

1/ GENERAL

1500 rpm

Engine model	NEF67 TM7	
Basic engine	F4GE0685B*B601 - 5801836994	
Number cylinders	6	
Firing order (N°1 nearest to fan)	1-5-3-6-2-4	
Cylinder arrangement	in line	
Valves per cylinder	2	
Type	diesel 4 stroke	
Injection system	direct	
Induction System	Turbocharged aftercooled air/air	
Bore	mm	104
Stroke	mm	132
Total displacement	liter	6,7
Mean piston speed	m/s	6,6
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	0,14
flywheel only	kgm ²	0,71
BMEP		
Prime Power	bar/kPa	21,16 / 2116
Stand-by Power	bar/kPa	23.3 / 2332
Dry weight (including cooling package)	kg	~ 640
Energy to coolant	kcal/kWh	443
Energy to charge cooler	kcal/kWh	98
Energy to radiation	kcal/kWh	107
Dimensions L x W x H	mm	1697 X 789 X 1318

2/ PERFORMANCES

1500 rpm

Continuous Power	(gross)	kWm	145
Prime Power	(gross)	kWm	181,5
Stand-By Power	(gross)	kWm	200
Fan consumption		kWm	5
Continuous Power	(net)	kWm	141,5
Prime Power	(net)	kWm	176,5
Stand-By Power	(net)	kWm	194
Performance conditions			
temperature		°C	≤ 40
altitude a.s.l		m	≤ 1000
Derating			
temperature > T 40°C		%/5°C	2%
altitude >1000 <3000 m		%/500m	3%
altitude > 3000 m		%/500m	6%

3/ COOLING SYSTEM

1500 rpm

Type		liquido
Recommended coolant		acqua + 50 % paraflu 11
Coolant capacity		
motor only	litri	10,5
radiator and hose	litri	15
Coolant pump flow	l/min	141
Pression cap setting	kPa (bar)	70 (0,7)
Shutdown switch setting	°C	103
Maximal additional restriction	Pa	196
Air To Boil	Prime Power	°C
		60
Fan		
diameter	mm	685
number of blades		12
drive ratio		1,41 : 1
speed	giri/1'	2115,0
air flow	m ³ /s	3,8
power consumption	kWm	5

4/ LUBRICATION SYSTEM

1500 rpm

Oil sump capacity		
max	liter	12
min	liter	8
Oil system capacity including filters	liter	17,2
Oil pressure at PRP	kPa	300-500
Oil temperature		
normal	°C	---
max	°C	120
Engine angularity		
longitudinal	degrees	35°
trasverse	degrees	35°
Servicing intervall	hours	800
Oil specification		ACEA E3/E5
Oil consumption	%fuel	< 0,1

5/ INTAKE SYSTEM

1500 rpm

Air consumption at 100% of load	m ³ /h (Kg/h)	586 (706)
Air intake restriction clean filter	kPa (mbar)	2 (20)
Air intake restriction dirty filter	kPa (mbar)	5 (50)
Air filter type		dry

6/ EXHAUST SYTEM

1500 rpm

Gas flow at stand by power	kg/h	793
Max temperature at PRP (25°C)	°C	600
Max allowable back pressure	kPa (mbar)	5 (50)
Energy to exhaust	kcal/kWh	598

7/ FUEL SYSTEM

1500 rpm

Fuel consumption at		
Stand-By	gr/kWh (l/h) [kg/h]	205 (49) [41]
full load PRP	gr/kWh (l/h) [kg/h]	192,8 (42,1) [35]
80%	gr/kWh (l/h) [kg/h]	194 (37,3) [31]
50%	gr/kWh (l/h) [kg/h]	200 (24) [20]
Fuel specifications		EN 590
Fuel pump max suction head	m	---
Injection pump	type STANADYNE	DB 4629

8/ ELECTRIC SYSTEM

1500 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	1 x 100
discharge current	Amp	650
(EN 50342)		
Stop solenoid energized to run		---
Alternator		
voltage	V	14
charge	Amp	90

9/ COLD STARTING

1500 rpm

Without air preheating	°C	-10
With air preheating	°C	-25

10/ EMISSION GASEOUS AND PARTICLES

1500 rpm

No _x	Oxides of nitrogen	gr/kWh	-
HC	Hydrocarbons	gr/kWh	-
No _x +HC		gr/kWh	-
CO	Carbon monoxide	gr/kWh	-
PT	Particles	gr/kWh	-