VOLVO PENTA **1500rpm/1800 rpm**	Document No **23466370**	Issue Index **03**

Base on water temp 38°C/100°F

General

In-line four stroke diesel engine with direct injection. Rotation direction, anti-clockwise viewed towards flywheel. Turbocharged

Number of cylinders			6
Displacement, total		litre in^3	12.78 779.7
Firing order			1-5-3-6-2-4
Bore		mm in	131 5.16
Stroke		mm in	158 6.22
Compression ratio			18.5
Dry weight	Engine only, excluding cooling system	kg lb	1520 3351
	Genset, see dimension drawing	kg lb	

Performance		**rpm** **load**	**1500** **25%**	**50%**	**75%**	**100%**	**110%**
Power setting 300 kW		kW hp	75 102	150 204	225 306	300 408	330 449
Torque at:	Power setting 300 kW	Nm lbft	477 352	955 704	1432 1056	1910 1409	2101 1549
Mean piston speed		m/s ft/sec			7.9 26.0		
Effective mean pressure at:	Power setting 300 kW	MPa psi	0.5 68	0.9 136	1.4 204	1.9 272	2.1 300
Max combustion pressure at:	Power setting 300 kW	MPa psi	8.2 1189	10.5 1523	13.5 1958	16.6 2408	18 2611
Total mass moment of inertia, J (mR^2) Engine only		kgm^2 $lbft^2$			3.43 81.4		
Friction Power		kW hp	32 43	32 43	32 43	32 43	32 43

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Performance		rpm load	1800 25%	 50%	 75%	 100%	 110%
Power setting 360 kW		kW hp	90 122	180 245	270 367	360 490	396 539
Torque at:	Power setting 360 kW	Nm lbft	477 352	955 704	1432 1056	1910 1409	2101 1549
Mean piston speed		m/s ft/sec			9.5 31.2		
Effective mean pressure at:	Power setting 360 kW	MPa psi	0.5 68	0.9 136	1.4 204	1.9 272	2.1 300
Max combustion pressure at:	Power setting 360 kW	MPa psi	8.3 1204	10.6 1537	13.9 2016	17.7 2567	19.3 2799
Total mass moment of inertia, J (mR^2) Engine only		kgm^2 $lbft^2$			3.43 81.4		
Friction Power		kW hp	45 61.2	45 61.2	45 61.2	45 61.2	45 61.2

Engine noise emission

Test Standards: ISO 3744-1981 (E) sound power (without intake and exhaust noise)
Tolerans ± 0.75 dB(A)

		rpm load	1500 25%	 50%	 75%	 100%	 110%
Measured sound power Lw	No load	dB(A)	107.5	107.5	107.5	107.5	107.5
	Power setting 300 kW	dB(A)	109.5	109.9	110.4	111	111
	Power setting 300 kW	dB(A)	109.5	109.9	110.4	111	111
		rpm			**1800**		
Measured sound power Lw	No load	dB(A)	109.1	109.1	109.1	109.1	109.1
	Power setting 360 kW	dB(A)	111.4	112.3	112.7	113.4	113.2
	Power setting 360 kW	dB(A)	111.4	112.3	112.7	113.4	113.2

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Vibrations (vibration velocity)

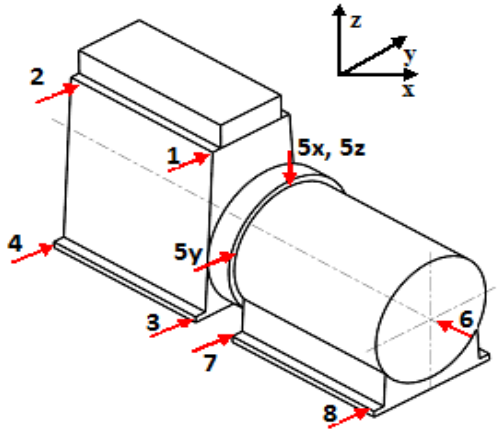
Power:	kW	300
Speed:	rpm	1500
Ambient temperature	°C	29-36
Type of Fuel		SD10

Measuring Point No	Rms overall values (2 Hz to 1000 Hz) (calculated)									Remarks
	Direction of Measurement									Prime
	Axial (x) [mm]	Axial (x) [mm/s]	Axial (x) [m/s^2]	Transverse (y) [mm]	Transverse (y) [mm/s]	Transverse (y) [m/s^2]	Vertical (z) [mm]	Vertical (z) [mm/s]	Vertical (z) [m/s^2]	
1	0.183	8.5	9.9	0.395	11.1	11.8	0.15	10.4	9.2	Engine
2	0.212	8.2	7.9	0.529	11.5	8.7	0.192	8.8	8.9	
3	0.228	9.5	10.2	0.396	15.1	18.1	0.141	11.8	12.1	
4	0.171	9.2	15.6	0.193	11.1	16.5	0.16	9.4	14	
5	0.093	16.7	11.2	0.104	8.1	8.3	0.098	14.6	12.6	Generator
6	0.054	15.8	11.6	0.085	16.7	8.5	0.049	14.7	10.7	
7	0.085	8.5	4.5	0.079	16	8.5	0.106	18.1	10.7	
8	0.093	8.2	4.5	0.093	14.8	8.4	0.096	17.1	10.4	

