TE-5802-B	Fuel booster module temperature inside mixing tank T008		Genset-B	ENG-FO
TI-4111-B	Temperature indicator before fuel oil booster module diesel cooler		Genset-B	ENG-FO
TI-4112-B	Temperature indicator after fuel oil booster module diesel cooler		Genset-B	ENG-FO
TI-5801-B	Temperature indicator before fuel oil booster module flushing valve		Genset-B	ENG-FO

Tag #	Service Description	Qty	Genset / Common	System
TI-5802-B	Fuel booster module temperature indicator inside mixing tank T008		Genset-B	ENG-FO
TI-5805-B			Genset-B	ENG-FO
TI-5810-B			Genset-B	ENG-FO
TI-8302-B	Temperature indicator before fuel oil booster module fuel oil heater		Genset-B	ENG-FO
TI-8303-B	Temperature indicator after fuel oil booster module fuel oil heater		Genset-B	ENG-FO
TT-5804-B	Fuel booster module temperature behind heater H008		Genset-B	ENG-FO
RSC-TCV-008-C	Fuel oil temperature control valve TCV008 end-position close		Genset-C	ENG-FO
RSO-TCV-008-C	Fuel oil temperature control valve TCV008 end-position open		Genset-C	ENG-FO
RT-TCV-008-C	Fuel oil temperature control valve TCV008 position feedback		Genset-C	ENG-FO
TCV-008-C	Fuel oil booster module temp ctrl valve		Genset-C	ENG-FO
CT-5804-C	Fuel booster module temperature behind heater H008		Genset-C	ENG-FO
FQI-5801-C	Fuel oil booster module flow quantity indicator		Genset-C	ENG-FO
FQS-5801-C	Fuel oil booster module flow quantity counter pulse signal		Genset-C	ENG-FO
FQT-5801-C	Fuel booster module actual flow rate		Genset-C	ENG-FO
LSH-T008-C	Fuel oil booster module mixing tank T008 level high		Genset-C	ENG-FO
LSL-T008-C	Fuel oil booster module mixing tank T008 level low		Genset-C	ENG-FO
MOV-108-C	F.O booster module fuel selection valve		Genset-C	ENG-FO
MOV-208-C	F.O booster module diesel cooler selection valve		Genset-C	ENG-FO
MSV-008-C	Fuel oil booster module flushing valve		Genset-C	ENG-FO
PDI-FIL-008-C	Fuel oil booster module duplex filter pressure differential		Genset-C	ENG-FO
PI-1P008-C	Fuel oil booster pump 1 pressure indicator		Genset-C	ENG-FO
PI-2P008-C	Fuel oil booster pump 2 pressure indicator		Genset-C	ENG-FO
PI-4112-C	Pressure indicator after fuel oil booster module diesel cooler		Genset-C	ENG-FO
PI-5802-C	Fuel oil booster module mixing tank T008 pressure indicator		Genset-C	ENG-FO
PI-5806-C	Fuel booster module pressure indicator behind duplex filter FIL008		Genset-C	ENG-FO
PI-8303-C	Pressure indicator after fuel oil booster module fuel oil heater		Genset-C	ENG-FO
POV-008-C	F.O booster module supply emerg shut-off valve		Genset-C	ENG-FO
PSH-1P008-C	Fuel oil booster pump 1 pressure switch high		Genset-C	ENG-FO
PSH-2P008-C	Fuel oil booster pump 2 pressure switch high		Genset-C	ENG-FO
PT-5803-C	Fuel booster module pressure behind booster pumps 1/2P008		Genset-C	ENG-FO
PT-5806-C	Fuel booster module pressure behind duplex filter FIL008		Genset-C	ENG-FO
RSC-MOV-008-C			Genset-C	ENG-FO
RSC-MOV-108-C	Fuel oil booster module fuel selection valve in HSD close position		Genset-C	ENG-FO
RSC-MSV-008-C	Fuel oil booster module flushing valve flushing close position		Genset-C	ENG-FO
RSC-POV-008-C	Fuel oil booster module emergency shut-off valve close position		Genset-C	ENG-FO
RSO-MOV-008-C			Genset-C	ENG-FO
RSO-MOV-108-C	Fuel oil booster module fuel selection valve in MFO close position		Genset-C	ENG-FO
RSO-MSV-008-C	Fuel oil booster module flushing valve re-circulation close position		Genset-C	ENG-FO
RSO-POV-008-C	Fuel oil booster module emergency shut-off valve open position		Genset-C	ENG-FO
SOV-008-C			Genset-C	ENG-FO
TE-5802-C	Fuel booster module temperature inside mixing tank T008		Genset-C	ENG-FO
TI-4111-C	Temperature indicator before fuel oil booster module diesel cooler		Genset-C	ENG-FO
TI-4112-C	Temperature indicator after fuel oil booster module diesel cooler		Genset-C	ENG-FO
TI-5801-C	Temperature indicator before fuel oil booster module flushing valve		Genset-C	ENG-FO
TI-5802-C	Fuel booster module temperature indicator inside mixing tank T008		Genset-C	ENG-FO
TI-5805-C			Genset-C	ENG-FO
TI-5810-C			Genset-C	ENG-FO
TI-8302-C	Temperature indicator before fuel oil booster module fuel oil heater		Genset-C	ENG-FO
TI-8303-C	Temperature indicator after fuel oil booster module fuel oil heater		Genset-C	ENG-FO
TT-5804-C	Fuel booster module temperature behind heater H008		Genset-C	ENG-FO
RSC-TCV-008-D	Fuel oil temperature control valve TCV008 end-position close		Genset-D	ENG-FO
RSO-TCV-008-D	Fuel oil temperature control valve TCV008 end-position open		Genset-D	ENG-FO
RT-TCV-008-D	Fuel oil temperature control valve TCV008 position feedback		Genset-D	ENG-FO
TCV-008-D	Fuel oil booster module temp ctrl valve		Genset-D	ENG-FO
CT-5804-D	Fuel booster module temperature behind heater H008		Genset-D	ENG-FO
FQI-5801-D	Fuel oil booster module flow quantity indicator		Genset-D	ENG-FO
FQS-5801-D	Fuel oil booster module flow quantity counter pulse signal		Genset-D	ENG-FO

Tag #	Service Description	Qty	Genset / Common	System
FQT-5801-D	Fuel booster module actual flow rate		Genset-D	ENG-FO
LSH-T008-D	Fuel oil booster module mixing tank T008 level high		Genset-D	ENG-FO
LSL-T008-D	Fuel oil booster module mixing tank T008 level low		Genset-D	ENG-FO
MOV-108-D	F.O booster module fuel selection valve		Genset-D	ENG-FO
MOV-208-D	F.O booster module diesel cooler selection valve		Genset-D	ENG-FO
MSV-008-D	Fuel oil booster module flushing valve		Genset-D	ENG-FO
PDI-FIL-008-D	Fuel oil booster module duplex filter pressure differential		Genset-D	ENG-FO
PI-1P008-D	Fuel oil booster pump 1 pressure indicator		Genset-D	ENG-FO
PI-2P008-D	Fuel oil booster pump 2 pressure indicator		Genset-D	ENG-FO
PI-4112-D	Pressure indicator after fuel oil booster module diesel cooler		Genset-D	ENG-FO
PI-5802-D	Fuel oil booster module mixing tank T008 pressure indicator		Genset-D	ENG-FO
PI-5806-D	Fuel booster module pressure indicator behind duplex filter FIL008		Genset-D	ENG-FO
PI-8303-D	Pressure indicator after fuel oil booster module fuel oil heater		Genset-D	ENG-FO
POV-008-D	F.O booster module supply emerg shut-off valve		Genset-D	ENG-FO
PSH-1P008-D	Fuel oil booster pump 1 pressure switch high		Genset-D	ENG-FO
PSH-2P008-D	Fuel oil booster pump 2 pressure switch high		Genset-D	ENG-FO
PT-5803-D	Fuel booster module pressure behind booster pumps 1/2P008		Genset-D	ENG-FO
PT-5806-D	Fuel booster module pressure behind duplex filter FIL008		Genset-D	ENG-FO
RSC-MOV-008-D			Genset-D	ENG-FO
RSC-MOV-108-D	Fuel oil booster module fuel selection valve in HSD close position		Genset-D	ENG-FO
RSC-MSV-008-D	Fuel oil booster module flushing valve flushing close position		Genset-D	ENG-FO
RSC-POV-008-D	Fuel oil booster module emergency shut-off valve close position		Genset-D	ENG-FO
RSO-MOV-008-D			Genset-D	ENG-FO
RSO-MOV-108-D	Fuel oil booster module fuel selection valve in MFO close position		Genset-D	ENG-FO
RSO-MSV-008-D	Fuel oil booster module flushing valve re-circulation close position		Genset-D	ENG-FO
RSO-POV-008-D	Fuel oil booster module emergency shut-off valve open position		Genset-D	ENG-FO
SOV-008-D			Genset-D	ENG-FO
TE-5802-D	Fuel booster module temperature inside mixing tank T008		Genset-D	ENG-FO
TI-4111-D	Temperature indicator before fuel oil booster module diesel cooler		Genset-D	ENG-FO
TI-4112-D	Temperature indicator after fuel oil booster module diesel cooler		Genset-D	ENG-FO
TI-5801-D	Temperature indicator before fuel oil booster module flushing valve		Genset-D	ENG-FO
TI-5802-D	Fuel booster module temperature indicator inside mixing tank T008		Genset-D	ENG-FO
TI-5805-D			Genset-D	ENG-FO
TI-5810-D			Genset-D	ENG-FO
TI-8302-D	Temperature indicator before fuel oil booster module fuel oil heater		Genset-D	ENG-FO
TI-8303-D	Temperature indicator after fuel oil booster module fuel oil heater		Genset-D	ENG-FO
TT-5804-D	Fuel booster module temperature behind heater H008		Genset-D	ENG-FO
1POV-009-A	Fresh lube oil replenishing valve		Genset-A	ENG-LO
2POV-009-A	Maintenance lube oil re-transfer valve		Genset-A	ENG-LO
FQI-2306-A	Fresh lube oil replenishing flow quantity indicator		Genset-A	ENG-LO
FQS-2306-A	Fresh lube oil replenishing flow quantity counter pulse signal		Genset-A	ENG-LO
FQT-2306-A	Fresh lube oil replenishing actual flow rate		Genset-A	ENG-LO
MSV-009-A	Separator L.O circulation selection valve		Genset-A	ENG-LO
RSC-1POV-009-A	Fresh lube oil replenishing valve closed		Genset-A	ENG-LO
RSC-2POV-009-A	Maintenance lube oil re-transfer valve closed		Genset-A	ENG-LO
RSC-MSV-009-A	Separator lube oil circulation selection valve in maintenance tank position		Genset-A	ENG-LO
RSO-1POV-009-A	Fresh lube oil replenishing valve opened		Genset-A	ENG-LO
RSO-2POV-009-A	Maintenance lube oil re-transfer valve closed		Genset-A	ENG-LO
RSO-MSV-009-A	Separator lube oil circulation selection valve in engine frame tank position		Genset-A	ENG-LO
1POV-009-B	Fresh lube oil replenishing valve		Genset-B	ENG-LO
2POV-009-B	Maintenance lube oil re-transfer valve		Genset-B	ENG-LO
FQI-2306-B	Fresh lube oil replenishing flow quantity indicator		Genset-B	ENG-LO
FQS-2306-B	Fresh lube oil replenishing flow quantity counter pulse signal		Genset-B	ENG-LO
FQT-2306-B	Fresh lube oil replenishing actual flow rate		Genset-B	ENG-LO
MSV-009-B	Separator L.O circulation selection valve		Genset-B	ENG-LO
RSC-1POV-009-B	Fresh lube oil replenishing valve closed		Genset-B	ENG-LO
RSC-2POV-009-B	Maintenance lube oil re-transfer valve closed		Genset-B	ENG-LO

