VOLVO PENTA **1500rpm/1800 rpm**	Document No **23466371**	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 360 kW		kW hp	90 122	180 245	270 367	360 490	396 539
Power setting 360 kW		kW hp	90 122	180 245	270 367	360 490	396 539
Torque at:	Power setting 360 kW	Nm lbft	573 423	1146 845	1719 1268	2292 1690	2521 1859
	Power setting 360 kW	Nm lbft	573 423	1146 845	1719 1268	2292 1690	2521 1859
Mean piston speed		m/s ft/sec			7.9 26.0		
Effective mean pressure at:	Power setting 360 kW	MPa psi	0.6 82	1.1 163	1.7 245	2.3 327	2.5 360
Max combustion pressure at:	Power setting 360 kW	MPa psi	8.5 1233	11.2 1624	15.4 2234	18.9 2741	20.1 2915
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 400 kW		kW	100	200	300	400	440
		hp	136	272	408	544	598
Power setting 400 kW		kW	100	200	300	400	440
		hp	136	272	408	544	598
Torque at:	Power setting 400 kW	Nm	531	1061	1592	2122	2334
		lbft	391	783	1174	1565	1722
Mean piston speed		m/s			9.5		
		ft/sec			31.2		
Effective mean pressure at:	Power setting 400 kW	MPa	0.5	1.0	1.6	2.1	2.3
		psi	76	151	227	303	333
Max combustion pressure at:	Power setting 400 kW	MPa	8.7	12.2	15.5	20	20.8
		psi	1262	1769	2248	2901	3017
Total mass moment of inertia, J (mR^2)		kgm^2			3.43		
Engine only		$lbft^2$			81.4		
Friction Power		kW	45	45	45	45	45
		hp	61.2	61.2	61.2	61.2	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 360 kW	dB(A)	109.1	110.2	111	111	111.3
		rpm			**1800**		
Measured sound power Lw	No load	dB(A)	109.1	109.1	109.1	109.1	109.1
	Power setting 400 kW	dB(A)	111.4	112.6	112.7	113.3	113.1

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Vibrations (vibration velocity)

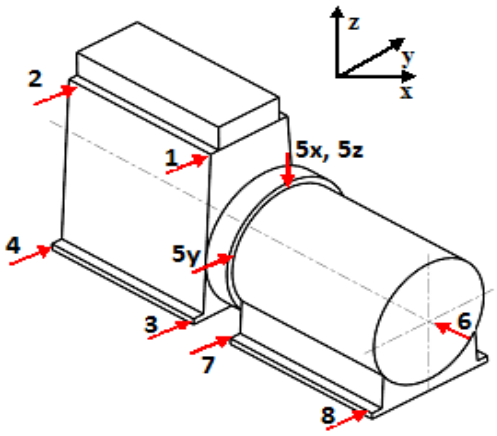
Power:	kW	360
Speed:	rpm	1500
Ambient temperature	°C	29-36
Type of Fuel		SD10

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	0.129	9.5	10.2	0.238	10.5	9.3	0.137	12.9	11.8	Engine
2	0.334	11.4	8.2	0.348	13.3	8.9	0.194	11.2	10	
3	0.207	12.3	11.3	0.332	13.8	17.3	0.141	14.5	13.3	
4	0.143	12.3	16.7	0.182	12.6	15.9	0.143	11.1	13.2	
5	0.097	19.9	12.9	0.106	8.9	8.2	0.095	17.8	14.6	Generator
6	0.058	18.3	13.2	0.101	19.6	10.1	0.053	16.6	12	
7	0.079	9.6	5	0.083	18.9	9.8	0.107	18.9	12.9	
8	0.089	9.4	5.1	0.089	17.3	9.5	0.097	21.5	12.5	

Power:	kW	400
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	0.166	11.8	11.4	0.344	12.7	12.4	0.162	14.2	15.8	Engine
2	0.577	17.7	10.9	0.764	22.5	12.4	0.293	21.9	16	
3	0.185	12.3	14.6	0.254	21.6	26.7	0.129	16.2	18.2	
4	0.293	13.4	20.8	0.307	24.9	24.2	0.212	24.5	21	
5	0.098	20.3	14.5	0.127	12.2	11.6	0.104	21.1	16.4	Generator
6	0.062	19.9	16.5	0.105	18.9	13.2	0.053	16.1	11.7	
7	0.087	13.6	8.8	0.08	19.3	13.8	0.105	29.5	18.2	
8	0.095	13.7	8.9	0.092	19	13.4	0.104	25.5	16.8	