Power:	kW	360
Speed:	rpm	1800
Ambient temperature	°C	29-36
Type of Fuel		SD10

Measuring Point No	Rms overall values (2 Hz to 1000 Hz) (calculated)									Remarks
	Direction of Measurement									Prime
	Axial (x) [mm]	Axial (x) [mm/s]	Axial (x) [m/s^2]	Transverse (y) [mm]	Transverse (y) [mm/s]	Transverse (y) [m/s^2]	Vertical (z) [mm]	Vertical (z) [mm/s]	Vertical (z) [m/s^2]	
1	0.201	10.6	11.2	0.448	13.4	12.9	0.194	12.3	13.8	Engine
2	0.591	16.9	10.4	0.601	17.7	11.1	0.272	19.5	14.8	
3	0.227	11.1	13.5	0.217	18.3	25.2	0.118	14	17	
4	0.338	13.3	20.6	0.369	21.7	23.5	0.249	21.5	18.7	
5	0.096	18.4	13.1	0.102	10.4	9.9	0.096	19.2	14.5	Generator
6	0.068	18	14.9	0.092	16.4	11.6	0.054	15	10.5	
7	0.092	11.3	7.4	0.077	17.1	12.4	0.106	25	15.6	
8	0.095	11.2	7.4	0.085	16.7	11.9	0.098	21.9	14.4	

Declared vibration levels according to ISO 8528-9



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Test conditions for load acceptance data

Warm engine.	**Generator**	**Modell**	**Type of AVR**
	Stamford	HCI534D1	MX341

Load acceptance performance can vary due to actual alternator inertia, voltage regulator, type of load and local ambient conditions.

Single step load performance at 1500 rpm

Load (%)	Speed diff (%)		Recovery time (s)		Remaining load	Speed diff (%)		Recovery time (s)	
	Nominal	110% power	Nominal	110% power	(%)	Nomi-nal	110% power	Nomi-nal	110% power
0-20	2.4	2.7	1.5	1.4	20-100	14.9	18.2	3.7	5.2
0-40	4.1	4.5	1.5	1.5	40-100	9.1	11.6	2.7	4.0
0-60	6.5	7.7	2.0	2.3	60-100	4.1	6.0	1.6	3.2
0-80	12.4	15.0	3.2	3.6	80-100	2.1	2.4	1.0	1.3
0-100	23.4	32.2	5.2	8.8					
0-72.2	9.5		2.3		72.2-100	3.1		0.9	
0-65.4		9.8		2.4	65.4-100		5.3		2.3
0-63	7.2		2.2		63-100	3.7		1.3	
0-57		7.2		2.2	57-100		6.6		3.1
100-0						-5.3	-4.3	1.1	1.1

Single step load performance at 1800 rpm

Load (%)	Speed diff %		Recovery time (s)		Remaining load	Speed diff (%)		Recovery time (s)	
	Nominal	110% power	Nominal	110% power	(%)	Nomi-nal	110% power	Nomi-nal	110% power
0-20	1.8	1.9	0.9	0.8	20-100	8.8	11.6	2.9	3.9
0-40	3.1	3.1	1.2	1.0	40-100	6.9	9.3	2.5	3.5
0-60	4.3	4.9	1.4	1.6	60-100	3.5	4.6	1.5	2.3
0-80	7.5	10.4	2.6	2.9	80-100	1.4	1.5	0.7	1.0
0-100	14.1	17.1	3.7	8.6					
0-87.8	10.2		2.7		87.8-100	0.8		0.5	
0-80.1		10.6		2.7	80.1-100		1.5		0.8
0-76.6	6.6		2.4		76.6-100	1.6		0.7	
0-69.8		6.7		2.4	69.8-100		2.5		1.6
100-0						-3.6	-2.9	1.3	1.2

Cold start performance		**rpm**	**1500**	**1800**
Time from start to stay within 0.5% of no load speed at ambient temperature:	20°C	s	4.8	4.6
	5 °C	s	5.7	5.2

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Lubrication system			rpm load	1500 25%	 50%	 75%	 100%	 110%
Lubricating oil consumption	Power setting 300 kW		liter/h	0.005	0.010	0.015	0.020	0.023
			US gal/h	0.001	0.003	0.004	0.005	0.006
			rpm			**1800**		
	Power setting 360 kW		liter/h	0.006	0.012	0.018	0.025	0.027
			US gal/h	0.002	0.003	0.005	0.007	0.007
Oil system capacity including filters			liter	49				
			US gal	12.9				
Oil sump capacity:		max	liter	44				
			US gal	11.6				
		min	liter	35				
			US gal	9.2				
Oil change intervals/ specifications: (Fuel quality dependant)	VDS-3		h	600				
	VDS-2		h	400				
			h					
			h					
Engine angularity limits, static (ref. classification rules, roll and pitch simultaneously)		front up	°	36				
		front down	°	36				
		side tilt	°	36				

Lubrication system		rpm	1500	1800
Oil pressure at rated speed		kPa	360	- 450
		psi	52	- 65
Lubrication oil temperature in oil sump:	max	°C	110	
		°F	230	
Oil filter micron size		µ	40	