Tag #	Service Description	Qty	Genset / Common	System
RSC-MSV-009-B	Separator lube oil circulation selection valve in maintenance tank position		Genset-B	ENG-LO
RSO-1POV-009-B	Fresh lube oil replenishing valve opened		Genset-B	ENG-LO
RSO-2POV-009-B	Maintenance lube oil re-transfer valve closed		Genset-B	ENG-LO
RSO-MSV-009-B	Separator lube oil circulation selection valve in engine frame tank position		Genset-B	ENG-LO
1POV-009-C	Fresh lube oil replenishing valve		Genset-C	ENG-LO
2POV-009-C	Maintenance lube oil re-transfer valve		Genset-C	ENG-LO
FQI-2306-C	Fresh lube oil replenishing flow quantity indicator		Genset-C	ENG-LO
FQS-2306-C	Fresh lube oil replenishing flow quantity counter pulse signal		Genset-C	ENG-LO
FQT-2306-C	Fresh lube oil replenishing actual flow rate		Genset-C	ENG-LO
MSV-009-C	Separator L.O circulation selection valve		Genset-C	ENG-LO
RSC-1POV-009-C	Fresh lube oil replenishing valve closed		Genset-C	ENG-LO
RSC-2POV-009-C	Maintenance lube oil re-transfer valve closed		Genset-C	ENG-LO
RSC-MSV-009-C	Separator lube oil circulation selection valve in maintenance tank position		Genset-C	ENG-LO
RSO-1POV-009-C	Fresh lube oil replenishing valve opened		Genset-C	ENG-LO
RSO-2POV-009-C	Maintenance lube oil re-transfer valve closed		Genset-C	ENG-LO
RSO-MSV-009-C	Separator lube oil circulation selection valve in engine frame tank position		Genset-C	ENG-LO
1POV-009-D	Fresh lube oil replenishing valve		Genset-D	ENG-LO
2POV-009-D	Maintenance lube oil re-transfer valve		Genset-D	ENG-LO
FQI-2306-D	Fresh lube oil replenishing flow quantity indicator		Genset-D	ENG-LO
FQS-2306-D	Fresh lube oil replenishing flow quantity counter pulse signal		Genset-D	ENG-LO
FQT-2306-D	Fresh lube oil replenishing actual flow rate		Genset-D	ENG-LO
MSV-009-D	Separator L.O circulation selection valve		Genset-D	ENG-LO
RSC-1POV-009-D	Fresh lube oil replenishing valve closed		Genset-D	ENG-LO
RSC-2POV-009-D	Maintenance lube oil re-transfer valve closed		Genset-D	ENG-LO
RSC-MSV-009-D	Separator lube oil circulation selection valve in maintenance tank position		Genset-D	ENG-LO
RSO-1POV-009-D	Fresh lube oil replenishing valve opened		Genset-D	ENG-LO
RSO-2POV-009-D	Maintenance lube oil re-transfer valve closed		Genset-D	ENG-LO
RSO-MSV-009-D	Separator lube oil circulation selection valve in engine frame tank position		Genset-D	ENG-LO
FQI-5102	Diesel (HSD) unloading pump mod flow quantity indicator	1	Common	DO-SUP
FQS-5102	Diesel (HSD) unloading pump mod flow quantity counter pulse signal	1	Common	DO-SUP
FQT-5102	Diesel (HSD) unloading pump(s) 1/2P014 actual flow rate	1	Common	DO-SUP
PI-1P014	Diesel (HSD) unloading pump 1 outlet pressure indicator	1	Common	DO-SUP
PI-2P014	Diesel (HSD) unloading pump 2 outlet pressure indicator	1	Common	DO-SUP
POV-014	Diesel (HSD) unloading emergency shut-off valve close request	1	Common	DO-SUP
PSH-1P014	Diesel (HSD) unloading pump 1 pressure switch high	1	Common	DO-SUP
PSH-2P014	Diesel (HSD) unloading pump 2 pressure switch high	1	Common	DO-SUP
PT-5103	Pressure behind diesel (HSD) unloading pump(s) 1/2P014	1	Common	DO-SUP
RSC-POV-014	Diesel (HSD) unloading module emergency shut-off valve close position	1	Common	DO-SUP
RSO-POV-014	Diesel (HSD) unloading module emergency shut-off valve open position	1	Common	DO-SUP
V-PI-1P014	Diesel (HSD) unloading pump 1 inlet pressure indicator	1	Common	DO-SUP
V-PI-2P014	Diesel (HSD) unloading pump 2 inlet pressure indicator	1	Common	DO-SUP
FQI-5502	Fuel oil (MFO) unloading pump mod flow quantity indicator	1	Common	FO-SUP
FQS-5502	Fuel oil (MFO) unloading pump mod flow quantity counter pulse signal	1	Common	FO-SUP
FQT-5502	Fuel oil (MFO) unloading pump(s) 1/2P017 actual flow rate	1	Common	FO-SUP
PI-1P017	Fuel oil (MFO) unloading pump 1 outlet pressure indicator	1	Common	FO-SUP
PI-2P017	Fuel oil (MFO) unloading pump 2 outlet pressure indicator	1	Common	FO-SUP
POV-017	Fuel oil (MFO) unloading emergency shut-off valve closing request	1	Common	FO-SUP
PSH-1P017	Fuel oil (MFO) unloading pump 1 pressure switch high	1	Common	FO-SUP
PSH-2P017	Fuel oil (MFO) unloading pump 2 pressure switch high	1	Common	FO-SUP
PT-5503	Pressure behind fuel oil (MFO) unloading pump(s) 1/2P017	1	Common	FO-SUP
RSC-POV-017	Fuel oil (MFO) unloading module emergency shut-off valve close position	1	Common	FO-SUP
RSO-POV-017	Fuel oil (MFO) unloading module emergency shut-off valve open position	1	Common	FO-SUP

Tag #	Service Description	Qty	Genset / Common	System
V-PI-1P017	Fuel oil (MFO) unloading pump 1 inlet pressure indicator	1	Common	FO-SUP
V-PI-2P017	Fuel oil (MFO) unloading pump 2 inlet pressure indicator	1	Common	FO-SUP
1TE-5605-A	F.O separator oil circulation selection valve temperature 1		Common	FO-TREAT
2TE-5605-A	F.O separator oil circulation selection valve temperature 2		Common	FO-TREAT
CS-CF019-A			Common	FO-TREAT
IAT-CF019-A	Intake air temperature - Fuel oil separator centrifuge CF019-A		Common	FO-TREAT
LSH-T019-A	Fuel oil separator Sludge collecting tank level switch high		Common	FO-TREAT
LSHH-T019-A	Fuel oil separator Sludge collecting tank level switch high-high		Common	FO-TREAT
PI-2205-A	Pressure indicator after fuel oil separator centrifuge		Common	FO-TREAT
PI-3001-A	F.O SEP WATER INLET pressure ctrl valve PCV019-A pressure indicator		Common	FO-TREAT
PI-7306-A	F.O separator oil circulation selection valve pressure indicator		Common	FO-TREAT
PI-P019-A	Pressure after Fuel oil separator feed pump		Common	FO-TREAT
1POV-019	F.O separator oil circulation selection valve		Common	FO-TREAT
PT-2204-A	Pressure after F.O. separator oil circulation selection valve		Common	FO-TREAT
PT-2205-A	Pressure after fuel oil separator centrifuge		Common	FO-TREAT
PT-CF019-A	Pressure inside Fuel oil separator centrifuge CF019-A		Common	FO-TREAT
1SOV-219	F.O separator displacement-and filling water solenoid valve		Common	FO-TREAT
1SOV-319	F.O separator operating water solenoid valve		Common	FO-TREAT
1SOV-419	F.O separator water circulation solenoid valve		Common	FO-TREAT
1SOV-519	F.O separator water discharge solenoid valve		Common	FO-TREAT
1SOV-119	Sludge drain discharge pneumatic pump		Common	FO-TREAT
ST-CF019-A	Fuel oil speed separator centrifuge		Common	FO-TREAT
TI-5604-A	Temperature before fuel oil separator fuel oil heater		Common	FO-TREAT
TI-5605-A	Temperature after fuel oil separator fuel oil heater		Common	FO-TREAT
V-PI-P019-A	Pressure before Fuel oil separator feed pump		Common	FO-TREAT
VT-CF019-A	Fuel oil vibration separator centrifuge		Common	FO-TREAT
1PCV-019	F.O separator water inlet pressure ctrl valve		Common	FO-TREAT
1PCV-119	F.O separator Sludge discharge pump pressure ctrl valve		Common	FO-TREAT
1TCV-019	F.O separator module temp ctrl valve		Common	FO-TREAT
1TE-5605-B	F.O separator oil circulation selection valve temperature 1		Common	FO-TREAT
2TE-5605-B	F.O separator oil circulation selection valve temperature 2		Common	FO-TREAT
CS-CF019-B			Common	FO-TREAT
IAT-CF019-B	Intake air temperature - Fuel oil separator centrifuge CF019-B		Common	FO-TREAT
LSH-T019-B	Fuel oil separator Sludge collecting tank level switch high		Common	FO-TREAT
LSHH-T019-B	Fuel oil separator Sludge collecting tank level switch high-high		Common	FO-TREAT
PI-2205-B	Pressure indicator after fuel oil separator centrifuge		Common	FO-TREAT
PI-3001-B	F.O SEP WATER INLET pressure ctrl valve PCV019-B pressure indicator		Common	FO-TREAT
PI-7306-B	F.O separator oil circulation selection valve pressure indicator		Common	FO-TREAT
PI-P019-B	Pressure after Fuel oil separator feed pump		Common	FO-TREAT
2POV-019	F.O separator oil circulation selection valve		Common	FO-TREAT
PT-2204-B	Pressure after F.O. separator oil circulation selection valve		Common	FO-TREAT
PT-2205-B	Pressure after fuel oil separator centrifuge		Common	FO-TREAT
PT-CF019-B	Pressure inside Fuel oil separator centrifuge CF019-B		Common	FO-TREAT
2SOV-219	F.O separator displacement-and filling water solenoid valve		Common	FO-TREAT
2SOV-319	F.O separator operating water solenoid valve		Common	FO-TREAT
2SOV-419	F.O separator water circulation solenoid valve		Common	FO-TREAT
2SOV-519	F.O separator water discharge solenoid valve		Common	FO-TREAT
2SOV-119	Sludge drain discharge pneumatic pump		Common	FO-TREAT
ST-CF019-B	Fuel oil speed separator centrifuge		Common	FO-TREAT
TI-5604-B	Temperature before fuel oil separator fuel oil heater		Common	FO-TREAT
TI-5605-B	Temperature after fuel oil separator fuel oil heater		Common	FO-TREAT
V-PI-P019-B	Pressure before Fuel oil separator feed pump		Common	FO-TREAT
VT-CF019-B	Fuel oil vibration separator centrifuge		Common	FO-TREAT
2PCV-019	F.O separator water inlet pressure ctrl valve		Common	FO-TREAT
2PCV-119	F.O separator Sludge discharge pump pressure ctrl valve		Common	FO-TREAT
2TCV-019	F.O separator module temp ctrl valve		Common	FO-TREAT
1PI-V023	Working air compressor pressure indicator	1	Common	WORK-AIR
LSL-C023	Working air compressor oil level switch low	1	Common	WORK-AIR
MSV-023	Working air compressor module interconnecting valve to MOD026	1	Common	WORK-AIR

