

Alarms for UMS – Class and MAN Diesel requirements

ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	IACS	MAN Diesel	Sensor and function	Point of location
Fuel oil													
1	1	1	1	1	1	1	1	1	1	1	1	PT 8001 AL	Fuel oil, inlet engine
1	1	1	1	1	1	1	1	1	1	1	1	LS 8006 AH	Leakage from high pressure pipes
Lubricating oil													
1	1	1	1	1	1	1		1	1	1	1	PT 8103 AL	Lubricating oil inlet to turbocharger/turbocharger
1	1	1	1	1	1	1	1	1	1	1	1	TE 8106 AH	Thrust bearing segment
1	1	1	1	1	1	1	1	1	1	1	1	PT 8108 AL	Lubricating oil inlet to main engine
1	1	1	1	1	1	1	1	1	1	1	1	TE 8112 AH	Lubricating oil inlet to main engine
1	1	1	1	1	1		1	1	1	1	1	TE 8113 AH	Piston cooling oil outlet/cylinder
1	1	1	1	1	1		1	1	1	1	1	FS 8114 AL	Piston cooling oil outlet/cylinder
1	1	1		1	1	1		1	1	1	1	TE 8117 AH	Turbocharger lubricating oil outlet from turbocharger/turbocharger 2)
											1	TE 8123 AH	Main bearing oil outlet temperature/main bearing (S40/35ME-B9 only)
											1	XC 8126 AH	Bearing wear (All types except S40/35ME-B9)
											1	XS 8127 A	Bearing wear detector failure (All types except S50-35ME-B)
		1		1		1	1				1	PDS 8140 AH	Lubricating oil differential pressure – cross filter
											1	XS 8150 AH	Water in lubricating oil
											1	XS 8151 AH	Water in lubricating oil – too high
											1	XS 8152 A	Water in lubricating oil sensor not ready

1 Indicates that the sensor is required.
 The sensors in the MAN Diesel column are included for Unattended Machinery Spaces (UMS), option: 4 75 127, subject to class requirements and will be finally specified in the Guidance Values Automation for the specific engine plant.
 The sensor identification codes and functions are listed in Table 18.07.01.
 The tables are liable to change without notice, and are subject to latest class requirements.

2) For turbochargers with slide bearings

Table 18.04.02a: Alarm functions for UMS

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ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	IACS	MAN Diesel	Sensor and function	Point of location
													Hydraulic Power Supply
			1								1	XC 1231 A	Automatic main lube oil filter, failure (Boll & Kirch)
											1	LS 1235 AH	Leakage oil from hydraulic pipes
											1	LS 1236 AH	Leakage oil from hydraulic power supply unit
													Cooling water
1	1	1	1	1	1	1	1	1	1	1	1	PT 8401 AL	Jacket cooling water inlet
											1	PDS/PDT 8403 AL	Jacket cooling water across engine; to be calculated in alarm system from sensor no. 8402 and 8413
				1							1	TE 8407 AL	Jacket cooling water inlet
1	1	1	1	1	1	1	1	1	1	1	1	TE 8408 AH	Jacket cooling water outlet, cylinder
											1	PT 8413 I	Jacket cooling water outlet, common pipe
1	1	1		1	1	1	1	1	1	1	1	PT 8421 AL	Cooling water inlet air cooler
				1							1	TE 8422 AH	Cooling water inlet air cooler/air cooler
													Compressed air
1	1	1		1	1	1	1	1	1	1	1	PT 8501 AL	Starting air inlet to main starting valve
1	1	1	1	1	1	1	1	1+	1	1	1	PT 8503 AL	Control air inlet and finished with engine
			1								1	PT 8505 AL	Air inlet to air cylinder for exhaust valve
													Scavenge air
				1						1	1	PS 8604 AL	Scavenge air, auxiliary blower, failure (Only ME-B)
	1	1	1	1			1÷				1	TE 8609 AH	Scavenge air receiver
1	1	1	1	1	1	1	1	1	1	1	1	TE 8610 AH	Scavenge air box – fire alarm, cylinder/cylinder
1	1	1		1	1	1	1	1	1	1	1	LS 8611 AH	Water mist catcher – water level

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- ☐ Select one of the alternatives
- + Alarm for high pressure, too
- ÷ Alarm for low pressure, too

Table 18.04.02b: Alarm functions for UMS

Alarms for UMS – Class and MAN Diesel requirements

ABS	BV	CCS	DNV	GL	KR	LR	NK	RINA	RS	IACS	MAN Diesel	Sensor and function	Point of location	
Exhaust gas														
1	1	1	1	1	1	(1)	1	1	1	1	1	TC 8701 AH	Exhaust gas before turbocharger/turbocharger	
1	1		1		1	1	1	1	1	1	1	TC 8702 AH	Exhaust gas after exhaust valve, cylinder/cylinder	
1	1	1	1	1	1	1	1	1	1	1		TC 8707 AH	Exhaust gas outlet turbocharger/turbocharger (Yard's supply)	
Miscellaneous														
			1									ZT 8801 AH	Turbocharger overspeed	
			1									WT 8805 AH	Vibration of turbocharger	
											1	WT 8812 AH	Axial vibration monitor 2)	
1	1	<input type="checkbox"/>	1	1	1	1	1	1	1	1	1	XS 8813 AH	Oil mist in crankcase/cylinder	
	1											1	XS 8814 AL	Oil mist detector failure
												1	XC 8816 I	Shaftline earthing device
Engine Control System														
1	1	1	1	1	1	1	1	1	1	1	1	XC 2201 A	Power failure	
1	1		1	1		1	1	1	1	1	1	XC 2202 A	ME common failure	

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The sensor identification codes and functions are listed in Table 18.07.01.

The tables are liable to change without notice, and are subject to latest class requirements.

(1) May be combined with TC 8702 AH where turbocharger is mounted directly on the exhaust manifold.

2) Required for: K-ME-C6/7 and K98ME6/7 engines with 11 and 14 cylinders.
 S-ME-C7/8, S-ME-GI7/8, and L-ME-C7/8 engines with 5 and 6 cylinders.
 S-ME-B8/9 engines with 5 and 6 cylinders mainly.
 (For K90ME9, K/S-ME-C9, and S50ME-B9 data is available on request).

Alarm for overheating of main, crank and crosshead bearings, option: 4 75 134.

Table 18.04.02c: Alarm functions for UMS