* See also general section in the sales guide

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Fuel system		rpm load	1500 25%	 50%	 75%	 100%	 110%
Specific fuel consumption with:	Power setting 300 kW	g/kWh lb/hph	231 0.375	202 0.328	194 0.314	190 0.309	190 0.308
		rpm			**1800**		
	Power setting 360 kW	g/kWh lb/hph	248 0.402	213 0.344	200 0.324	200 0.324	197 0.319
Fuel to conform to		ASTM-D975-No. 1 and 2-D, JIS KK 2204, EN 590 DMX and MDO-DMA (ISO8271)					
		rpm			**1500**		
System return flow	Power setting 300 kW	liter/h US gal/h	53 14.0	52 13.7	52 13.7	52 13.7	51 13.5
		rpm			**1800**		
	Power setting 360 kW	liter/h US gal/h	56 14.8	56 14.8	55 14.5	55 14.5	55 14.5
		rpm			**1500**		
System supply flow	Power setting 300 kW	liter/h US gal/h	74 19.6	89 23.5	105 27.7	121 32.0	128 33.8
		rpm			**1800**		
	Power setting 360 kW	liter/h US gal/h	82 21.7	102 26.9	120 31.7	141 37.3	151 39.9
		rpm			**1500**		
Normal fuel pressure (after filter)	Power setting 300 kW	kPa psi	582 84.4	576 83.5	570 82.7	564 81.8	561 81.4
		rpm			**1800**		
	Power setting 360 kW	kPa psi	608 88.2	600 87.0	593 86.0	585 84.8	583 84.6

Fuel system

Fuel supply line max restriction	kPa psi	30 4.4
Fuel supply max pressure head (day tank, from CL)	m feet	2 6.6
Fuel supply line max suction head (from CL)	kPa psi	4 0.6
Fuel return line max restriction	kPa psi	20 2.9
Maximum allowable inlet fuel temp	°C °F	50 122
Fuel filter micron size	µ	2

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Intake system		rpm load	1500 25%	1500 50%	1500 75%	1500 100%	1500 110%
Air consumption at: (+25°C and 100kPa)	Power setting 300 kW	m^3/min	10.5	13.7	17.8	21.7	23.0
		cfm	372	482	629	766	813
		rpm	1800	1800	1800	1800	1800
	Power setting 360 kW	m^3/min	14.3	16.3	21.0	24.7	26.8
		cfm	503	575	741	871	947
Max allowable air intake restriction including piping		kPa	6				
		psi	0.9				
Air filter type				Paper cartridge			
Air filter cleaning efficiency		%	98.5				

Exhaust system		rpm rpm	1500 25%	1500 50%	1500 75%	1500 100%	1500 110%
Heat rejection to exhaust at:	Power setting 300 kW	kW	57	99	137	172	190
		BTU/min	3242	5636	7791	9776	10805
		rpm	1800	1800	1800	1800	1800
	Power setting 360 kW	kW	77	129	173	223	245
		BTU/min	4373	7319	9833	12670	13933

Exhaust system		rpm load	1500 25%	1500 50%	1500 75%	1500 100%	1500 110%
Exhaust gas temperature after turbine at:	Power setting 300 kW	°C	285	356	377	391	398
		°F	545	673	711	736	748
		rpm	1800	1800	1800	1800	1800
	Power setting 360 kW	°C	260	301	337	399	423
		°F	500	574	639	750	793
Exhaust back pressure after turbocharger during test		kPa	12				
		psi	1.7				
Permitted exhaust back pressure after turbocharger		kPa	17				
		psi	2.5				
		rpm	1500	1500	1500	1500	1500
Exhaust gas flow at: (temp and pressure after turbine at the corresponding power setting)	Power setting 300 kW	m^3/min	20.2	29.3	38.9	47.5	50.5
		cfm	712	1035	1373	1676	1782
		rpm	1800	1800	1800	1800	1800
	Power setting 360 kW	m^3/min	26.6	36.6	46.5	56.8	60.9
		cfm	940	1293	1643	2004	2149

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Cooling system		rpm / load	25%	50%	1500 75%	100%	110%
Heat rejection radiation from engine to surrounding at:	Power setting 300 kW	kW	4	4	5	5	5
		BTU/min	199	227	284	284	284
		rpm			**1800**		
	Power setting 360 kW	kW	4	4	5	5	5
		BTU/min	227	227	284	284	284
		rpm			**1500**		
Heat rejection to raw water system at:	Power setting 300 kW	kW	73	115	158	212	235
		BTU/min	4151	6540	8985	12056	13364
		rpm			**1800**		
	Power setting 360 kW	kW	93	143	194	260	291
		BTU/min	5289	8132	11033	14786	16549