Tag #	Service Description	Qty	Genset / Common	System
MSV-123	Working air compressor module interconnecting valve from MOD026	1	Common	WORK-AIR
PI-7303	Working air compressor pressure indicator	1	Common	WORK-AIR
PI-7305	Pressure indicator in working air supply main header	1	Common	WORK-AIR
PI-C023	Working air compressor outlet pressure indicator	1	Common	WORK-AIR
PSH-C023	Working air compressor pressure switch high	1	Common	WORK-AIR
PSL-7303	Working air compressor pressure switch low	1	Common	WORK-AIR
PT-7305	Pressure in working air supply main header	1	Common	WORK-AIR
RSC-MSV-023	Working compr. mod intercom. valve to MOD026 valve close pos.	1	Common	WORK-AIR
RSC-MSV-123	Working compr. mod intercom. valve from MOD026 valve close pos.	1	Common	WORK-AIR
RSO-MSV-023	Working compr. mod intercom. valve to MOD026 valve open pos.	1	Common	WORK-AIR
RSO-MSV-123	Working compr. mod intercom. valve from MOD026 valve open pos.	1	Common	WORK-AIR
PI-PCV-023	Working air pressure reduction pressure control valve pressure indicator	1	Common	WORK-AIR
1PI-V026		1	Common	CONTROL-AIR
LSL-C026	Control & Instrument air compressor oil level switch low	1	Common	CONTROL-AIR
MSV-026	Ctrl & Inst air compressor module interconnecting valve to MOD026	1	Common	CONTROL-AIR
MSV-126	Ctrl & Inst air compressor module interconnecting valve from MOD026	1	Common	CONTROL-AIR
MSV-226	Ctrl & Inst air compressor module interconnecting valve from MOD020	1	Common	CONTROL-AIR
PI-7203	Control & Instrument air compressor pressure indicator	1	Common	CONTROL-AIR
PI-7205	Pressure indicator in control & Instrument air supply main header	1	Common	CONTROL-AIR
PI-C026	Ctrl & Inst air compressor pressure indicator outlet	1	Common	CONTROL-AIR
PSH-C026	Control & Instrument air compressor pressure switch high	1	Common	CONTROL-AIR
PSL-7203	Control & Instrument air compressor pressure switch low			
PT-7205	Pressure in control & Instrument air supply main header	1	Common	CONTROL-AIR
RSC-MSV-026	Control & Inst air compr. mod interconnecting valve from 1MOD020 valve close pos.	1	Common	CONTROL-AIR
RSC-MSV-126	Control & Inst air compr. mod intercom. valve from MOD023 valve close pos.	1	Common	CONTROL-AIR
RSC-MSV-226	Ctrl & Inst air compr. mod interconnecting valve to MOD023 valve close pos.	1	Common	CONTROL-AIR
RSO-MSV-026	Ctrl & Inst air compr. mod intercom. valve to MOD023 valve open pos.	1	Common	CONTROL-AIR
RSO-MSV-126	Control & Inst air compr. mod interconnecting valve from MOD023 valve open pos.	1	Common	CONTROL-AIR
RSO-MSV-226	Control & Inst air compr mod interconnecting valve from 1MOD020 valve open pos.	1	Common	CONTROL-AIR
PI-PCV-026	Ctrl & Inst air pressure reduction pressure control valve pressure indicator	1	Common	CONTROL-AIR
FQI-2301	Fresh lube oil unloading flow quantity indicator	1	Common	LO-SUP
FQS-2301	Fresh lube oil unloading flow quantity counter pulse signal	1	Common	LO-SUP
FQT-2301	Fresh lube oil unloading pump(s) 1/2P031 actual flow rate	1	Common	LO-SUP
LI-T032	Level indicator inside fresh lube oil storage tank T032	1	Common	LO-SUP
LI-T033	Level indicator inside maintenance lube oil buffer tank T033	1	Common	LO-SUP
LSHH-T032	Fresh lube oil storage tank T032 level high-high	1	Common	LO-SUP
LSHH-T033	Maintenance lube oil buffer tank T033 high-high	1	Common	LO-SUP
LSLL-T032	Fresh lube oil storage tank T032 level low-low	1	Common	LO-SUP
LSLL-T033	Maintenance lube oil buffer tank T033 level low-low	1	Common	LO-SUP
LT-T032	Level inside fresh lube oil storage tank T032	1	Common	LO-SUP
LT-T033	Level inside maintenance lube oil buffer tank T033	1	Common	LO-SUP
PI-1P031	Fresh lube oil unloading pump 1 pressure indicator	1	Common	LO-SUP
PI-1P034	Combined lube oil filling pump 1 pressure indicator	1	Common	LO-SUP
PI-2301	Pressure indicator behind fresh lube oil unloading pump(s) 1/2P031	1	Common	LO-SUP
PI-2303	Pressure indicator behind fresh lube oil unloading pump(s) 1/2P031	1	Common	LO-SUP
PI-2P031	Fresh lube oil unloading pump 2 pressure indicator	1	Common	LO-SUP
PI-2P034	Combined lube oil filling pump 2 pressure indicator	1	Common	LO-SUP
PI-7206		1	Common	LO-SUP
POV-034	Combined lube oil filling emerg shut-off valve	1	Common	LO-SUP

Tag #	Service Description	Qty	Genset / Common	System
POV-035	Lube oil supply module tank selection valve	1	Common	LO-SUP
PSH-1P031	Fresh lube oil unloading pump 1 pressure switch high	1	Common	LO-SUP
PSH-1P034	Combined lube oil filling pump 1 pressure switch high	1	Common	LO-SUP
PSH-2P031	Fresh lube oil unloading pump 2 pressure switch high	1	Common	LO-SUP
PSH-2P034	Combined lube oil filling pump 2 pressure switch high	1	Common	LO-SUP
PT-2301	Pressure behind fresh lube oil unloading pump(s) 1/2P031	1	Common	LO-SUP
PT-2303	Pressure behind fresh lube oil unloading pump(s) 1/2P031	1	Common	LO-SUP
RSC--POV-034	Combined lube oil filling emergency shut-off valve close position	1	Common	LO-SUP
RSC-POV-035	Lube oil supply module tank selection valve end-position T032	1	Common	LO-SUP
RSO-POV-034	Combined lube oil filling emergency shut-off valve open position	1	Common	LO-SUP
RSO-POV-035	Lube oil supply module tank selection valve end-position T033	1	Common	LO-SUP
V-PI-1P031	Pressure indicator before fresh lube oil unloading pump 1	1	Common	LO-SUP
V-PI-1P034	Pressure indicator before combined lube oil filling pump 1	1	Common	LO-SUP
V-PI-2P031	Pressure indicator before fresh lube oil unloading pump 2	1	Common	LO-SUP
V-PI-2P034	Pressure indicator before combined lube oil filling pump 2	1	Common	LO-SUP
FQT-3001	Process water supply MOD050 actual flow rate	1	Common	PROC-WATER
FSL-3002	Process water supply pumps 1/2P050 flow switch low	1	Common	PROC-WATER
LI-T050	Level indicator inside process water storage tank T050	1	Common	PROC-WATER
LI-T150	Process water chemical dosing tank level indicator	1	Common	PROC-WATER
LSHH-T050	Process water storage tank T050 level high-high	1	Common	PROC-WATER
LSLL-T050	Process water storage tank T050 level low-low	1	Common	PROC-WATER
LSLL-T150	Process water chemical dosing tank level switch low-low	1	Common	PROC-WATER
LT-T050	Level inside process water storage tank T050	1	Common	PROC-WATER
PI-1P050	Process water supply pumps 1 pressure indicator outlet	1	Common	PROC-WATER
PI-2P050	Process water supply pumps 2 pressure indicator outlet	1	Common	PROC-WATER
PI-3001	Pressure indicator before process water supply MOD050	1	Common	PROC-WATER
PI-3003	Pressure indicator behind process water supply pump(s) 1/2P050	1	Common	PROC-WATER
PI-7206		1	Common	PROC-WATER
PI-P150	Process water chemical closing pump pressure indicator	1	Common	PROC-WATER
PI-V050	Process water supply module pressure vessel pressure indicator	1	Common	PROC-WATER
POV-050	Process water storage tank filling valve opening request	1	Common	PROC-WATER
PSH-1P050	Process water supply pumps 1 pressure switch high	1	Common	PROC-WATER
PSH-2P050	Process water supply pumps 2 pressure switch high	1	Common	PROC-WATER
PSH-P150	Process water chemical closing pump pressure switch high	1	Common	PROC-WATER
PT-3003	Pressure behind process water supply pump(s) 1/2P050	1	Common	PROC-WATER
RSC-POV-050	Process water storage tank filling valve opening position	1	Common	PROC-WATER
RSO-POV-050	Process water storage tank filling valve close position	1	Common	PROC-WATER
V-PI-1P050	Process water supply pumps 1 pressure indicator inlet	1	Common	PROC-WATER
V-PI-2P050	Process water supply pumps 2 pressure indicator inlet	1	Common	PROC-WATER
LI-T063	Level Indicator inside thermal oil receiver tank T063	1	Common	TO-WHR
LSHH-T063	Thermal oil receiver tank T063 level high-high	1	Common	TO-WHR
LSLL-T063	Thermal oil receiver tank T063 level low-low	1	Common	TO-WHR
LT-T063	Level inside thermal oil receiver tank T063	1	Common	TO-WHR
PT-2303	Thermal oil pressure unloading & receiver tank module MOD063	1	Common	TO-WHR
PI-1P063	Thermal oil unloading & transfer pump 1 pressure indicator outlet	1	Common	TO-WHR
PI-2P063	Thermal oil unloading & transfer pump 2 pressure indicator outlet	1	Common	TO-WHR
PI-8003		1	Common	TO-WHR
PI-2303	Thermal oil pressure indicator unloading & receiver tank module MOD063	1	Common	TO-WHR
PSH-1P063	Thermal oil unloading & transfer pump 1 pressure switch high	1	Common	TO-WHR
PSH-2P063	Thermal oil unloading & transfer pump 2 pressure switch high	1	Common	TO-WHR
PT-8003	Pressure behind thermal oil unloading & transfer pump(s) 1/2P063	1	Common	TO-WHR
V-PI-1P063	Thermal oil unloading & transfer pump 1 pressure indicator inlet	1	Common	TO-WHR
V-PI-2P063	Thermal oil unloading & transfer pump 2 pressure indicator inlet	1	Common	TO-WHR
1TE-8111	Independent thermal oil heater temperature 1	1	Common	TO-WHR
2TE-8111	Independent thermal oil heater temperature 2	1	Common	TO-WHR
LI-T065	Level indicator inside independent thermal oil heater diesel tank T065	1	Common	TO-WHR
LSHH-T065	Indep. thermal oil heater/HSD tank level switch high-high	1	Common	TO-WHR
LSLL-T065	Indep. thermal oil heater/HSD tank level switch low-low	1	Common	TO-WHR
LT-T065	Level inside independent thermal oil heater diesel tank T065	1	Common	TO-WHR
PDTI-8110	Independent thermal oil heater pressure differential	1	Common	TO-WHR
PI-P065	Pressure after indep. thermal oil heater circulation pump	1	Common	TO-WHR

Tag #	Service Description	Qty	Genset / Common	System
POV-065	ITOH diesel tank filling valve close request	1	Common	TO-WHR
PSH-P065	Indep. thermal oil heater circulation pump pressure switch high	1	Common	TO-WHR
RSC-POV-065	ITOH diesel tank filling valve close position	1	Common	TO-WHR
RSO-POV-065	ITOH diesel tank filling valve open position	1	Common	TO-WHR
TE-6701	Independent thermal oil heater temperature	1	Common	TO-WHR
TI-8111	Independent thermal oil heater temperature indicator	1	Common	TO-WHR
V-PI-P065	Pressure before indep. thermal oil heater circulation pump	1	Common	TO-WHR
1PDT-8200-A	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-A	ENG-EXH
1PDTI-8200-A	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-A	ENG-EXH
1TE-8280-A	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-A	ENG-EXH
2PDT-8200-A	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-A	ENG-EXH
2TE-8280-A	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-A	ENG-EXH
2PDTI-8200-A	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-A	ENG-EXH
PDT-6600-A	Waste heat thermal oil heater pressure differential		Genset-A	ENG-EXH
PDTI-6600-A	Waste heat thermal oil heater pressure differential transmitter indicator		Genset-A	ENG-EXH
PRV-066-A			Genset-A	ENG-EXH
RSC-PRV-066-A	WHTOH pressure control valve PRV066 end-position close		Genset-A	ENG-EXH
RSO-PRV-066-A	WHTOH pressure control valve PRV066 end-position open		Genset-A	ENG-EXH
RT-PRV-066-A	WHTOH pressure control valve PRV066 position feedback		Genset-A	ENG-EXH
TE-6701-A	Waste heat thermal oil heater temperature MOD066		Genset-A	ENG-EXH
TI-6702-A	Waste heat thermal oil heater temperature indicator MOD066		Genset-A	ENG-EXH
TI-8270-A	Thermal oil temperature indicator before WHTOH exhaust gas boiler		Genset-A	ENG-EXH
TI-8280-A	Thermal oil temperature indicator after WHTOH exhaust gas boiler		Genset-A	ENG-EXH
RSC-TCV-066-A	WHTOH exhaust gas boiler motorized damper end-position close		Genset-A	ENG-EXH
RSO-TCV-066-A	WHTOH exhaust gas boiler motorized damper end-position open		Genset-A	ENG-EXH
RT-TCV-066-A	WHTOH motorized damper TCV066 position feedback		Genset-A	ENG-EXH
TCV-066-A	Waste Heat Thermal Oil Heater Damper		Genset-A	ENG-EXH
1PDT-8200-B	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-B	ENG-EXH
1PDTI-8200-B	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-B	ENG-EXH
1TE-8280-B	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-B	ENG-EXH
2PDT-8200-B	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-B	ENG-EXH
2TE-8280-B	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-B	ENG-EXH
2PDTI-8200-B	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-B	ENG-EXH
PDT-6600-B	Waste heat thermal oil heater pressure differential		Genset-B	ENG-EXH
PDTI-6600-B	Waste heat thermal oil heater pressure differential transmitter indicator		Genset-B	ENG-EXH
PRV-066-B			Genset-B	ENG-EXH
RSC-PRV-066-B	WHTOH pressure control valve PRV066 end-position close		Genset-B	ENG-EXH
RSO-PRV-066-B	WHTOH pressure control valve PRV066 end-position open		Genset-B	ENG-EXH
RT-PRV-066-B	WHTOH pressure control valve PRV066 position feedback		Genset-B	ENG-EXH
TE-6701-B	Waste heat thermal oil heater temperature MOD066		Genset-B	ENG-EXH
TI-6702-B	Waste heat thermal oil heater temperature indicator MOD066		Genset-B	ENG-EXH
TI-8270-B	Thermal oil temperature indicator before WHTOH exhaust gas boiler		Genset-B	ENG-EXH
TI-8280-B	Thermal oil temperature indicator after WHTOH exhaust gas boiler		Genset-B	ENG-EXH
RSC-TCV-066-B	WHTOH exhaust gas boiler motorized damper end-position close		Genset-B	ENG-EXH
RSO-TCV-066-B	WHTOH exhaust gas boiler motorized damper end-position open		Genset-B	ENG-EXH
RT-TCV-066-B	WHTOH motorized damper TCV066 position feedback		Genset-B	ENG-EXH
TCV-066-B	Waste Heat Thermal Oil Heater Damper		Genset-B	ENG-EXH
1PDT-8200-C	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-C	ENG-EXH
1PDTI-8200-C	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-C	ENG-EXH
1TE-8280-C	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-C	ENG-EXH
2PDT-8200-C	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-C	ENG-EXH
2TE-8280-C	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-C	ENG-EXH
2PDTI-8200-C	Thermal oil differential pressure indicator over WHTOH exhaust		Genset-C	ENG-EXH