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	2.8	3.1	1.4	1.3	20-100	26.2	35.5	6.1	7.9
0-40	5.0	5.4	1.5	1.6	40-100	14.1	18.2	3.6	4.4
0-60	9.5	11.9	2.6	3.0	60-100	6.5	6.2	2.2	2.3
0-80	19.4	28.0	4.3	6.4	80-100	2.5	2.5	1.0	1.1
0-100	51.4	62.6	8.1	9.5					
0-60.4	9.8		2.4		60.4-100	6.2		1.8	
0-54.9		9.7		2.4	54.9-100		10.0		2.6
0-52.6	7.4		2.2		52.6-100	9.7		2.8	
0-47.9		7.4		2.2	47.9-100		12.8		3.4
100-0						-4.7	-4.0	1.2	1.3

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	1.9	2.0	0.8	0.9	20-100	10.9	15.2	3.2	4.1
0-40	3.2	3.4	1.1	1.1	40-100	9.1	12.3	3.1	3.6
0-60	5.0	6.3	1.6	2.2	60-100	4.2	6.5	1.7	2.6
0-80	9.9	13.5	2.8	3.4	80-100	1.5	1.5	0.7	0.7
0-100	17.4	22.0	3.8	5.0					
0-80.5	10.5		2.7		80.5-100	1.4		0.6	
0-73.6		10.9		2.8	73.6-100		2.4		1.1
0-70.2	6.6		2.4		70.2-100	2.4		0.9	
0-64.1		7.5		2.5	64.1-100		5.1		2.1
100-0						-2.4	-2.7	1.4	1.4

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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

Lubrication system		rpm load	1500 25%	50%	75%	100%	110%
Lubricating oil consumption	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
		rpm			**1800**		
	Power setting 400 kW	liter/h	0.007	0.014	0.020	0.027	0.030
		US gal/h	0.002	0.004	0.005	0.007	0.008

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	
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	25%	50%	1500 / 75%	100%	110%
Specific fuel consumption with:	Power setting 360 kW	g/kWh	221	198	190	190	190
		lb/hph	0.359	0.322	0.308	0.308	0.308
		rpm			**1800**		
	Power setting 400 kW	g/kWh	240	207	199	197	198
		lb/hph	0.388	0.336	0.323	0.319	0.320
Fuel to conform to		ASTM-D975-No. 1 and 2-D, JIS KK 2204, EN 590DMX and MDO-DMA (ISO8271)					
		rpm			**1500**		
System return flow	Power setting 360 kW	liter/h	46	45	44	44	44
		US gal/h	12.2	11.9	11.6	11.6	11.6
		rpm			**1800**		
	Power setting 400 kW	liter/h	49	49	48	47	47
		US gal/h	12.9	12.9	12.7	12.4	12.4
		rpm			**1500**		
System supply flow	Power setting 360 kW	liter/h	70	88	105	126	134
		US gal/h	18.5	23.2	27.7	33.3	35.4
		rpm			**1800**		
	Power setting 400 kW	liter/h	78	99	120	141	152
		US gal/h	20.6	26.2	31.7	37.3	40.2
		rpm			**1500**		
Normal fuel pressure (after filter)	Power setting 360 kW	kPa	552	542	530	516	512
		psi	80.1	78.6	76.9	74.8	74.3
		rpm			**1800**		
	Power setting 400 kW	kPa	595	583	573	559	557
		psi	86.3	84.6	83.1	81.1	80.8

Fuel system

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

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Intake system		**rpm** / **load**	**1500** 25%	50%	75%	100%	110%
Air consumption at: (+25°C and 100kPa)	Power setting 360 kW	m^3/min	11.95	15.08	21	25.43	26.67
		cfm	422	533	742	898	942
		rpm	**1800**				
	Power setting 400 kW	m^3/min	14.42	17.4	23.33	28.15	29.25
		cfm	509	614	824	994	1033
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**	25%	50%	**1500** 75%	100%	110%
Heat rejection to exhaust at:	Power setting 360 kW	kW	65	114	156	208	235
		BTU/min	3696	6455	8843	11846	13364
		rpm			**1800**		
	Power setting 400 kW	kW	83	138	193	243	277
		BTU/min	4697	7831	10953	13836	15753