Cooling system. Fresh water coolant circuit

Coolant volume engine, including heat exchanger, charge air cooler and std. expansion tank		liter US gal	53 14.00	
Max. additional coolant for cabin heater etc. with std. expansion tank		liter US gal	16 4.23	
Max. coolant flow to cabin heater etc.		l/s US gal/s	0.7 0.18	
Coolant pump	drive/ratio		1/1.5	
		rpm	**1500**	**1800**
Coolant flow with fully open thermostat		l/s US gal/s	4.6 1.22	5.5 1.45
Nominal coolant pressure with standard system		kPa psi	145-170	196-224
Thermostat	start to open	°C °F	82 180	
	fully open	°C °F	92 198	
Maximum static pressure head (expansion tank height + pressure cap setting)		kPa psi	100 14.5	
Standard pressure cap setting		kPa psi	75 10.9	

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Cooling system. Engine mounted raw water pump

Raw water pump	drive/ratio	1/1.5	
	rpm	**1500**	**1800**
Nominal raw water design flow	l/s	6.4	7.4
	US gal/s	1.7	2.0
Nominal raw water pump pressure head at design flow	kPa	79	103
(measured before and after pump)	psi	11.5	14.9
Maximum raw water pump suction head	kPa	-10	-14
	psi	-1.5	-2.0
Maximum additional pressure drop	kPa	78	105
(after heat exchanger)	psi	11.3	15.2
Maximum raw water temperature entering heat exchanger	°C	32	
	°F	90	

Cooling system. Raw water circuit central cooling	**rpm**	**1500**	**1800**
Maximum raw water flow	l/s	7.0	
	US gal/s	1.8	
Minimum raw water flow	l/s	4.9	5.8
	US gal/s	1.3	1.5
Maximum allowed raw water circuit pressure before	kPa	150	
heat exchanger (external pump system)	psi	21.8	
Maximum raw water temperature entering heat exchanger	°C	38	
	°F	100	

rpm	**1500**

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Charge air cooler system		**load**	**25%**	**50%**	**75%**	**100%**	**110%**
Cooling power	Power setting 300 kW	kW	10	16	32	49	59
		BTU/min	569	910	1820	2787	3355
		rpm			**1800**		
	Power setting 360 kW	kW	13	19	41	70	82
		BTU/min	739	1081	2332	3981	4663
		rpm			**1500**		
Charge air mass flow	Power setting 300 kW	kg/s	0.22	0.27	0.36	0.42	0.45
		rpm			**1800**		
	Power setting 360 kW	kg/s	0.29	0.32	0.43	0.53	0.56

Charge air cooler system		**rpm** / **load**	**25%**	**50%**	**1500** / **75%**	**100%**	**110%**
Charge air inlet temp.	Power setting 300 kW	°C	66	88	126	153	170
(Charge air temp after turbo compressor)		°F	151	190	259	307	338
		rpm			**1800**		
	Power setting 360 kW	°C	79	94	133	171	185
		°F	174	201	271	340	365

Charge air cooler system		**rpm** / **load**	**25%**	**50%**	**1500** / **75%**	**100%**	**110%**
Charge air outlet temp.	Power setting 300 kW	°C	30	35	36	37	43
(Charge air temp after charge air cooler)		°F	86	95	97	99	109
		rpm			**1800**		
	Power setting 360 kW	°C	33	35	37	40	41
		°F	91	95	99	104	106
Maximum pressure drop over charge air cooler, incl. piping		kPa	1.3				
		psi	0.19				
		rpm	**1500**				
Charge air pressure	Power setting 300 kW	kPa	243				
		psi	35.24				
		rpm	**1800**				
	Power setting 360 kW	kPa	246				
		psi	35.68				

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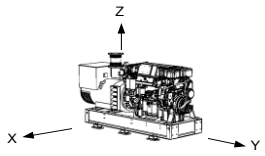
Engine management system

Functionality	Alternatives	Default setting
Governor mode	Isochronus/Droop	Droop
Governor droop	0/0, 1-5%	4%
Governor response	Adjustable PID (service tool)	0/0/0
Idle speed	600-1200	900
Fine speed adjustment	±90	0
Stop function	Normaly Closed/Normaly Opened	Depends on order

Electrical system **rpm 1500 and 1800**

Voltage and type			24V / insulated from earth	
Alternator:	make/output	A	Bosch/110A	
	tacho output	Hz/alt. Rev	6	
	drive ratio		3.7:1	
Starter motor		make	Melco	
		type	105P70	
		kW	7.0	
Starter motor solenoid,	pull current	A	280	
	hold current	A	-	
Number of teeth on:	flywheel		153	
	starter motor		12	
Inrush current at +20°C \ +5°C		A	1020 \ 1560	
Cranking current at +20°C \ +5°C		A	400 \ 530	
Crank engine speed at 20°C \ +5°C		rpm	150 \ 130	
Starter motor battery capacity:	max	Ah	2x220	
	min at +5°C	Ah	2x180	