Tag #	Service Description	Qty	Genset / Common	System
	gas boiler			
PDT-6600-C	Waste heat thermal oil heater pressure differential		Genset-C	ENG-EXH
PDTI-6600-C	Waste heat thermal oil heater pressure differential transmitter indicator		Genset-C	ENG-EXH
PRV-066-C			Genset-C	ENG-EXH
RSC-PRV-066-C	WHTOH pressure control valve PRV066 end-position close		Genset-C	ENG-EXH
RSO-PRV-066-C	WHTOH pressure control valve PRV066 end-position open		Genset-C	ENG-EXH
RT-PRV-066-C	WHTOH pressure control valve PRV066 position feedback		Genset-C	ENG-EXH
TE-6701-C	Waste heat thermal oil heater temperature MOD066		Genset-C	ENG-EXH
TI-6702-C	Waste heat thermal oil heater temperature indicator MOD066		Genset-C	ENG-EXH
TI-8270-C	Thermal oil temperature indicator before WHTOH exhaust gas boiler		Genset-C	ENG-EXH
TI-8280-C	Thermal oil temperature indicator after WHTOH exhaust gas boiler		Genset-C	ENG-EXH
RSC-TCV-066-C	WHTOH exhaust gas boiler motorized damper end-position close		Genset-C	ENG-EXH
RSO-TCV-066-C	WHTOH exhaust gas boiler motorized damper end-position open		Genset-C	ENG-EXH
RT-TCV-066-C	WHTOH motorized damper TCV066 position feedback		Genset-C	ENG-EXH
TCV-066-C	Waste Heat Thermal Oil Heater Damper		Genset-C	ENG-EXH
1PDT-8200-D	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-D	ENG-EXH
1PDTI-8200-D	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-D	ENG-EXH
1TE-8280-D	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-D	ENG-EXH
2PDT-8200-D	Thermal oil differential pressure over WHTOH exhaust gas boiler		Genset-D	ENG-EXH
2TE-8280-D	Thermal oil temperature after WHTOH exhaust gas boiler		Genset-D	ENG-EXH
2PDTI-8200-D	Thermal oil differential pressure indicator over WHTOH exhaust gas boiler		Genset-D	ENG-EXH
PDT-6600-D	Waste heat thermal oil heater pressure differential		Genset-D	ENG-EXH
PDTI-6600-D	Waste heat thermal oil heater pressure differential transmitter indicator		Genset-D	ENG-EXH
PRV-066-D			Genset-D	ENG-EXH
RSC-PRV-066-D	WHTOH pressure control valve PRV066 end-position close		Genset-D	ENG-EXH
RSO-PRV-066-D	WHTOH pressure control valve PRV066 end-position open		Genset-D	ENG-EXH
RT-PRV-066-D	WHTOH pressure control valve PRV066 position feedback		Genset-D	ENG-EXH
TE-6701-D	Waste heat thermal oil heater temperature MOD066		Genset-D	ENG-EXH
TI-6702-D	Waste heat thermal oil heater temperature indicator MOD066		Genset-D	ENG-EXH
TI-8270-D	Thermal oil temperature indicator before WHTOH exhaust gas boiler		Genset-D	ENG-EXH
TI-8280-D	Thermal oil temperature indicator after WHTOH exhaust gas boiler		Genset-D	ENG-EXH
RSC-TCV-066-D	WHTOH exhaust gas boiler motorized damper end-position close		Genset-D	ENG-EXH
RSO-TCV-066-D	WHTOH exhaust gas boiler motorized damper end-position open		Genset-D	ENG-EXH
RT-TCV-066-D	WHTOH motorized damper TCV066 position feedback		Genset-D	ENG-EXH
TCV-066-D	Waste Heat Thermal Oil Heater Damper		Genset-D	ENG-EXH
LI-T067	Level indicator inside thermal oil supply module expansion tank T067	1	Common	TO-WHR
LSHH-T067	Thermal oil supply module expansion tank T067 level high	1	Common	TO-WHR
LSLL-T067	Thermal oil supply module expansion tank T067 level low	1	Common	TO-WHR
LT-T067	Level inside thermal oil supply module expansion tank T067	1	Common	TO-WHR
PI-1P067	Thermal oil supply module circulation pump 1 pressure indicator outlet	1	Common	TO-WHR
PI-2P067	Thermal oil supply module circulation pump 2 pressure indicator outlet	1	Common	TO-WHR
PI-3P067	Thermal oil supply module circulation pump 3 pressure indicator outlet	1	Common	TO-WHR
PI-7206		1	Common	TO-WHR
PI-8104	Pressure indicator in thermal oil supply module hot-header	1	Common	TO-WHR
PRV-067	Thermal oil header pressure regulation valve	1	Common	TO-WHR
PSH-1P067	Thermal oil supply module circulation pump 1 pressure switch high	1	Common	TO-WHR
PSH-2P067	Thermal oil supply module circulation pump 2 pressure switch high	1	Common	TO-WHR
PSH-3P067	Thermal oil supply module circulation pump 3 pressure switch high	1	Common	TO-WHR
PT-8101		1	Common	TO-WHR

Tag #	Service Description	Qty	Genset / Common	System
PT-8103	Pressure behind thermal oil supply pump(s) 1-3P067	1	Common	TO-WHR
PT-8104	Pressure in thermal oil supply module hot-header	1	Common	TO-WHR
RSC-PRV-067	Thermal oil header pressure regulation valve close position	1	Common	TO-WHR
RSO-PRV-067	Thermal oil header pressure regulation valve open position	1	Common	TO-WHR
RT-PRV-067	Thermal oil header pressure regulation valve PRV067 position feedback	1	Common	TO-WHR
TE-8102	Temperature before thermal oil supply pump(s) 1-3P067	1	Common	TO-WHR
TE-8104	Temperature in thermal oil supply module hot-header	1	Common	TO-WHR
TI-8101		1	Common	TO-WHR
TI-8102	Temperature indicator before thermal oil supply pump(s) 1-3P067	1	Common	TO-WHR
TI-8104	Temperature indicator in thermal oil supply module hot-header	1	Common	TO-WHR
V-PI-1P067	Thermal oil supply module circulation pump 1 pressure indicator inlet	1	Common	TO-WHR
V-PI-2P067	Thermal oil supply module circulation pump 2 pressure indicator inlet	1	Common	TO-WHR
V-PI-3P067	Thermal oil supply module circulation pump 3 pressure indicator inlet	1	Common	TO-WHR
LCV-067	Thermal oil expansion tank level control valve close request	1	Common	TO-WHR
RSC-LCV-067	Thermal oil expansion tank level control valve close position	1	Common	TO-WHR
RSO-LCV-067	Thermal oil expansion tank level control valve open position	1	Common	TO-WHR
PI-8101	Pressure indicator after Thermal oil tank farm temperature control MOD069	1	Common	TO-WHR
PI-8104	Pressure indicator before Thermal oil tank farm temperature control MOD069	1	Common	TO-WHR
TI-8101	Temperature indicator after Thermal oil tank farm temperature control MOD069	1	Common	TO-WHR
TI-8104	Temperature indicator before Thermal oil tank farm temperature control MOD069	1	Common	TO-WHR
1TCV-017	Fuel oil settling tank 1T017 temperature control valve	1	Common	TO-WHR
2TCV-017	Fuel oil settling tank 2T017 temperature control valve	1	Common	TO-WHR
RSC-1TCV-017	Fuel oil setting tank 1 tamp control valve end-position close	1	Common	TO-WHR
RSC-2TCV-017	Fuel oil setting tank 2 tamp control valve end-position close	1	Common	TO-WHR
RSC-TCV-018	Fuel oil daily tank temp control valve end-position close	1	Common	TO-WHR
RSC-TCV-074	Oily-Water & Sludge buffer tank temp control valve end-position close	1	Common	TO-WHR
RSC-TCV-075	Sludge storage tank temp control valve end-position close	1	Common	TO-WHR
RSC-TCV-218	Fuel oil buffer tank temp control valve end-position close	1	Common	TO-WHR
RSO-1TCV-017	Fuel oil setting tank 1 tamp control valve end-position open	1	Common	TO-WHR
RSO-2TCV-017	Fuel oil setting tank 2 tamp control valve end-position open	1	Common	TO-WHR
RSO-TCV-018	Fuel oil daily tank temp control valve end-position open	1	Common	TO-WHR
RSO-TCV-074	Oily-Water & Sludge buffer tank temp control valve end-position open	1	Common	TO-WHR
RSO-TCV-075	Sludge storage tank temp control valve end-position open	1	Common	TO-WHR
RSO-TCV-218	Fuel oil buffer tank temp control valve end-position close	1	Common	TO-WHR
RT-1TCV-017	Fuel oil settling tank 1 temp. control valve 1TCV017 pos. feedback	1	Common	TO-WHR
RT-2TCV-017	Fuel oil settling tank 2 temp. control valve 2TCV017 pos. feedback	1	Common	TO-WHR
RT-TCV-018	Fuel oil daily tank T018 Temperature control valve TCV018 pos. feedback	1	Common	TO-WHR
RT-TCV-074	Oily-Water & sludge buffer tank temp. control valve TCV074 pos. feedback	1	Common	TO-WHR
RT-TCV-075	sludge storage tank temp. control valve TCV075 pos. feedback	1	Common	TO-WHR
RT-TCV-218	Fuel oil buffer tank T218 temperature control valve TCV218 pos. feedback	1	Common	TO-WHR
TCV-018	Fuel oil daily tank T018 temperature control valve	1	Common	TO-WHR
TCV-074	Oily water & Sludge buffer tank T074 temperature control valve	1	Common	TO-WHR
TCV-075	Sludge storage tank T075 temperature control valve	1	Common	TO-WHR
TCV-218	Fuel oil buffer tank T218 temperature control valve	1	Common	TO-WHR
LI-T071-A	Level indicator inside fuel oil leakage collecting tank		Common	SL-COL
LI-T072-A	Level indicator inside Sludge collecting tank		Common	SL-COL
LSHH-T071-A	Fuel oil leakage collecting tank level switch high-high		Common	SL-COL
LSHH-T072-A	Sludge collecting tank level switch high-high		Common	SL-COL
LSLL-T071-A	Fuel oil leakage collecting tank level switch low-low		Common	SL-COL
LSLL-T072-A	Sludge collecting tank level switch low-low		Common	SL-COL
LT-T071-A	Level inside fuel oil leakage collecting tank		Common	SL-COL

