



Engine type:	four-stroke, direct-injection		
Cylinders :	6 cylinder in line, wet replaceable cylinder liners		
Aspiration :	turbocharger, intercooler		
Cooling :	water circulation by centrifugal pump on engine		
Lubrication:	force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit of engine		
Injection:	Bosch in-line pump with mechanical speed governor		
Generator:	Bosch three-phase generator with rectifier and transistorized governor, 28 V, 55 A		
Starter motor:	Bosch solenoid-operated starter, typ KB, 24 V, 5,4 kW		
Bore :	128 mm	Starter battery capacity:	143 Ah (24V)
Stroke :	155 mm	Filling capacities:	
Volume :	11,967 l	- Engine lube oil for	
		standard oil sump (min.):	14 l
		standard oil sump (max.):	18 l
Compression ratio:	15,5:1		
Cooling water temperature:		Inertia moments (SI-Unit) :	
- under normal conditions	90° C	- engine and vibration damper	0,914 kgm ²
- short period under		- flywheel for	
extreme conditions	95° C	generator drive 1500 rpm :	2,412 kgm ²
- before start of		generator drive 1800 rpm :	---
full load (min.)	40° C		
Filling capacities:		Steady-state speed accuracy (speed droop)	
- coolant for engine with	58 l	- constant speed	4 - 5%
integrated cooling system		(at ISO standard rating)	
and piping approx			



speed	rpm	1500	1500	1800	1800	1800
Nominal rating ¹⁾	kW	190	244	200	218	280
	HP	258	332	272	296	380
Mean effective pressure Torque	bar	12,7	16,3	11,1	12,1	15,6
	Nm	1210	1553	1061	1157	1486
Rating for governing purpose only ¹⁾	kW	209	268	220	240	308
	HP	284	364	299	326	419
Mean effective pressure Torque	bar	14	17,9	12,3	13,4	17,2
	Nm	1331	1706	1167	1273	1634
Mean piston velocity	m/s	0	0	0	0	0
		7,75	7,75	9,3	9,3	9,3
Fuel consumption (+5% tolerance)						
Nominal rating						
1/1 load	g/kWh	203	206	206	208	205
3/4 load	g/kWh	205	206	208	210	207
1/2 load	g/kWh	210	212	214	213	211
Lube oil consumpt. max	g/h	193	250	200	227	280
Air for combustior	m ³ /h	660	1040	1180	1230	1370
Negative pressure at air filte outlet, max. permissibl	hPa	30	30	30	30	30
Exhaust gas heat ²⁾	KW	90	157	120	124	180
Exhaust gas temp ²⁾	°C	395	480	420	424	430
Exhaust gas mass flow	kg/h	800	1260	1430	1470	1650
Exhaust gas vol. flow ²⁾	m ³ /h	1530	2720	2864	2935	3330
Exhaust gas back pressure max. permissibl	hPa	60	60	60	60	60
Jacket water heat incl. water-cooled exhaust manifold	kW	147	170	155	161	190
Minimum cooling water circulation	l/h	18000	18000	21600	21600	21600
Intercooler heat rate	kW	27	33	27	29	45



speed	rpm	1500	1500	1800	1800	1800
delivery quantity of fuel supply pump	l/h	135	135	145	145	145
delivery quantity of raw water pump at a back pressure of 0,6 bars	l/min	130	130	180	180	180
Radiation heat	kW	28	35	27	28	37
Noise at 1 m distance (excl. fan)	dB(A)	95	95	95	95	95
Dry weight of engine ..	kg	1120	1120	1120	1120	1120

1) The nominal ratings are based on reference conditions according to 298 K (25° Celsius) air temperature, 100 kPa (1000 mbar) air pressure, 60 % air humidity; deratings for site conditions to be taken into account.

2) Data are for engine with non-cooled exhaust manifold.

3) Power rating definitions according to ISO 8528-1.

Output-related data are referred to the maximum rating specified for each speed.

Technical data are subject to alterations.