Max. g-force				
	x	m/s²	2	
	y	m/s²	2	
	z	m/s²	6	

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Sensors : Control and Monitoring System							Engine protection action
Sensors	**Signal**	**Range**	**Unit**	**Warning Initial Delay / Warning Delay**	**Warning Level**	**Derating Level**	
AUS/DEF concentration	Ultrasonic 1 Hz	0 - 62.5	%	N/A	<28	N/A	Warning only
AUS/DEF Tank Empty	Ultrasonic 1 Hz	0-100	%	30 sec	0	N/A	Warning only
AUS/DEF Tank Low level	Ultrasonic 1 Hz	0-100	%	30 sec	15	N/A	Warning only
AUS/DEF tank temp High alarm	Resistive	-40 - 125 ±1.5°C	°C	1 sec	70	N/A	Warning only
Coolant level switch	Digital	ON/OFF		30 sec from start / 11 sec	Low	N/A	Warning only
Coolant temperature	50-0 kΩ	-40 - 140 ±1.5°C	°C	30 sec from start / 2 sec	98	N/A	Warning only
Engine speed cam	Frequency		rpm	Instant	Lost signal	N/A	Warning only
Engine speed crank	Frequency		rpm	Instant	Lost signal	N/A	Warning only
Exhaust gas temperature after turbine	PT200	-40 - 750 ± 2.5%	°C	30 sec from start / 2 sec	532	N/A	Warning only
					N/A	N/A	Warning only
Oil level sensor	Digital	± 1.9 mm		30 sec from start / 5 sec	Low level	N/A	Warning only
Oil temperature	50-0 kΩ	-40 - 140 ± 1.5°C	°C	30 sec from start/1.5 sec	125	N/A	Warning only
Exhaust temperature before muffler	PT200	-40 - 750 ± 2.5%	°C	30 sec from start / 2 sec	532	N/A	Warning only
Water In fuel switch	Digital	ON/OFF		Instant	Water in fuel	N/A	Warning only
Wet Exhaust temp	PT200	0 - 850	°C	30 sec from start / 5 sec	192	N/A	Warning only

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HE 300/360
1500rpm/1800 rpm

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Sensors (rpm dependent)	Signal	Range	Unit	Initial Delay / Delay	Warning Level / Derating Level / Shutdown Level rpm Map					Comment
Charge air pressure	0,5-4,5 V	50-600 ±4.2 kPa	kPa					**1500 rpm**	**1800 rpm**	
Warning Level			kPa	30 sec from start / 2.2 sec				290	270	
Derating Level			kPa	NA				NA	NA	
Charge air temperature	50-0 kΩ	-40 - 130 ±4%	°C					**1500 rpm**	**1800 rpm**	
Warning Level			°C	60 sec from start / 15 sec				80	76	
Derating Level			°C	NA				NA	NA	
Coolant pressure	0,5-4,5 V	0-300± 3%	kPa					**1500 rpm**	**1800 rpm**	
Warning Level			kPa	30 sec from start /1.5sec				50	76	
Derating Level			kPa	NA				NA	NA	
Fuel pressure	0,5-4,5 V	0-700±2.5%	kPa					**1500 rpm**	**1800 rpm**	
Warning Level			kPa	60 sec from start / 5 sec				205	280	
Derating Level			kPa	NA				NA	NA	
Oil pressure	0,5-4,5 V	0-700±2.5%	kPa					**1500 rpm**	**1800 rpm**	
Warning Level			kPa	30 sec from start / 3 sec				260	260	
Derating Level			kPa	NA				NA	NA	
Seawater pressure	0,5-4,5 V	0-300± 3%	kPa					**1500 rpm**	**1800 rpm**	Only HE and KC
Warning Level			kPa	30 sec from start / 5 sec				30	45	
Derating Level			kPa	NA				NA	NA	

Warning = Yellow Lamp active
Derating = Red Lamp active

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HE 300/360
1500rpm/1800 rpm

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For SDM only

Sensors Control and Monitoring System						
Sensors	**Signal**	**Range**	**Unit**	**Warning Initial Delay /**	**Shutdown level**	**Engine protection action**
Coolant temperature	Digital	ON/OFF ON= Shutdown	°C	12sec from start/1 sec	105	Shutdown
Eng. overspeed SDM 1500+15%	Frequency	153 puls./rev	rpm / Hz	Instant	1725 rpm / 4399 Hz	Shutdown
Eng. overspeed SDM 1800+15%	Frequency	153 puls./rev	rpm / Hz	Instant	2070 rpm / 5278 Hz	Shutdown

Sensors (rpm dependent)	**Signal**	**Range**	**Unit**	**Initial Delay / Delay**	**Warning Level / Derating Level / Shutdown Level**					**Engine protection action**
					0 rpm	**600 rpm**	**1000 rpm**	**1500 rpm**	**1800 rpm**	
Oil pressure□	Digital□	ON/OFF	kPa	12 sec from start / 1 sec	NA	120 ±20	120 ±20	120 ±20	120 ±20	Shutdown

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Technical data - Exhaust AfterTreatment System data (EATS)

Weight data:

SCR system weight: (incl SCR unit, AUS injector pipe, AUS sensor and bracket)			kg lb	115.7 255.1
Total SCR system weight for IPS: (incl SCR unit, AUS injector pipe, AUS sensor and bracket, exhaust piping)			kg lb	115.7 255.1
AUS pump			kg lb	3.1 6.8
AUS cabinet 20l weight: (incl tank, pump,UQS, ACM)			kg lb	36.4 80.2
AUS tank 160l weight:			kg lb	45 99.2
UQS - Lenght/Weight	mm in	439 17.3	kg lb	1.2 2.6
UQS - Lenght/Weight	mm in	597 23.5	kg lb	1.2 2.6
UQS - Lenght/Weight	mm in	715 28.1	kg lb	1.3 2.9