Tag #	Service Description	Qty	Genset / Common	System
LT-T072-A	Level inside Sludge collecting tank		Common	SL-COL
PI-P071-A	Pressure indicator behind fuel leakage drain discharge pump		Common	SL-COL
PI-P072-A	Pressure indicator behind Sludge drain discharge pneumatic pump		Common	SL-COL
PSH-P071-A	Fuel leakage drain discharge pump pressure switch high		Common	SL-COL
PSH-P072-A	Sludge drain discharge pneumatic pump pressure switch high		Common	SL-COL
TE-T071-A	Temperature inside fuel oil leakage tank		Common	SL-COL
TI-T071-A	Temperature indicator inside fuel oil leakage tank		Common	SL-COL
V-PI-P071-A	Pressure indicator before fuel leakage drain discharge pump		Common	SL-COL
V-PI-P072-A	Pressure indicator before Sludge drain discharge pneumatic pump		Common	SL-COL
LI-T071-B	Level indicator inside fuel oil leakage collecting tank		Common	SL-COL
LI-T072-B	Level indicator inside Sludge collecting tank		Common	SL-COL
LSHH-T071-B	Fuel oil leakage collecting tank level switch high-high		Common	SL-COL
LSHH-T072-B	Sludge collecting tank level switch high-high		Common	SL-COL
LSLL-T071-B	Fuel oil leakage collecting tank level switch low-low		Common	SL-COL
LSLL-T072-B	Sludge collecting tank level switch low-low		Common	SL-COL
LT-T071-B	Level inside fuel oil leakage collecting tank		Common	SL-COL
LT-T072-B	Level inside Sludge collecting tank		Common	SL-COL
PI-P071-B	Pressure indicator behind fuel leakage drain discharge pump		Common	SL-COL
PI-P072-B	Pressure indicator behind Sludge drain discharge pneumatic pump		Common	SL-COL
PSH-P071-B	Fuel leakage drain discharge pump pressure switch high		Common	SL-COL
PSH-P072-B	Sludge drain discharge pneumatic pump pressure switch high		Common	SL-COL
TE-T071-B	Temperature inside fuel oil leakage tank		Common	SL-COL
TI-T071-B	Temperature indicator inside fuel oil leakage tank		Common	SL-COL
V-PI-P071-B	Pressure indicator before fuel leakage drain discharge pump		Common	SL-COL
V-PI-P072-B	Pressure indicator before Sludge drain discharge pneumatic pump		Common	SL-COL
PI-1P075	Pressure indicator after Sludge discharge unloading pump 1	1	Common	SL-TREAT
PI-2P075	Pressure indicator after Sludge discharge unloading pump 2	1	Common	SL-TREAT
PI-5207	Pressure indicator before Sludge discharge unloading pump MOD075	1	Common	SL-TREAT
POV-075	Sludge discharge unloading emerg shut-off valve closing request	1	Common	SL-TREAT
PSH-1P075	Sludge discharge unloading pneumatic pump 1 pressure switch high	1	Common	SL-TREAT
PSH-2P075	Sludge discharge unloading pneumatic pump 2 pressure switch high	1	Common	SL-TREAT
RSC-POV-075	Sludge discharge unloading module emerg shut-off valve open position	1	Common	SL-TREAT
RSO-POV-075	Sludge discharge unloading module emerg shut-off valve close position	1	Common	SL-TREAT
V-PI-1P075	Pressure indicator before Sludge discharge unloading pump 1	1	Common	SL-TREAT
V-PI-2P075	Pressure indicator before Sludge discharge unloading pump 2	1	Common	SL-TREAT
1LT-1V076	Level 1 inside sludge treatment oily water & sludge separator vessel 1V076	1	Common	SL-TREAT
1P076	Sludge treatment oily water separator tank sludge filling pumps 1	1	Common	SL-TREAT
1P176	Sludge treatment sediment sludge drain discharge pumps 1	1	Common	SL-TREAT
1P276	Sludge treatment oily sludge drain discharge pumps 1	1	Common	SL-TREAT
2LT-1V076	Level 2 inside sludge treatment oily water & sludge separator vessel 1V076	1	Common	SL-TREAT
2P076	Sludge treatment oily water separator tank sludge filling pumps 2	1	Common	SL-TREAT
2P176	Sludge treatment sediment sludge drain discharge pumps 2	1	Common	SL-TREAT
2P276	Sludge treatment oily sludge drain discharge pumps 2	1	Common	SL-TREAT
LI-1V076	Level indicator inside sludge treatment oily water & sludge separator vessel 1V076	1	Common	SL-TREAT
LI-3V076	Level indicator inside sludge treatment oily water & sludge separator vessel 3V076	1	Common	SL-TREAT
LI-4V076	Level indicator inside sludge treatment oily water & sludge separator vessel 4V076	1	Common	SL-TREAT
LSH-2V076	Sludge treatment only water & Sludge separator vessel 2V076 level switch high	1	Common	SL-TREAT
LSHH-2V076	Sludge treatment only water & Sludge separator vessel 2V076 level switch high-high	1	Common	SL-TREAT
LSL-2V076	Sludge treatment only water & Sludge separator vessel 2V076 level switch low	1	Common	SL-TREAT
LSLL-2V076	Sludge treatment only water & Sludge separator vessel 2V076 level switch low-low	1	Common	SL-TREAT

Tag #	Service Description	Qty	Genset / Common	System
LSLL-3V076	Sludge treatment only water & Sludge separator vessel 3V076 level switch low-low	1	Common	SL-TREAT
LSLL-4V076	Sludge treatment only water & Sludge separator vessel 4V076 level switch low-low	1	Common	SL-TREAT
LT-3V076	Level inside sludge treatment oily water & sludge separator vessel 3V076	1	Common	SL-TREAT
LT-4V076	Level inside sludge treatment oily water & sludge separator vessel 4V076	1	Common	SL-TREAT
PI-1P076	Sludge treatment oily water separator tank sludge filling pumps 1 pressure indicator	1	Common	SL-TREAT
PI-2P076	Sludge treatment oily water separator tank sludge filling pumps 2 pressure indicator	1	Common	SL-TREAT
PI-1P176	Sludge treatment sediment sludge drain discharge pumps 1 pressure indicator	1	Common	SL-TREAT
PI-2P176	Sludge treatment sediment sludge drain discharge pumps 2 pressure indicator	1	Common	SL-TREAT
PI-1P276	Sludge treatment oily sludge drain discharge pumps 1 pressure indicator	1	Common	SL-TREAT
PI-1P276	Sludge treatment oily sludge drain discharge pumps 2 pressure indicator	1	Common	SL-TREAT
PI-7206		1	Common	SL-TREAT
POV-076	Sludge treatment oily water separator tank Sludge filling valve	1	Common	SL-TREAT
PSH-1P076	Sludge treatment oily water separator tank Sludge filling pumps 1 pressure switch high	1	Common	SL-TREAT
PSH-2P076	Sludge treatment oily water separator tank Sludge filling pumps 2 pressure switch high	1	Common	SL-TREAT
PSH-1P176	Sludge treatment sediment Sludge drain discharge pumps 1 pressure switch high	1	Common	SL-TREAT
PSH-2P176	Sludge treatment sediment Sludge drain discharge pumps 2 pressure switch high	1	Common	SL-TREAT
PSH-1P276	Sludge treatment oily Sludge drain discharge pumps 1 pressure switch high	1	Common	SL-TREAT
PSH-2P276	Sludge treatment oily Sludge drain discharge pumps 2 pressure switch high	1	Common	SL-TREAT
PT-5902	Pressure before sludge treatment sludge pre-heating thermal oil heater	1	Common	SL-TREAT
PT-5905-1	Pressure behind sludge treatment sediment sludge drain discharge pumps 1/2P126	1	Common	SL-TREAT
PT-5905-2	Pressure behind sludge treatment oily sludge drain discharge pumps 1/2P276	1	Common	SL-TREAT
RSC-1P076	Sludge treatment oily water separator tank sludge filling pumps 1 close position	1	Common	SL-TREAT
RSC-1P176	Sludge treatment sediment sludge drain discharge pumps 1 close position	1	Common	SL-TREAT
RSC-1P276	Sludge treatment oily sludge drain discharge pumps 1 close position	1	Common	SL-TREAT
RSC-2P076	Sludge treatment oily water separator tank sludge filling pumps 2 close position	1	Common	SL-TREAT
RSC-2P176	Sludge treatment sediment sludge drain discharge pumps 2 close position	1	Common	SL-TREAT
RSC-2P276	Sludge treatment oily sludge drain discharge pumps 2 close position	1	Common	SL-TREAT
RSC-POV-076	Sludge treatment oily water separator tank sludge filling valve close position	1	Common	SL-TREAT
RSO-1P076	Sludge treatment oily water separator tank sludge filling pumps 1 open position	1	Common	SL-TREAT
RSO-1P176	Sludge treatment sediment sludge drain discharge pumps 1 open position	1	Common	SL-TREAT
RSO-1P276	Sludge treatment oily sludge drain discharge pumps 1 open position	1	Common	SL-TREAT
RSO-2P076	Sludge treatment oily water separator tank sludge filling pumps 2 open position	1	Common	SL-TREAT
RSO-2P176	Sludge treatment sediment sludge drain discharge pumps 2 open position	1	Common	SL-TREAT
RSO-2P276	Sludge treatment oily sludge drain discharge pumps 2 open position	1	Common	SL-TREAT

Tag #	Service Description	Qty	Genset / Common	System
	position			
RSO-POV-076	Sludge treatment oily water separator tank sludge filling valve open position	1	Common	SL-TREAT
RT-POV-076	Sludge treatment oily water separator tank sludge filling valve POV076 position feedback	1	Common	SL-TREAT
TE-1V076	Temperature inside sludge treatment oily water & sludge separator vessel 1V076	1	Common	SL-TREAT
TI-1V076	Temperature indicator inside sludge treatment oily water & sludge separator vessel 1V076	1	Common	SL-TREAT
TI-5902	Temperature indicator before sludge treatment sludge pre-heating thermal oil heater	1	Common	SL-TREAT
TTI-5903	Temperature before inside sludge treatment oily water & sludge separator vessel 1-4V076	1	Common	SL-TREAT
LCV-076	Sludge treatment water evaporator level control valve	1	Common	SL-TREAT
RSC-LCV-076	Sludge treatment water evaporator level control valve close position	1	Common	SL-TREAT
RSC-TCV-076	Sludge treatment sludge pre-heating temperature control valve close position	1	Common	SL-TREAT
RSO-LCV-076	Sludge treatment water evaporator level control valve open position	1	Common	SL-TREAT
RSO-TCV-076	Sludge treatment sludge pre-heating temperature control valve open position	1	Common	SL-TREAT
RT-LCV-076	Sludge treatment water evaporator level control valve LCV076 position feedback	1	Common	SL-TREAT
RT-TCV-076	Sludge treatment sludge pre-heating temperature control valve TCV076 position feedback	1	Common	SL-TREAT
TCV-076	Sludge treatment sludge pre-heating temperature control valve	1	Common	SL-TREAT
1SOV-090-A	SCR soot blowing Solenoid operated valve 1		Genset-A	ENG-EXH
2SOV-090-A	SCR soot blowing Solenoid operated valve 2		Genset-A	ENG-EXH
3SOV-090-A	SCR soot blowing Solenoid operated valve 3		Genset-A	ENG-EXH
4SOV-090-A	SCR soot blowing Solenoid operated valve 4		Genset-A	ENG-EXH
5SOV-090-A	SCR soot blowing Solenoid operated valve 5		Genset-A	ENG-EXH
6SOV-090-A	SCR soot blowing Solenoid operated valve 6		Genset-A	ENG-EXH
PDT-6601-A	Selective catalytic reactor (SCR) & dosing duct pressure differential		Genset-A	ENG-EXH
PDTI-6601-A	Selective catalytic reactor (SCR) & dosing duct pressure differential indicator		Genset-A	ENG-EXH
PSL-7611-A	Selective catalytic reactor (SCR) & dosing duct pressure switch low		Genset-A	ENG-EXH
TT-6602-A	Temperature Selective catalytic reactor (SCR)		Genset-A	ENG-EXH
1SOV-090-B	SCR soot blowing Solenoid operated valve 1		Genset-B	ENG-EXH
2SOV-090-B	SCR soot blowing Solenoid operated valve 2		Genset-B	ENG-EXH
3SOV-090-B	SCR soot blowing Solenoid operated valve 3		Genset-B	ENG-EXH
4SOV-090-B	SCR soot blowing Solenoid operated valve 4		Genset-B	ENG-EXH
5SOV-090-B	SCR soot blowing Solenoid operated valve 5		Genset-B	ENG-EXH
6SOV-090-B	SCR soot blowing Solenoid operated valve 6		Genset-B	ENG-EXH
PDT-6601-B	Selective catalytic reactor (SCR) & dosing duct pressure differential		Genset-B	ENG-EXH
PDTI-6601-B	Selective catalytic reactor (SCR) & dosing duct pressure differential indicator		Genset-B	ENG-EXH
PSL-7611-B	Selective catalytic reactor (SCR) & dosing duct pressure switch low		Genset-B	ENG-EXH
TT-6602-B	Temperature Selective catalytic reactor (SCR)		Genset-B	ENG-EXH
1SOV-090-C	SCR soot blowing Solenoid operated valve 1		Genset-C	ENG-EXH
2SOV-090-C	SCR soot blowing Solenoid operated valve 2		Genset-C	ENG-EXH
3SOV-090-C	SCR soot blowing Solenoid operated valve 3		Genset-C	ENG-EXH
4SOV-090-C	SCR soot blowing Solenoid operated valve 4		Genset-C	ENG-EXH
5SOV-090-C	SCR soot blowing Solenoid operated valve 5		Genset-C	ENG-EXH
6SOV-090-C	SCR soot blowing Solenoid operated valve 6		Genset-C	ENG-EXH
PDT-6601-C	Selective catalytic reactor (SCR) & dosing duct pressure differential		Genset-C	ENG-EXH
PDTI-6601-C	Selective catalytic reactor (SCR) & dosing duct pressure differential indicator		Genset-C	ENG-EXH
PSL-7611-C	Selective catalytic reactor (SCR) & dosing duct pressure switch low		Genset-C	ENG-EXH
TT-6602-C	Temperature Selective catalytic reactor (SCR)		Genset-C	ENG-EXH
1SOV-090-D	SCR soot blowing Solenoid operated valve 1		Genset-D	ENG-EXH
2SOV-090-D	SCR soot blowing Solenoid operated valve 2		Genset-D	ENG-EXH