Exhaust system		**rpm** / **load**	25%	50%	**1500** 75%	100%	110%
Exhaust gas temperature after turbine at:	Power setting 360 kW	°C	286	366	356	388	395
		°F	547	691	673	730	743
		rpm			**1800**		
	Power setting 400 kW	°C	287	377	395	410	459
		°F	549	711	743	770	858
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**		
Exhaust gas flow at: (temp and pressure after turbine at the corresponding power setting)	Power setting 360 kW	m^3/min	22.7	33.4	44.4	54.7	63
		cfm	802	1180	1568	1932	2225
		rpm			**1800**		
	Power setting 400 kW	m^3/min	27.4	37.9	49.7	58	68.3
		cfm	968	1338	1755	2048	2412

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Cooling system		rpm load	1500 25%	50%	75%	100%	110%
Heat rejection radiation from engine to surrounding at:	Power setting 360 kW	kW BTU/min	4 227	4 227	5 284	5 284	5 284
		rpm			**1800**		
	Power setting 400 kW	kW BTU/min	4 227	4 227	5 284	5 284	5 284
		rpm			**1500**		
Heat rejection to raw water system at:	Power setting 360 kW	kW BTU/min	76 4322	125 7109	179 10180	241 13705	265 15070
		rpm			**1800**		
	Power setting 400 kW	kW BTU/min	96 5459	149 8473	209 11886	287 16321	315 17914

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. 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
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	

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Charge air cooler system		**rpm load**	**25%**	**50%**	**1500 75%**	**100%**	**110%**
Cooling power	Power setting 360 kW	kW	9	15	38	64	74
		BTU/min	512	853	2161	3640	4208
		rpm			**1800**		
	Power setting 400 kW	kW	13	19	41	70	80
		BTU/min	739	1081	2332	3981	4550
		rpm			**1500**		
Charge air mass flow	Power setting 360 kW	kg/s	0.22	0.27	0.36	0.42	0.50
		rpm			**1800**		
	Power setting 400 kW	kg/s	0.29	0.33	0.45	0.55	0.55

Charge air cooler system		**rpm load**	**25%**	**50%**	**1500 75%**	**100%**	**110%**
Charge air inlet temp.	Power setting 360 kW	°C	73	101	148	179	194
(Charge air temp after turbo compressor)		°F	163	214	298	354	381
		rpm			**1800**		
	Power setting 400 kW	°C	79	102	144	185	195
		°F	174	216	291	365	383

Charge air cooler system		**rpm load**	**25%**	**50%**	**1500 75%**	**100%**	**110%**
Charge air outlet temp.	Power setting 360 kW	°C	31	35	38	40	48
(Charge air temp after charge air cooler)		°F	88	95	100	104	118
		rpm			**1800**		
	Power setting 400 kW	°C	34	35	38	41	50
		°F	93	95	100	106	122
Maximum pressure drop over charge air cooler, incl. piping		kPa	1.2				
		psi	0.17				
		rpm	**1500**				
Charge air pressure	Power setting 360 kW	kPa	272				
		psi	39.45				
		rpm	**1800**				
	Power setting 400 kW	kPa	246				
		psi	35.68				

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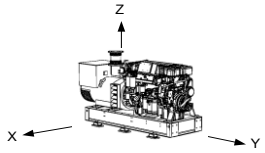
Engine management system

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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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				300	280	
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