Dimension data:

SCR Surface area		m2/ft2	2.2 / 23.7
SCR Flange:	Standard type		
	Diameter:	in/mm	6 in / 152 mm
	Number of Inlet / Outlet:	1 inlet / 2 outlet	

Flow data:

Max AUS flow to injector	l/h US gal/h	7.9 2.1
Max collant flow to AUS injector	l/h US gal/h	6.7 1.8

Exhaust system	Rating	rpm	600	800	1000	1200	1300	1400	1500	1600	1800	1900
Max allowable temperature drop between turbine and SCR muffler inlet.		°C °F							10 50		10 50	
SCR muffler pressure drop at prop. load x^3		kPa psi							3 0.4		5 0.7	
SCR muffler pressure drop at Full load		kPa psi							6 0.9		7 1.0	

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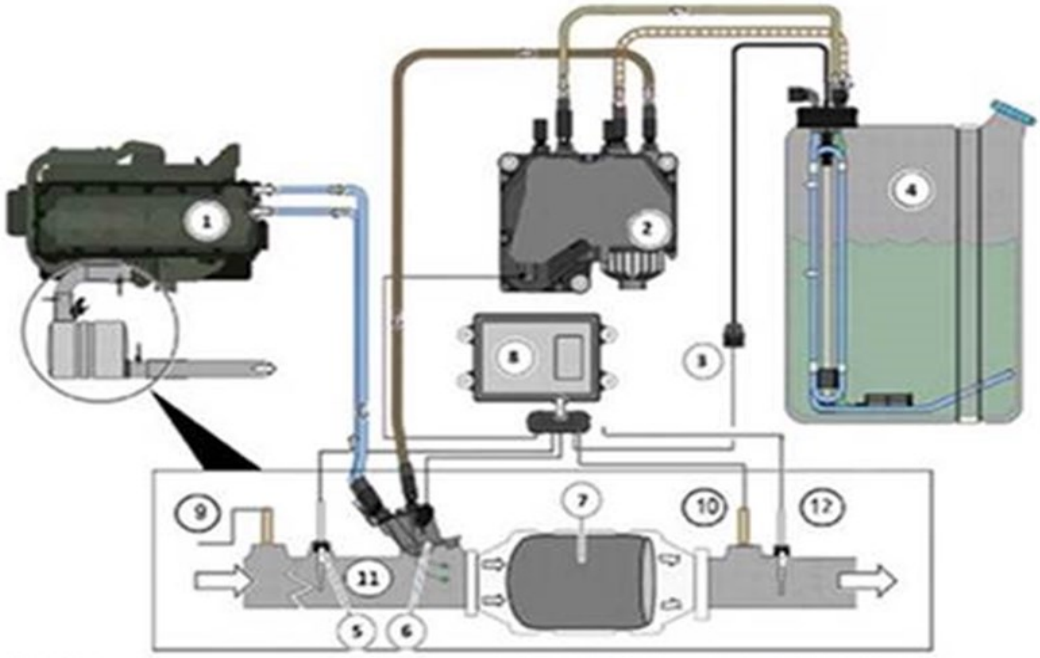
AUS system	Rating	rpm	600	800	1000	1200	1300	1400	1500	1600	1800	1900
Specific AUS consumption		g/kWh lb/hph							14.40 0.02		12.00 0.02	
AUS consumption at Full load		l/h US gal/h							4.54 1.20		5.57 1.47	

AUS concentration 32.5%



1. Engine
2. AUS pump
3. Sensor connector QLT
4. AUS tank with QLT
5. Front exhaust temperature sensor
6. AUS injector
7. Catalytic converter (SCR)
8. ACM (After Treatment Module)
9. Front NOx sensor
10. Rear NOx sensor
11. Injector pipe
12. Rear exhaust temperature sensor

Abbreviations:

ACM	Aftertreament Control Module
AUS	Aqueous Urea Solution
EATS	Exhaust Aftertreatment System
SCR	Selective Catalytic Reduction
UDS	Urea Dosing System
UQS	Urea Quality Sensor