Tag #	Service Description	Qty	Genset / Common	System
3SOV-090-D	SCR soot blowing Solenoid operated valve 3		Genset-D	ENG-EXH
4SOV-090-D	SCR soot blowing Solenoid operated valve 4		Genset-D	ENG-EXH
5SOV-090-D	SCR soot blowing Solenoid operated valve 5		Genset-D	ENG-EXH
6SOV-090-D	SCR soot blowing Solenoid operated valve 6		Genset-D	ENG-EXH
PDT-6601-D	Selective catalytic reactor (SCR) & dosing duct pressure differential		Genset-D	ENG-EXH
PDTI-6601-D	Selective catalytic reactor (SCR) & dosing duct pressure differential indicator		Genset-D	ENG-EXH
PSL-7611-D	Selective catalytic reactor (SCR) & dosing duct pressure switch low		Genset-D	ENG-EXH
TT-6602-D	Temperature Selective catalytic reactor (SCR)		Genset-D	ENG-EXH
FQI-6308-A	SCR dosing unit MOD091 flow quantity indicator		Genset-A	ENG-EXH
FQT-6308-A	SCR dosing unit MOD091 actual flow rate		Genset-A	ENG-EXH
FSL-7603-A	SCR dosing unit MOD091 flow switch low		Genset-A	ENG-EXH
POV-091-A	SCR dosing unit urea injection supply valve close request		Genset-A	ENG-EXH
PSI-7604-A	Pressure switch after SCR dosing unit atomization air supply valve		Genset-A	ENG-EXH
PSI-7605-A	Pressure switch after SCR dosing unit cooling & cleaning air valve		Genset-A	ENG-EXH
PTI-6308-A	Pressure before SCR dosing unit MOD091		Genset-A	ENG-EXH
SOV-091-A	SCR dosing unit atomization air supply valve		Genset-A	ENG-EXH
SOV-191-A	SCR dosing unit cooling & cleaning air valve		Genset-A	ENG-EXH
FQI-6308-B	SCR dosing unit MOD091 flow quantity indicator		Genset-B	ENG-EXH
FQT-6308-B	SCR dosing unit MOD091 actual flow rate		Genset-B	ENG-EXH
FSL-7603-B	SCR dosing unit MOD091 flow switch low		Genset-B	ENG-EXH
POV-091-B	SCR dosing unit urea injection supply valve close request		Genset-B	ENG-EXH
PSI-7604-B	Pressure switch after SCR dosing unit atomization air supply valve		Genset-B	ENG-EXH
PSI-7605-B	Pressure switch after SCR dosing unit cooling & cleaning air valve		Genset-B	ENG-EXH
PTI-6308-B	Pressure before SCR dosing unit MOD091		Genset-B	ENG-EXH
SOV-091-B	SCR dosing unit urea injection supply valve		Genset-B	ENG-EXH
SOV-191-B	SCR dosing unit cooling & cleaning air valve		Genset-B	ENG-EXH
FQI-6308-C	SCR dosing unit MOD091 flow quantity indicator		Genset-C	ENG-EXH
FQT-6308-C	SCR dosing unit MOD091 actual flow rate		Genset-C	ENG-EXH
FSL-7603-C	SCR dosing unit MOD091 flow switch low		Genset-C	ENG-EXH
POV-091-C	SCR dosing unit urea injection supply valve close request		Genset-C	ENG-EXH
PSI-7604-C	Pressure switch after SCR dosing unit atomization air supply valve		Genset-C	ENG-EXH
PSI-7605-C	Pressure switch after SCR dosing unit cooling & cleaning air valve		Genset-C	ENG-EXH
PTI-6308-C	Pressure before SCR dosing unit MOD091		Genset-C	ENG-EXH
SOV-091-C	SCR dosing unit atomization air supply valve		Genset-C	ENG-EXH
SOV-191-C	SCR dosing unit cooling & cleaning air valve		Genset-C	ENG-EXH
FQI-6308-D	SCR dosing unit MOD091 flow quantity indicator		Genset-D	ENG-EXH
FQT-6308-D	SCR dosing unit MOD091 actual flow rate		Genset-D	ENG-EXH
FSL-7603-D	SCR dosing unit MOD091 flow switch low		Genset-D	ENG-EXH
POV-091-D	SCR dosing unit urea injection supply valve close request		Genset-D	ENG-EXH
PSI-7604-D	Pressure switch after SCR dosing unit atomization air supply valve		Genset-D	ENG-EXH
PSI-7605-D	Pressure switch after SCR dosing unit cooling & cleaning air valve		Genset-D	ENG-EXH
PTI-6308-D	Pressure before SCR dosing unit MOD091		Genset-D	ENG-EXH
SOV-091-D	SCR dosing unit atomization air supply valve		Genset-D	ENG-EXH
SOV-191-D	SCR dosing unit cooling & cleaning air valve		Genset-D	ENG-EXH
1POV-095	UREA-Solution mixing tank R/O-Water filling valve 1 forced close	1	Common	UREA-SUP
1POV-195	UREA-Solution mixing tank UREA filling valve 1 forced close	1	Common	UREA-SUP
2POV-095	UREA-Solution mixing tank R/O-Water filling valve 2 forced close	1	Common	UREA-SUP
2POV-195	UREA-Solution mixing tank UREA filling valve 2 forced close	1	Common	UREA-SUP
LI-1T095	Level indicator inside UREA-Solution mixing tank 1T095	1	Common	UREA-SUP
LI-2T095	Level indicator inside UREA-Solution mixing tank 2T095	1	Common	UREA-SUP
LI-T195	Level indicator inside UREA-Solution storage tank T195	1	Common	UREA-SUP
LSHH-1T095	UREA-Solution mixing tank 1T095 level high-high	1	Common	UREA-SUP
LSHH-2T095	UREA-Solution mixing tank 2T095 level high-high	1	Common	UREA-SUP
LSHH-T195	UREA-Solution storage tank T195 level high-high	1	Common	UREA-SUP
LSLL-1T095	UREA-Solution mixing tank 1T095 level low-low	1	Common	UREA-SUP
LSLL-2T095	UREA-Solution mixing tank 2T095 level low-low	1	Common	UREA-SUP
LSLL-T195	UREA-Solution storage tank T195 level low-low	1	Common	UREA-SUP
LT-1T095	Level inside UREA-Solution mixing tank 1T095	1	Common	UREA-SUP
LT-2T095	Level inside UREA-Solution mixing tank 2T095	1	Common	UREA-SUP
LT-T195	Level inside UREA-Solution storage tank T195	1	Common	UREA-SUP
PI-7218		1	Common	UREA-SUP
RSC-1POV-095	UREA-Solution mixing tank R/O-water filling valve 1 close position	1	Common	UREA-SUP

Tag #	Service Description	Qty	Genset / Common	System
RSC-1POV-195	UREA-Solution storage tank UREA filling valve 1 close position	1	Common	UREA-SUP
RSC-2POV-095	UREA-Solution mixing tank R/O-water filling valve 2 close position	1	Common	UREA-SUP
RSC-2POV-195	UREA-Solution storage tank UREA filling valve 2 close position	1	Common	UREA-SUP
RSO-1POV-095	UREA-Solution mixing tank R/O-water filling valve 1 open position	1	Common	UREA-SUP
RSO-1POV195	UREA-Solution storage tank UREA filling valve 1 open position	1	Common	UREA-SUP
RSO-2POV-095	UREA-Solution mixing tank R/O-water filling valve 2 open position	1	Common	UREA-SUP
RSO-2POV195	UREA-Solution storage tank UREA filling valve 2 open position	1	Common	UREA-SUP
TI-1M095	Temperature indicator behind Heat exchanger	1	Common	UREA-SUP
TI-1T095	Temperature indicator inside Urea solution mixing tanks 1	1	Common	UREA-SUP
TI-2T095	Temperature indicator inside Urea solution mixing tanks 2	1	Common	UREA-SUP
TT-1T095	Temperature inside Urea solution mixing tanks 1	1	Common	UREA-SUP
TT-2T095	Temperature inside Urea solution mixing tanks 2	1	Common	UREA-SUP
PSH-1P096	UREA supply pump 2 pressure switch high	1	Common	UREA-SUP
PSH-2P096	UREA supply pump 2 pressure switch high	1	Common	UREA-SUP
PTI-6307	Pressure after Urea supply pumps MOD096	1	Common	UREA-SUP
V-PI-P096	Pressure indicator before Urea supply pumps MOD096			
V-PI-1P096	Urea supply pump(s) 1 pressure indicator	1	Common	UREA-SUP
V-PI-2P096	Urea supply pump(s) 2 pressure indicator	1	Common	UREA-SUP
1SOV-099	Exhaust - Gas inlet NOx sample supply valve for engine 1	1	Common	ENG-EXH
2SOV-099	Exhaust - Gas inlet NOx sample supply valve for engine 2	1	Common	ENG-EXH
3SOV-099	Exhaust - Gas inlet NOx sample supply valve for engine 3	1	Common	ENG-EXH
4SOV-099	Exhaust - Gas inlet NOx sample supply valve for engine 4	1	Common	ENG-EXH
FQ-099	NOx emission quantity measurement probe	1	Common	ENG-EXH
FQT-6601		1	Common	ENG-EXH
FSL-GEN-DE-A	Generator de-bearing lubrication supply flow switch low MOD1001		Genset-A	GENSET
FSL-GEN-DE-B	Generator de-bearing lubrication supply flow switch low MOD1001		Genset-B	GENSET
FSL-GEN-DE-C	Generator de-bearing lubrication supply flow switch low MOD1001		Genset-C	GENSET
FSL-GEN-DE-D	Generator de-bearing lubrication supply flow switch low MOD1001		Genset-D	GENSET
PDI-FIL115	CDG5+6 diesel (HSD) supply pump(s) 1/2P115 pressure differential indicator	1	Common	CDG
PI-1P115	CDG5+6 Diesel supply Pump 1 pressure indicator outlet	1	Common	CDG
PI-2P115	CDG5+6 Diesel supply Pump 2 pressure indicator outlet	1	Common	CDG
PI-5303	Pressure after CDG5+6 diesel (HSD) supply pump(s) 1/2P115	1	Common	CDG
PI-5305	Pressure before CDG5+6 diesel supply pressure relief valve	1	Common	CDG
POV-115	CDG5+6 Diesel supply emergency shut-off valve closing request	1	Common	CDG
PSH-1P115	CDG5+6 Diesel supply Pump 1 pressure switch high	1	Common	CDG
PSH-2P115	CDG5+6 Diesel supply Pump 2 pressure switch high	1	Common	CDG
PT-5302	Pressure behind CDG5+6 diesel (HSD) supply pump(s) 1/2P115	1	Common	CDG
RSC-POV-115	CDG5+6 Diesel supply module emergency shut-off valve open position	1	Common	CDG
RSO-POV-115	CDG5+6 Diesel supply module emergency shut-off valve close position	1	Common	CDG
V-PI-1P115	CDG5+6 Diesel supply Pump 1 pressure indicator inlet	1	Common	CDG
V-PI-2P115	CDG5+6 Diesel supply Pump 2 pressure indicator inlet	1	Common	CDG
LSH-1P073	Level Switch High - Drain Pit Engine Basement Inside	1	Common	SL-COL
LSH-2P073	Level Switch High - Drain Pit Radiator / Air Intake	1	Common	SL-COL
LSH-3P073	Level Switch High - Drain Pit Pumphouse	1	Common	SL-COL
LSH-4P073	Level Switch High - Drain Pit Tank Farm	1	Common	SL-COL
LSH-5P073	Level Switch High - Drain Pit Unloading Station	1	Common	SL-COL
LSL-1P073	Level Switch Low - Drain Pit Engine Basement	1	Common	SL-COL
LSL-2P073	Level Switch Low - Drain Pit Radiator / Air Intake	1	Common	SL-COL
LSL-3P073	Level Switch Low - Drain Pit Pumphouse	1	Common	SL-COL
LSL-4P073	Level Switch Low - Drain Pit Tank Farm	1	Common	SL-COL
LSL-5P073	Level Switch Low - Drain Pit Unloading Station	1	Common	SL-COL
LSHH-T074	Level Switch High - Oily Water & Sludge Buffer Tank (T074)	1	Common	SL-TREAT
LSHH-T075	Level Switch High - Sludge Storage Tank (T075)	1	Common	SL-TREAT
LSLL-T074	Level Switch Low - Oily Water & Sludge Buffer Tank (T074)	1	Common	SL-TREAT
LSLL-T075	Level Switch Low - Sludge Storage Tank (T075)	1	Common	SL-TREAT
LTI-T074	Level Transmitter Indicator - Oily Water & Sludge Buffer Tank (T074)	1	Common	SL-TREAT

