N67 TM2A

126 kW (1500 rpm) - 141 kW (1800 rpm)

1/ GENERAL		1500 rpm	1800 rpm
Engine model		N67 TM2A	
Basic engine type		F4GE0685D*F650 - 504241370	
Number cylinders		6	
Firing order (N° 1 nearest to fan)		1-5-3-6-2-4	
Cylinder arrangement		in line	
Valves per cylinder		2	
Cycle		diesel 4 stroke	
Injection system		direct	
Induction System		Turbocharged aftercooled air/air	
Bore	mm	104	
Stroke	mm	132	
Total displacement	lit	6,7	
Mean piston speed	m/s	6,6	7,9
Compression ratio		17,5 : 1	
Flywheel rotation		anti clockwise viewed on flywheel	
Housing flywheel		SAE 3	
Flywheel		11"1/2	
Moment of inertia			
without flywheel	kgm^2	0,31	
flywheel only	kgm^2	0,71	
BMEP gross			
Prime Power	bar/kPa	14,1 / 1411,1	13,4 / 1338,8
Stand-by Power	bar/kPa	15,5 / 1552,2	14,7 / 1472,6
Dry weight (including cooling package)	kg	~ 640	
Energy to coolant	kcal/kWh	458,4	463,1
Energy to charge cooler	kcal/kWh	97,9	118,2
Energy to radiation	kcal/kWh	66	51
Dimensions L x W x H	mm	1697 x 789 x 1318	

2/ PERFORMANCES			1500 rpm	1800 rpm
Continuous Power	(gross)	kWm	94,5	107,6
Prime Power	(gross)	kWm	118,2	134,5
Stand-By Power	(gross)	kWm	130	148
Fan consumption		kWm	4	6,9
Continuous Power	(net)	kWm	90,5	100,7
Prime Power	(net)	kWm	114,2	127,6
Stand-By Power	(net)	kWm	126	141,1
Performance condition				
temperature		°C	≤ 40	
altitude a.s.l		m	≤ 1000	
Derating				
temperature > T 40°C		%/5°C	1%	
altitude >1000 <3000 m		%/500m	2%	
altitude >3000 m		%/500m	4%	

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N67 TM2A

126 kW (1500 rpm) - 141 kW (1800 rpm)

3/ COOLING SYSTEM		1500 rpm	1800 rpm
Type		liquid	
Recommanded coolant		water + 50 % paraflu 11	
Coolant capacity			
engine only	liter	10,5	
radiator and hoses	liter	15	
Coolant pump flow	l/min	141	169
Pressure cap setting	kPa (bar)	100 (1,0)	
Shutdown switch setting	°C	103	
Maximum additional restriction	Pa	196	
Air To Boil Prime Power	°C	61,5	59,1
Fan			
diameter	mm	600	
number of blades		12	
drive ratio		1,41 : 1	
speed	rpm	2115	2538
air flow	m^3/s	3,2	3,9
power consumption	kWm	4	6,9

4/ LUBRICATION SYSTEM		1500 rpm	1800 rpm
Oil sump capacity			
max	liter	12	
min	liter	8	
Oil system capacity including filter	liter	17,2	
Oil pressure at rated speed	kPa	300-500	
Oil temperature			
normal	°C	---	
max	°C	120	
Engine angularity			
longitudinal	degrees	25°	
transverse	degrees	25°	
Servicing interval	hours	600	
Oil specification		ACEA E3/E5	
Oil consumption	%fuel	< 0,1	

5/ INTAKE SYSTEM		1500 rpm	1800 rpm
Air consumption at 100 % of load	m^3/h (Kg/h)	559 (672,5)	693 (833,9)
Air intake restriction, clean filter	kPa (mbar)	2 (20)	
Air intake restriction, dirty filter	kPa (mbar)	5 (50)	
Air filter type		dry	

6/ EXHAUST SYSTEM		1500 rpm	1800 rpm
Gas flow at stand-by Power	kg/h	699	866
Max temperature at PRP (25°C)	°C	467,8	489,2
Max allowable back pressure	kPa (mbar)	5 (50)	
Energy to exhaust	kcal/kWh	628,8	711,5

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7/ FUEL SYSTEM

		1500 rpm	1800 rpm
Fuel consumption at			
Stand-By	gr/kWh (l/h) [kg/h]	206,9 (32,0) [26,9]	216,1 (38,1) [32,0]
Full load	gr/kWh (l/h) [kg/h]	208,1 (29,3) [24,6]	217,1 (34,8) [29,2]
80%	gr/kWh (l/h) [kg/h]	228,0 (24,1) [20,2]	237,6 (28,5) [24,0]
50%	gr/kWh (l/h) [kg/h]	225,0 (15,8) [13,3]	239,4 (19,2) [16,1]
Fuel specifications		EN 590	
Feed pump max suction head	m	---	
Injection pump	type STANADYNE	DB 4629-5932	

8/ ELECTRIC SYSTEM

			1500 rpm	1800 rpm
Voltage (negative to ground)		V	12	
Starter motor				
	make		Bosch	
	power	kW	3	
	pull current	Amp	60	
	hold current	Amp	12	
	break away current +20°C	Amp	1580	
	cranking current +20°C	Amp	---	
Number of teeth on starter motor			10	
Number of teeth on flywheel			125	
Starting batteries				
	recommended capacity Ah	1x	100	
	discharge current (EN 50342)	Amp	650	
Stop solenoid energized to run		Amp	---	
Alternator				
	voltage	V	14	
	charge	Amp	90	

9/ COLD STARTING

		1500 rpm	1800 rpm
Without air preheating	°C	-10	
With air preheating	°C	-25	

10/ EMISSION GASEOUS AND PARTICLES

			1500 rpm	1800 rpm
No_x	Oxides of nitrogen	gr/kWh	5,42	-
HC	Hydrocarbons	gr/kWh	0,1	-
No_x+HC		gr/kWh	5,52	-
CO	Carbon monoxide	gr/kWh	0,5	-
PT	Particles	gr/kWh	0,131	-

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