VOLVO PENTA

HE 360/400
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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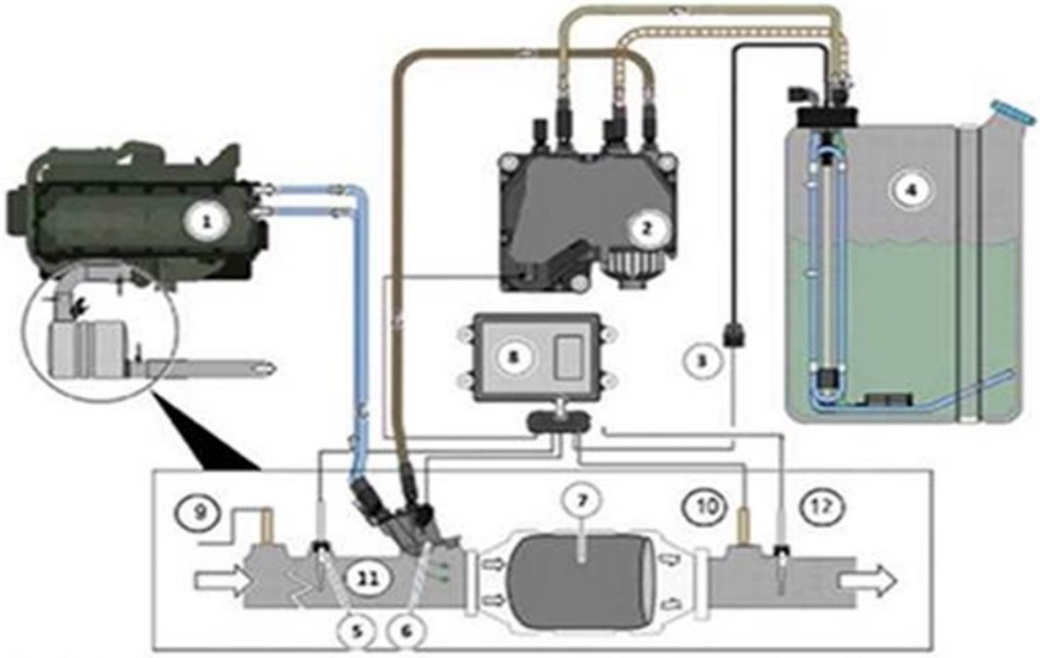
AUS system	Rating	rpm	600	800	1000	1200	1300	1400	1500	1600	1800	1900
Specific AUS consumption		g/kWh lb/hph							11.20 0.02		12.68 0.02	
AUS consumption at Full load		l/h US gal/h							5.04 1.33		6.10 1.61	

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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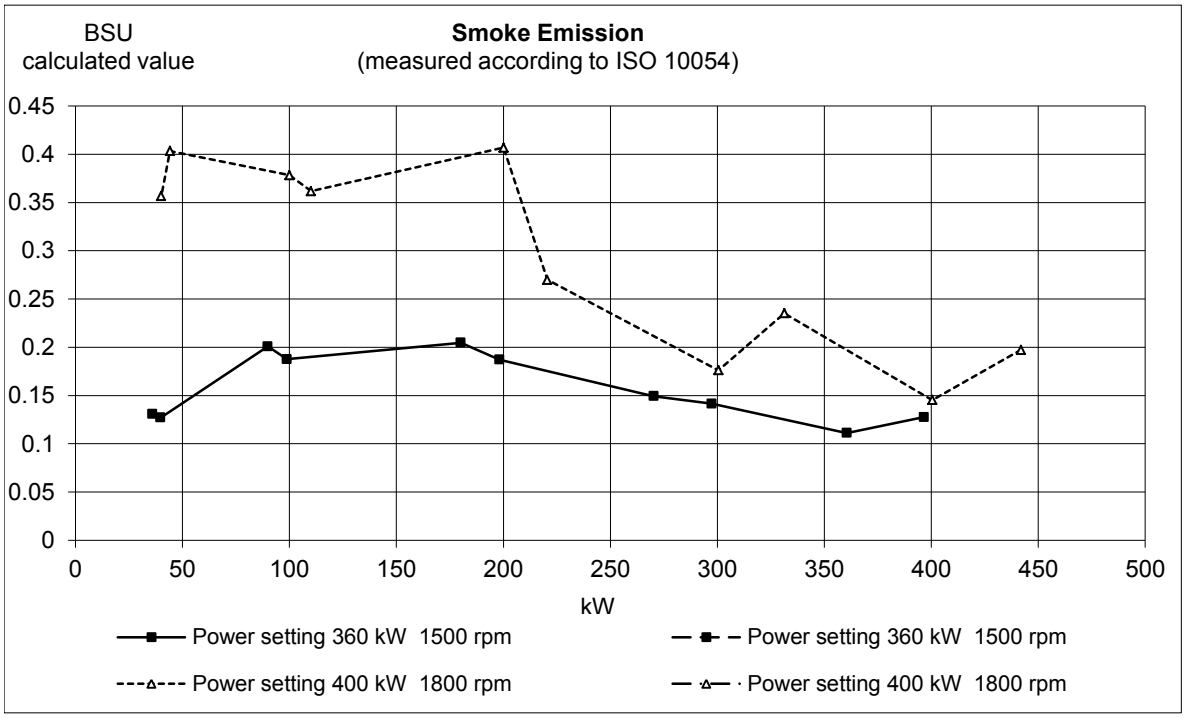