Tag #	Service Description	Qty	Genset / Common	System
LTI-T075	Level Transmitter Indicator - Sludge Storage Tank (T075)	1	Common	SL-TREAT
TE-T074	Temperature Element - Oily Water & Sludge Buffer Tank (T074)	1	Common	SL-TREAT
TE-T075	Temperature Element - Sludge Storage Tank (T075)	1	Common	SL-TREAT
TI-T074	Temperature Indicator - Oily Water & Sludge Buffer Tank (T074)	1	Common	SL-TREAT
TI-T075	Temperature Indicator - Sludge Storage Tank (T075)	1	Common	SL-TREAT
PI-7170-A	Starting Air Pressure Indicator	4	Genset-A	START-AIR
PI-7170-B	Starting Air Pressure Indicator	4	Genset-B	START-AIR
PI-7170-C	Starting Air Pressure Indicator	4	Genset-C	START-AIR
PI-7170-D	Starting Air Pressure Indicator	4	Genset-D	START-AIR
PT-7170-A	Starting Air Pressure Transmitter	4	Genset-A	START-AIR
PT-7170-B	Starting Air Pressure Transmitter	4	Genset-B	START-AIR
PT-7170-C	Starting Air Pressure Transmitter	4	Genset-C	START-AIR
PT-7170-D	Starting Air Pressure Transmitter	4	Genset-D	START-AIR
PT-7180-A	Emergency Air Pressure Transmitter	4	Genset-A	START-AIR
PT-7180-B	Emergency Air Pressure Transmitter	4	Genset-B	START-AIR
PT-7180-C	Emergency Air Pressure Transmitter	4	Genset-C	START-AIR
PT-7180-D	Emergency Air Pressure Transmitter	4	Genset-D	START-AIR
PT-7400-A	Control Air Pressure Transmitter	4	Genset-A	START-AIR
PT-7400-B	Control Air Pressure Transmitter	4	Genset-B	START-AIR
PT-7400-C	Control Air Pressure Transmitter	4	Genset-C	START-AIR
PT-7400-D	Control Air Pressure Transmitter	4	Genset-D	START-AIR
LSHH-2T049	Level Switch High - Buffer Water tank (2T049)	1	Common	MOD049
LSHH-3T049	Level Switch High - Treated Water Tank (3T049)	1	Common	MOD049
LSHH-4T049	Level Switch High - Ultra Filtration Water Tank (4T049)	1	Common	MOD049
LSHH-1T049	Level Switch High - Raw Water Tank (1T049)	1	Common	MOD049
LSLL-2T049	Level Switch Low - Buffer Water tank (2T049)	1	Common	MOD049
LSLL-3T049	Level Switch Low - Treated Water Tank (3T049)	1	Common	MOD049
LSLL-4T049	Level Switch Low - Ultra Filtration Water Tank (4T049)	1	Common	MOD049
LSLL-1T049	Level Switch Low - Raw Water Tank (1T049)	1	Common	MOD049
LTI-2T049	Level Transmitter Indicator - Buffer Water tank (2T049)	1	Common	MOD049
LTI-3T049	Level Transmitter Indicator - Treated Water Tank (3T049)	1	Common	MOD049
LTI-4T049	Level Transmitter Indicator - Ultra Filtration Water Tank (4T049)	1	Common	MOD049
LTI-1T049	Level Transmitter Indicator - Raw Water Tank (1T049)	1	Common	MOD049

2.4 150kV Switch Yard Equipment

Equipment Number	Equipment Description	Area
150kV SWITCHYARD		
Bay #1	11kV / 150kV Step Up Transformer 1 Bay	
SUT-1	11kV / 150kV Step Up Transformer 1	150kV Switchyard - Bay 1
HVMK-1	High Voltage Marshalling Kiosk 1	150kV Switchyard - Bay 1
LA-SUT-1	Lightning Arrestor (Set of 3 x single phase)	150kV Switchyard - Bay 1
DCB-52R11	Horizontal Centre Break Type Disconnecter with Earth Switch-CT/CB side (ES-57R11) (Set of 3 x single phase)	150kV Switchyard - Bay 1
CT-PRIM-1	Live Tank Current Transformer (Set of 3 x single phase)	150kV Switchyard - Bay 1
GI-CB-52R12	3-Pole GO Type SF6 Gas-Insulated Circuit Breaker	150kV Switchyard - Bay 1
Bay #2	150kV Bus Coupler Bay	
HVMK 5	High Voltage Marshalling Kiosk 5	150kV Switchyard - Bay 5
DCB-52R13-A	Horizontal Centre Break Type Disconnecter- (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R23-A	Horizontal Centre Break Type Disconnecter- (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R33-A	Horizontal Centre Break Type Disconnecter- (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R43-A	Horizontal Centre Break Type Disconnecter- (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R13-B	Horizontal Centre Break Type Disconnecter with Earth Switch-Bay side (ES-57R13) (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R23-B	Horizontal Centre Break Type Disconnecter with Earth Switch-Bay side (ES-57R23) (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R33-B	Horizontal Centre Break Type Disconnecter with Earth Switch-Bay side (ES-57R33) (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R43-B	Horizontal Centre Break Type Disconnecter with Earth Switch-Bay side (ES-57R43) (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R50-A	Horizontal Centre Break Type Disconnecter with Earth Switch-CB side (ES-57R51-A) (Set of 3 x single phase)	150kV Switchyard - Bay 5
DCB-52R50-B	Horizontal Centre Break Type Disconnecter with Earth Switch-CB side (ES-57R51-B) (Set of 3 x single phase)	150kV Switchyard - Bay 5
PT-BB-A	Potential / Voltage Transformer Bus A (Set of 3 x single phase)	150kV Switchyard - Bay 5
PT-BB-B	Potential / Voltage Transformer Bus B (Set of 3 x single phase)	150kV Switchyard - Bay 5
CT-BB-A	Live Tank Current Transformer Bus A (Set of 3 x single phase)	150kV Switchyard - Bay 5
CT-BB-B	Live Tank Current Transformer Bus B (Set of 3 x single phase)	150kV Switchyard - Bay 5
GI-CB-52R51	3-Pole GO Type SF6 Gas-Insulated Circuit Breaker	150kV Switchyard - Bay 5
Bay #3	11kV / 150kV Step Up Transformer 2 Bay	
SUT-2	11kV / 150kV Step Up Transformer 2	150kV Switchyard - Bay 2
HVMK-2	High Voltage Marshalling Kiosk 2	150kV Switchyard - Bay 2
LA-SUT-2	Lightning Arrestor (Set of 3 x single phase)	150kV Switchyard - Bay 2
DCB-52R21	Horizontal Centre Break Type Disconnecter with Earth Switch-CT/CB side (ES-57R21) (Set of 3 x single phase)	150kV Switchyard - Bay 2
CT-PRIM-2	Live Tank Current Transformer (Set of 3 x single phase)	150kV Switchyard - Bay 2
GI-CB-52R22	3-Pole GO Type SF6 Gas-Insulated Circuit Breaker	150kV Switchyard - Bay 2
Bay #4	Martabe Substation Outgoing Bay (PLN Grid Supply)	
HVMK 3	High Voltage Marshalling Kiosk 3	150kV Switchyard - Bay 3
LA-PLN	Lightning Arrestor (Set of 3 x single phase)	150kV Switchyard - Bay 3
PT-PLN	Potential / Voltage Transformer - PLN (Set of 3 x single phase)	150kV Switchyard - Bay 3
DCB-52R31	Horizontal Centre Break Type Disconnecter with 2 x Earth Switch-CT/CB and Line	150kV Switchyard - Bay 3

	side (ES-57R31 & ES-57R32) (Set of 3 x single phase)	
CT-PLN	Live Tank Current Transformer - PLN (Set of 3 x single phase)	150kV Switchyard - Bay 3
GI-CB-52R32	3-Pole GO Type SF6 Gas-Insulated Circuit Breaker	150kV Switchyard - Bay 3
Bay #5	Highlands Substation (PTAR Mine Site)	
HVMK 4	High Voltage Marshalling Kiosk 4	150kV Switchyard - Bay 4
LA-MINE	Lightning Arrestor (Set of 3 x single phase)	150kV Switchyard - Bay 4
PT-MINE	Potential / Voltage Transformer - MINE (Set of 3 x single phase)	150kV Switchyard - Bay 4
DCB-52R41	Horizontal Centre Break Type Disconnecter with 2 x Earth Switch-CT/CB and Line side (ES-57R41 & ES-57R42) (Set of 3 x single phase)	150kV Switchyard - Bay 4
CT-MINE	Live Tank Current Transformer - MINE (Set of 3 x single phase)	150kV Switchyard - Bay 4
GI-CB-52R42	3-Pole GO Type SF6 Gas-Insulated Circuit Breaker	150kV Switchyard - Bay 4
General		
LM1	25m High Lighting High Mast with integral motorized lifting/lowering arrangement #1	150kV Switchyard
FP1	Feeder Pillar for LM1	150kV Switchyard
LM2	25m High Lighting High Mast with integral motorized lifting/lowering arrangement #2	150kV Switchyard
FP2	Feeder Pillar for LM2	150kV Switchyard
Towers		
T1		150kV Switchyard
T2		150kV Switchyard
T3		150kV Switchyard
T4		150kV Switchyard
T5		150kV Switchyard
Gantry		150kV Switchyard
Disk insulators		
Conductors (ZEBRA ASCR)	Internal in switchyard	
Conductors (HAWK ASCR)	Links to existing 150kV line	
Clamps and Connectors		
Tension & Suspension		
Lightning Protection		
Earthing - in ground		
Earthing - structures		
Aluminium Tube		
Cable Ladder and conduits		
Modifications to T16		
2 x Line to T16		

2.5 Fire Fighting

Module Name	Module Description
WATER BASED AND FOAM BASED IFRE FIGHTING SYSTEM	
Pumps	
1P701	Fire Water Pump Electric
2P701	Fire Water Pump Diesel
P703	Jockey Pump
Tanks	
T701	Fire Water Tank (same tank as T049 Raw Water Tank - 500KL)
T702	Bladder Tank
Valves	
X- "VALVE IDENTIFIER-FF7-PIPE SIZE (DNXX)	Manual Valves
Deluge Valve	
DV701	HFO Settling Tank #1 Deluge Valve
DV702	HFO Settling Tank #2 Deluge Valve
DV703	ITOH (Independent Thermal Oil Heater) Deluge Valve
DV704	Pump & HFO Separator House Deluge Valve
DV705	Foam Bladder Tank System Deluge Valve
Pressure Safety Valve	
PSV701	Discharge Fire Water Pump Diesel Pressure Safety Valve
Flow Instruments:	
FI	Flow Indicator Gauge (local)
Level Instruments:	
LI	Level Indicator Gauge (local)
LSL	Level Switch Low (digital)
Pressure Instruments:	
PAL	Pressure Alarm Low (from analog signal) PI
PSH	Pressure Switch High (digital)
PT	Pressure Transmitter (4-20mA for remote indication)
Speed / Frequency Instruments:	
SAH	Speed Alarm High (from analog signal)
ST	Speed Transmitter (4-20mA for remote indication)
Temperature Instruments:	
TAH	Temperature Alarm High (from analog signal) TE
TT	Temperature Transmitter (4-20mA)
Solenoid Operated Valves	
SOV-DV701	HFO Settling Tank #1 Deluge Valve
SOV-DV702	HFO Settling Tank #2 Deluge Valve
SOV-DV703	ITOH (Independent Thermal Oil Heater) Deluge Valve
SOV-DV704	Pump & HFO Separator House Deluge Valve
SOV-DV705	Foam Bladder Tank System Deluge Valve
Motor Operated Valves	
MOV701	For HFO Settling Tank #1
MOV702	For HFO Settling Tank #2
MOV703	For HFO Daily Tank
MOV704	For Oily Water Buffer Tank
MOV705	For HSD Daily Tank
Hydrant	
OH001~008	Outdoor Hydrant
IH001~002	Indoor Hydrant

Module Name	Module Description
Foam Chamber	
FC701	For HFO Settling Tank #1
FC702	For HFO Settling Tank #2
FC703	For HFO Daily Tank
FC704	For Oily Water Buffer Tank
FC705	For HSD Daily Tank
Foam Proportioner	
FP701	Foam Proportioner
Hose Box	
HB7XX	Hose Box
Fire Extinguisher	
FE7XX	Portable Fire Extinguisher
WFE7XX	Wheeled Fire Extinguisher
<u>FIRE DETECTION AND ALARM SYSTEM</u>	
FCAP	Fire Alarm Control Panel
	Smoke Detector
	Heat Detector
	Manual Call Point
	Manual Release
	Abort Station for FM-200 or CO ₂
	Horn/Strobe Alarm
	Alarm Bell
	Annunciator Panel
FM-200 and CO₂ EXTINGUISHING SYSTEM	
	Control Room - First Floor (FM-200)
	Battery Room - Ground Floor (FM-200)
	MV Room - Ground Floor (CO ₂)
	LV Room - Ground Floor (CO ₂)

3. List of Supporting Technical and Engineering Documentation

The purpose of the supporting documents is to describe the scope of supply, construction requirements of equipment as well as requirements of functions, the basic principle design and philosophies. The project specifications may overrule some details mentioned in these specifications but shall not affect the validity of the remaining part of the specifications.