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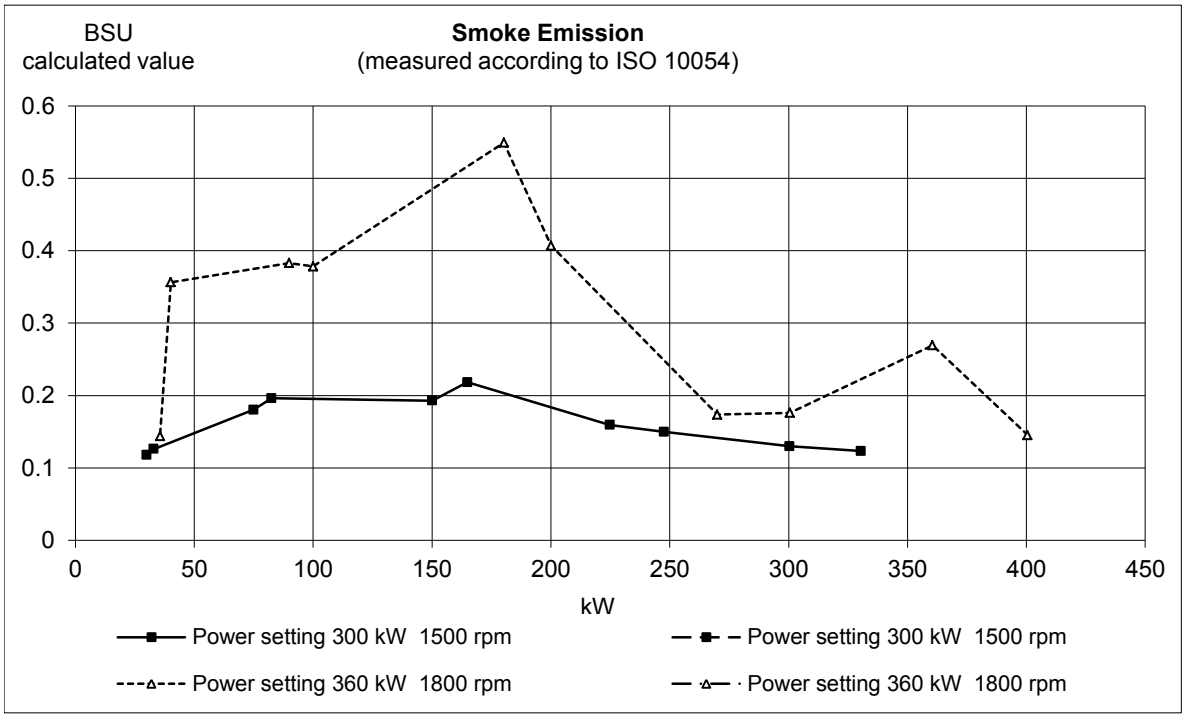