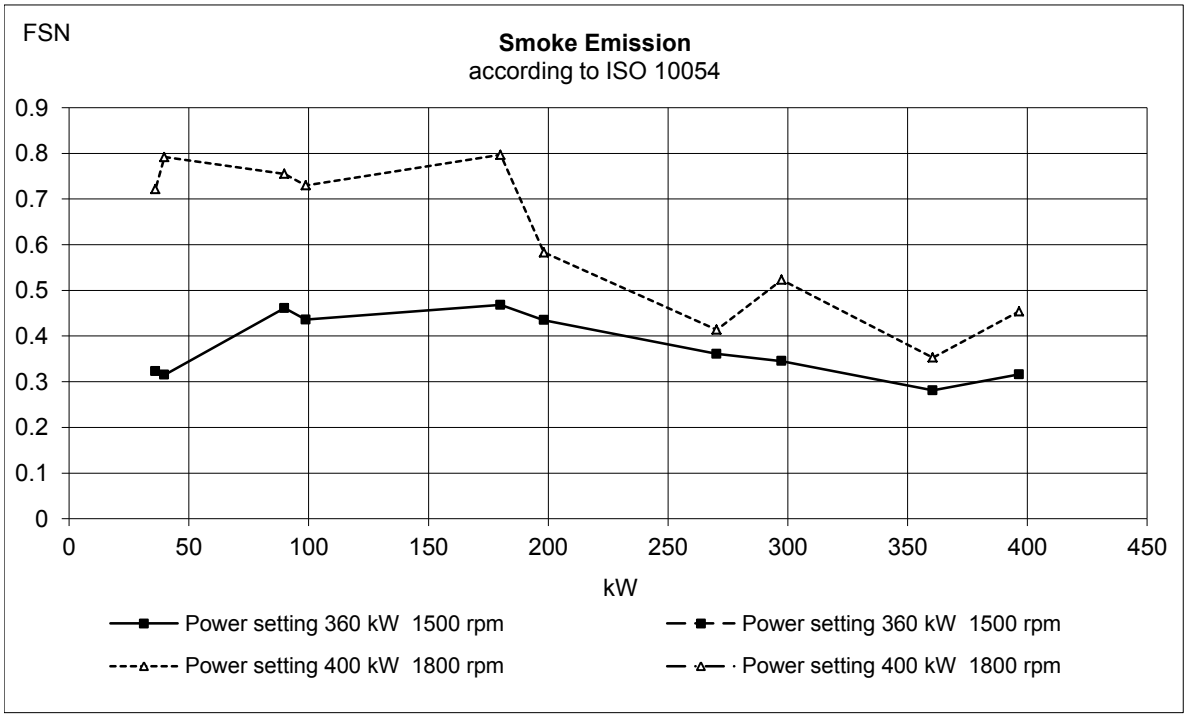

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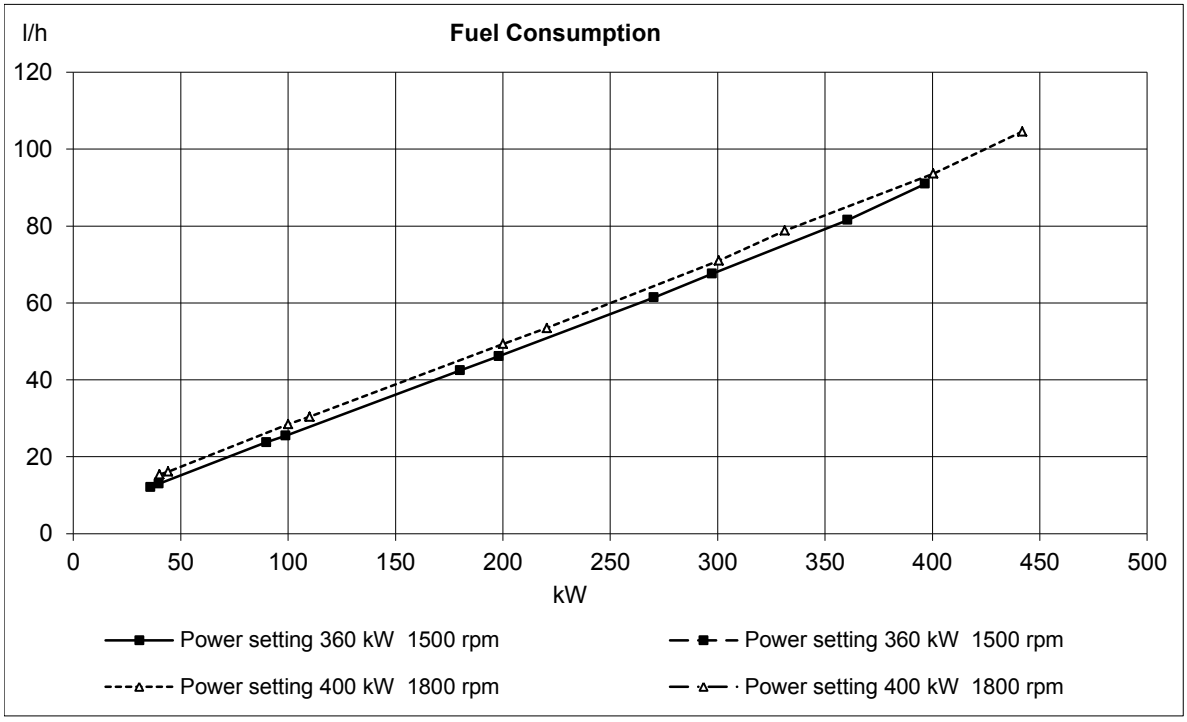