The following supporting technical and engineering specification documentation is available upon request:

1. General Technical Specifications:
 - i. General Technical Specification for Electrical Part (Control, LV and MV)
 - ii. General Technical Specification for Mechanical Auxiliaries (Mechanical Auxiliaries Engine & Common Related)
2. Functional Descriptions:
 - i. System Design Description of the Power Plant (Diesel Power Plant PLC & SCADA Control and Monitoring Philosophy)
 - ii. Basic Functional Description of the Power Plant (Operational Mode of Diesel/Heavy Fuel Oil Power Plant)
3. Preliminary Project Layouts and Model:
 - i. Panel General Arrangement Layout Site
 - ii. Layout GA Module
 - iii. 3D Arrangements
4. Piping and Instrumentation Diagrams (P&IDs):
 - i. Process Flow Water Treatment Plant
 - ii. System P&ID Legends for pipe, fittings and Equipment Marking
 - iii. System P&ID – Control & Instrumentation Air Supply System
 - iv. System P&ID – Diesel Oil Unloading and Supply System
 - v. System P&ID – Engine Combustion Air Intake System
 - vi. System P&ID – Engine Exhaust Gas System (with SCR & WHTOH)
 - vii. System P&ID – Engine Fuel Oil System (Fuel Oil Booster Module)
 - viii. System P&ID – Engine HT (High Temperature) Cooling Water System
 - ix. System P&ID – Engine LT (Low Temperature) Cooling Water System
 - x. System P&ID – Engine Lube Oil Lubrication System
 - xi. System P&ID – Engine Lube Oil Treatment System
 - xii. System P&ID – Engine Nozzle Cooling Water System
 - xiii. System P&ID – Fuel Leakage & Sludge Collecting System
 - xiv. System P&ID – Fuel Oil Unloading and Supply System
 - xv. System P&ID – Fuel Oil Treatment System
 - xvi. System P&ID – Genset & Engine Hall Ventilation System
 - xvii. System P&ID – Lube Oil Unloading and Supply System
 - xviii. System P&ID – Plant & Engine R/O (Reverse Osmosis) Water Supply System
 - xix. System P&ID – Plant & Engine Process Water Supply System
 - xx. System P&ID – SCR Compressed Air Supply System
 - xxi. System P&ID – Sludge Treatment & Sludge Discharge System
 - xxii. System P&ID – Starting Air Supply System
 - xxiii. System P&ID – Thermal Oil Waste Heat Recovery System (Generation & Supply)
 - xxiv. System P&ID – Thermal Oil Waste Heat Recovery System (Powerhouse Distribution)
 - xxv. System P&ID – Thermal Oil Waste Heat Recovery System (Pumphouse / Tank farm / Unloading Distribution)
 - xxvi. System P&ID – Urea Storage & Supply System
 - xxvii. System P&ID – Working Air Supply System

5. Electrical Documentation:

- i. Battery Chargers 110VDC
- ii. CAP – Common Auxiliary Panel
- iii. CAPP – Common Auxiliary Pumphouse Panel
- iv. CCP – Common Control Panel
- v. CMP – Common Metering Panel
- vi. CUP – Common Unloading Panel
- vii. Engineering Data:
 - a) Control Architectures
 - b) Electrical Cable Schedules
 - c) Electrical LV-Load List
 - d) Load Flow Analysis
 - e) PLC Documents
 - f) Protection and Measuring
 - g) Single Line Diagrams
- viii. ERP – Engine Radiator Panel
- ix. ETAP – Exhaust Gas Treatment Auxiliary Panel
- x. GAP – Genset Auxiliary Panel
- xi. GCP – Genset Control Panel
- xii. GIP – Genset Interface Panel
- xiii. HVCP – High Voltage Control Panel
- xiv. HVMK1 – High Voltage Marshalling Kiosk 1
- xv. HVMK2 – High Voltage Marshalling Kiosk 2
- xvi. HVMK3 – High Voltage Marshalling Kiosk 3
- xvii. HVMK4 – High Voltage Marshalling Kiosk 4
- xviii. HVMK5 – High Voltage Marshalling Kiosk 5
- xix. LVLE – Low Voltage Lighting and Electrification Panels
- xx. LV-MDP – Low Voltage Main Distribution Panel
- xxi. MV1-SWG – Medium Voltage Switchgear 1
- xxii. MVA-GEN – Medium Voltage Generator Neutral Earthing 1
- xxiii. SCADA Documentation
- xxiv. SIP – Substation Interface Panel
- xxv. UAT – Unit Auxiliary Transformer
- xxvi. UPS – Uninterruptible Power Supply
- xxvii. UPSDP – Uninterruptible Power Supply Distribution Panel

6. Mechanical Documentation:

- i. Blackstart Generator
- ii. Combustion Air Intake Filter Module
- iii. Continuous Emission Measurement System (CEMS)
- iv. Control Air Dryer Module
- v. Control Air Expansion Vessel - Pumphouse
- vi. Control Air Expansion Vessel - Unloading
- vii. Cooling Water Expansion Tanks Module
- viii. Cooling Water Temperature & Flow Control Module
- ix. Diesel Ring-Line Feeder Module (HSD)
- x. Diesel Ring-Line Pressure Control Module (HSD)
- xi. Diesel Unloading Pumps Module (HSD)
- xii. Drawing Ducting & Detail Support
- xiii. DUCT - Combustion Air Intake Ducting
- xiv. DUCT - Engine Hall Ventilation Ducting

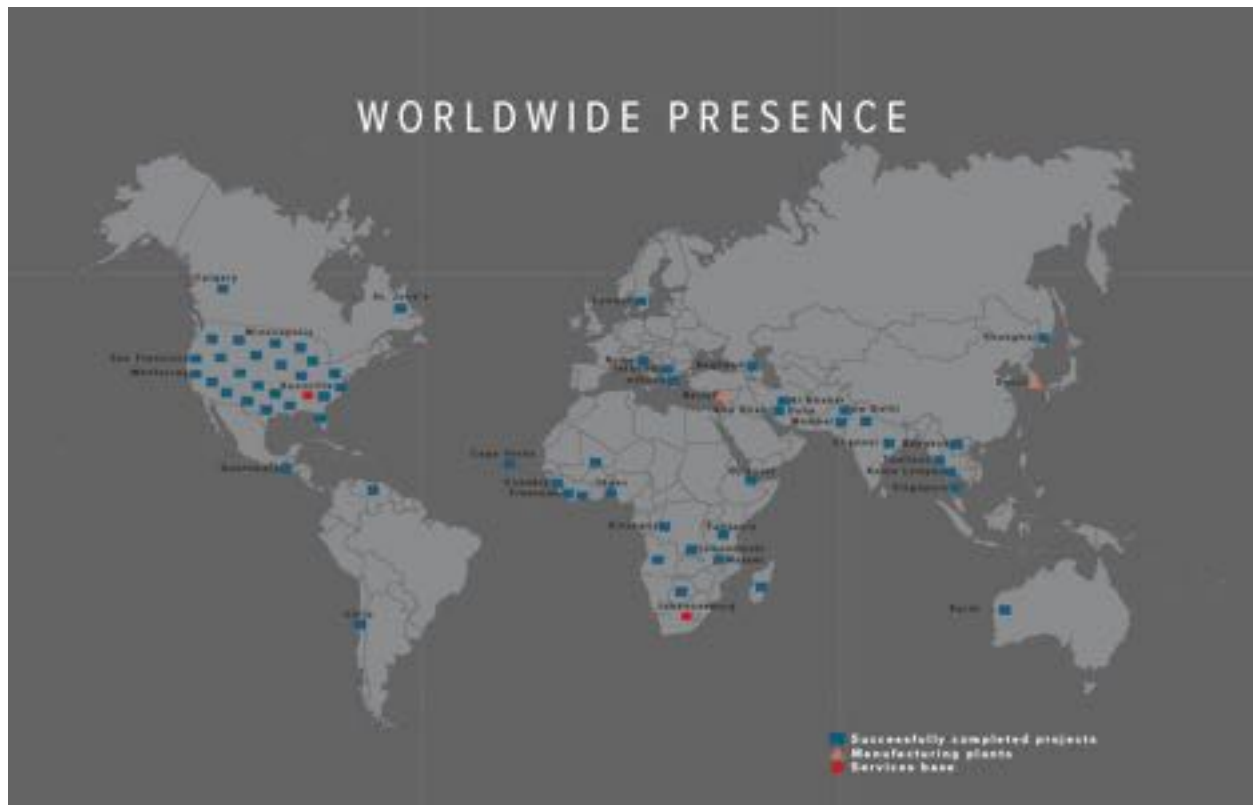
- xv. DUCT - Exhaust duct and stack for MOD065
 - xvi. Engine Cooling Radiator Fan Module
 - xvii. Engine Hall Ventilation & Filter Module
 - xviii. Exhaust Silencer and Exhaust Stack Module
 - xix. Fire Fighting
 - xx. Fire Fighting Water pH Adjuster Module
 - xxi. Fresh Water Reverse-Osmosis Module
 - xxii. Fuel Leakage & Sludge Collecting Tank Module
 - xxiii. Fuel Oil Booster Module
 - xxiv. Fuel Oil Ring-Line Feeder Module (HFO)
 - xxv. Fuel Oil Ring-Line Pressure Control Module (HFO)
 - xxvi. Fuel Oil Separator Module (HFO)
 - xxvii. Fuel Oil Unloading Pumps Module (HFO)
 - xxviii. Generator Documents
 - xxix. Generator DE Bearing Lubrication Supply Module
 - xxx. HT Cooling Water Pre-Heating Module
 - xxxi. Independent Thermal Oil Heater Module
 - xxxii. Lube Oil Cooler & Filter Module
 - xxxiii. Lube Oil Replenishing Module
 - xxxiv. Lube Oil Separator Module & Lube Oil Fine Filter Module
 - xxxv. Lube Oil Supply Module
 - xxxvi. Module P&ID Legends
 - xxxvii. Nozzle Cooling Water Module
 - xxxviii. Overhead Crane - Engine Hall
 - xxxix. Process Water Supply Module
 - xl. Raw Water Sand & Carbon Filter Module
 - xli. Raw Water Ultrafiltration Module
 - xlii. SCR Compressed Air Compressor Module including Pressure Reducing & Dryer Module
 - xliii. SCR Compressed Air Pressure Expansion Vessel Module
 - xliv. SCR Control Unit Module (Selective Catalytic Reactor)
 - xlv. SCR Dosing Unit Module
 - xlvi. Sewage Injection System Module
 - xlvi. Sludge Discharge Module
 - xlvi. Sludge Treatment Plant Module
 - xlvi. Starting Air Compressor Expansion Vessel Module
 - l. Starting Air Compressor Module including Pressure Reducing Module
 - li. Sump Pit Pumps
 - lii. Thermal Oil Supply Module
 - liii. Thermal Oil Tank Farm Temperature Control Module
 - liv. Thermal Oil Unloading & Receiver Tank Module
 - lv. Treated Water Supply Pumps Module
 - lvi. UREA Supply Pumps Module
 - lvii. UREA Unloading & Mixing Module
 - lviii. Waste Heat Exhaust Gas Thermal Oil Heater
 - lix. Water Treatment Plant (WTP)
 - lx. Working Air Compressor Module
 - lxi. Working Air Expansion Vessel - Workshop
7. Site Manual (Specification for the provision of services on MAN Diesel & Turbo power plant sites)

4 Power Plant Photos





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