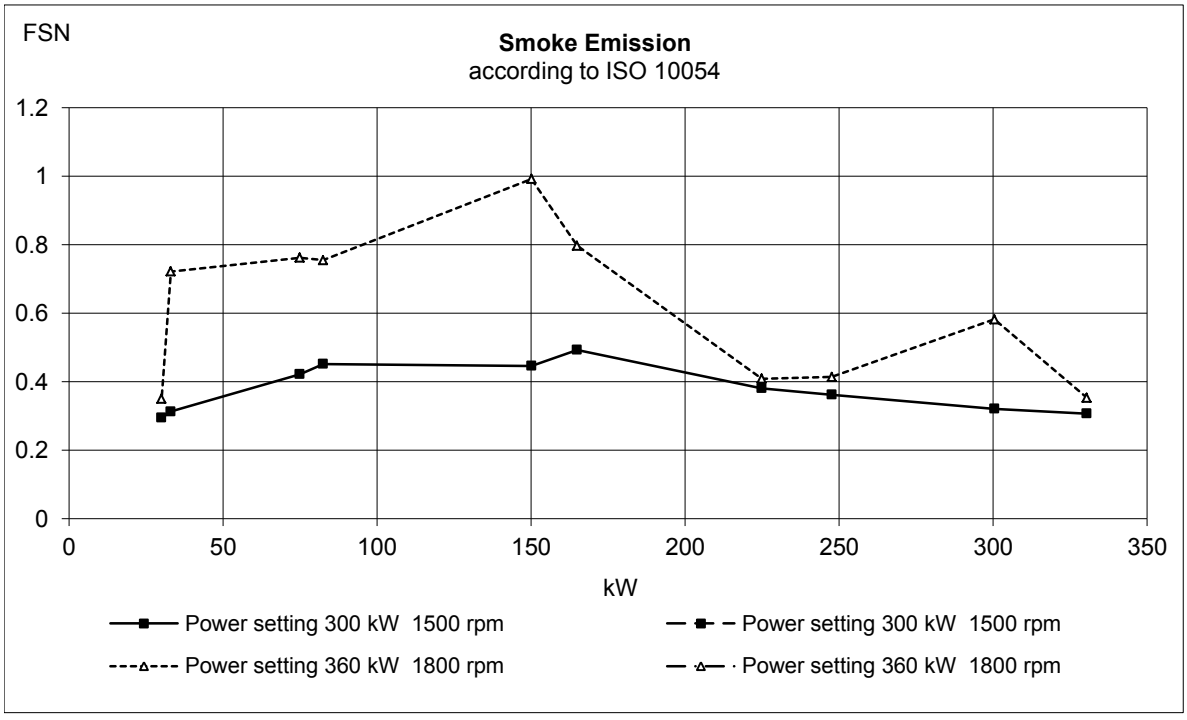

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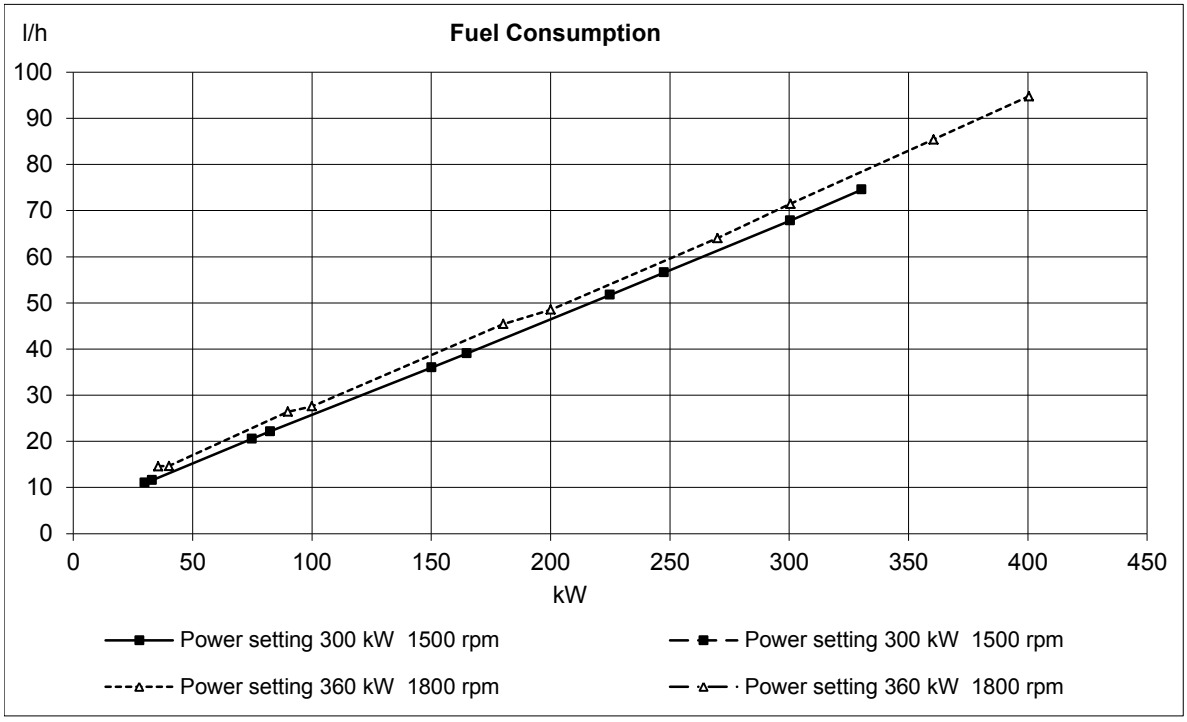

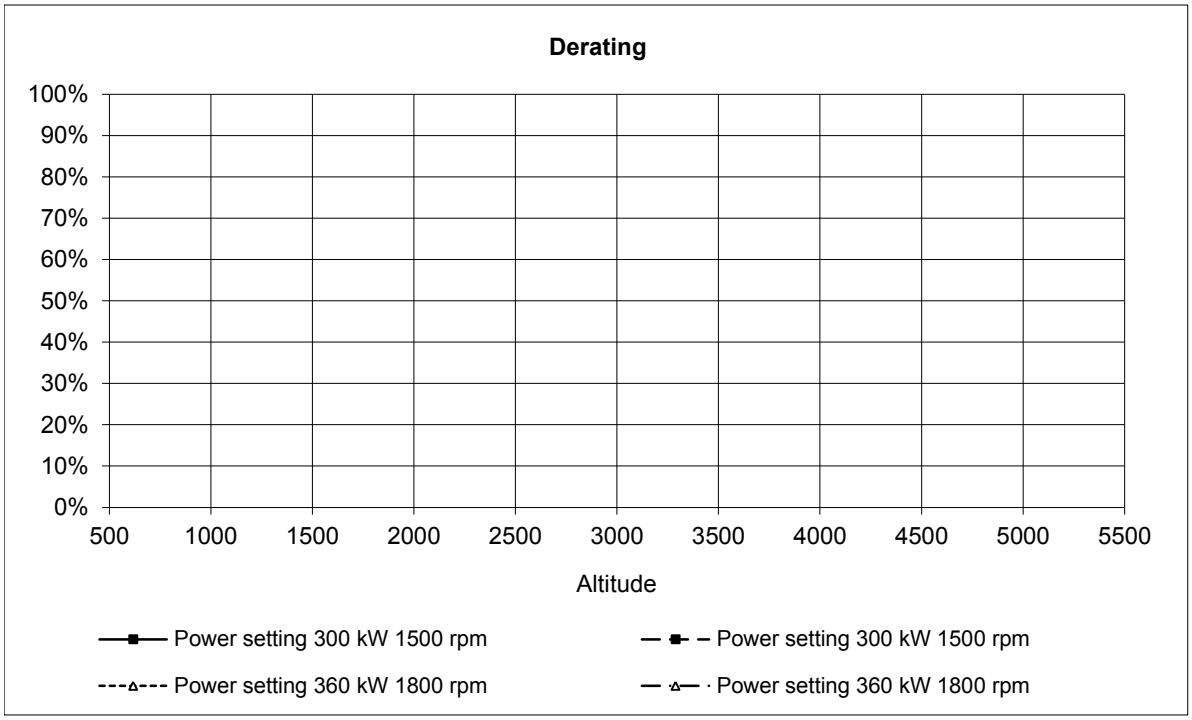

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