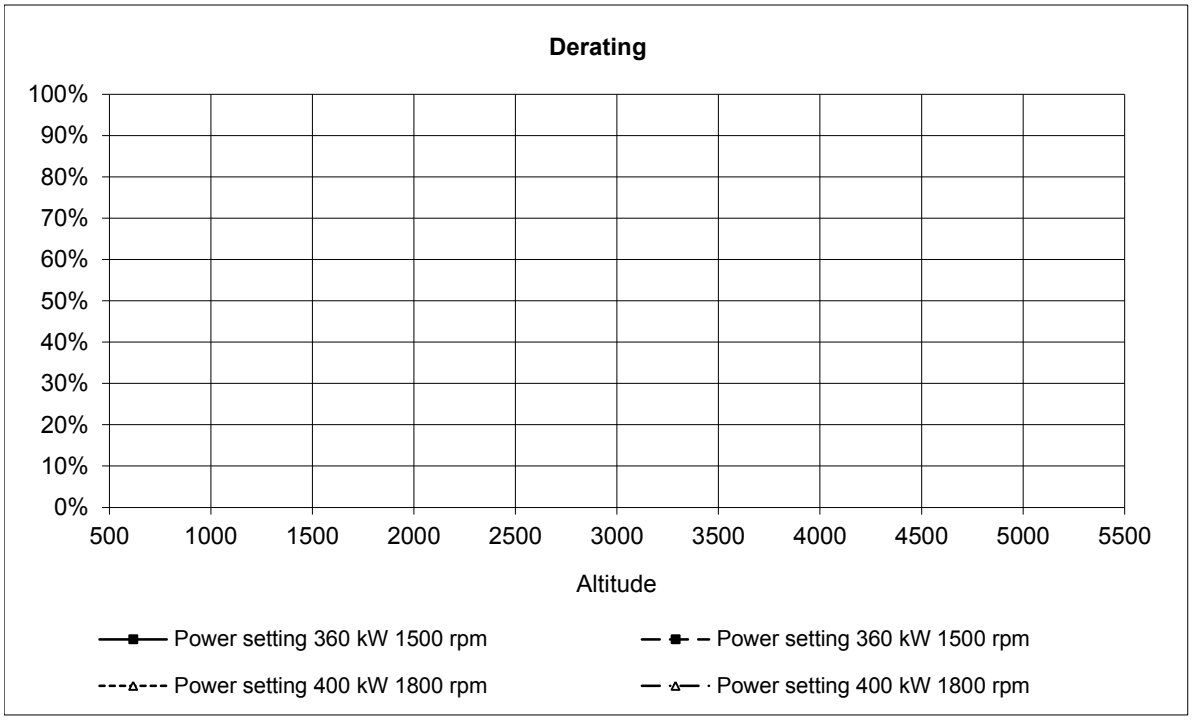

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