# POWER GENERATION APPLICATIONS NEF SERIES

N45 SM1A
59 kW @ 1500 rpm
65 kW @ 1800 rpm
Stage II

		Stage II		
Specifications				
Thermodynamic cycle		Diesel 4 stroke		
Air intake		TC		
Arrangement		4L		
Bore x Stroke	mm	104 x 132		
Total displacement	1	4.5		
Valves per cylinder		2		
Injection system		Mechanical		
Speed governor		mechanical		
Cooling system		liquid (water - paraflu 50%)		
Flywheel housing/flywheel	type	SAE3 / 11" 1/2		
Direction of rotation (seen from flywheel side)		CCW		
Oil specifications		ACEA E3-E5		
Oil consumption		<0.1% of fuel consumption		
Fuel specifications		EN 590		
Oil and filter maintenance interval for replacement	hours	600		
Specific fuel consumption at:	rpm	1500	1800	
	100% load I/h (g/kWh)	13.7 (210.8)	15.5 (213.4)	
	80% load I/h (g/kWh)	10.2 (210.2)	11.7 (214.5)	
	50% load I/h (g/kWh)	7.0 (216.3)	8.2 (226.6)	
Coolant capacity: engine only		~8.5		
engine+radiator		~18.5		
ATB (without canopy)	°C	58	60	
Lube oil total system capacity including pipes, filters etc.		~12.8		
Electric system		12 Vcc	_	
Starting batteries: recommended capacity	Ah	1 x 100		
Discharge current (EN 50342)	А	650		
Cold starting: without air preheating	°C	-10		

#### **Performances**

Ratings <sup>1</sup>		150	1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY	
Rated Output <sup>2</sup>	kWm	53.5	59	59	65	

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- 1) Ratings in accordance with ISO 8528. For duty at temperature over 40°C and/or altitude over 1000 meters must be considered a power derating factor. Contact the FPT sales organization.
- 2) Net power at flywheel available after 50 hours running with a  $\pm 3\%$  tolerance.

with air preheating

**PRIME POWER:** The prime power is the maximum power available with varying loads for an unlimited number of hours. The average power output during a 24h period of operation must not exceed 80% of the declared prime power between the prescribed maintenance intervals and at standard environmental conditions. A 10% overload is permissible for 1 hour every 12 hours of operation.

**STAND-BY POWER:** The stand-by power is the maximum power available for a period of 500 hours/year with a mean load factor of 90% of the declared stand-by power. No kind of overloads is permissible for this use.

**CONTINUOUS POWER:** Contact the FPT sales organization.





### Standard configuration

FPT engine N45 SM1A equipped with:

- Mounted radiator
- Mounted belt driven pusher fan
- Fan guard
- Mounted air filter with replaceable cartridges
- Fuel filter
- Primary fuel filter/water separator
- Replaceable oil filter
- Front engine mounting brackets
- Flywheel housing SAE3 and flywheel 11"1/2
- Re-directable exhaust gas elbow
- Recirculed oil breather system
- Oil dipstick
- HWT and LOP sensors
- 12 Vdc electrical system
- User's handbook

THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

## **Optional equipment:**

On request the engine can be supplied with:

- Oil drain pump
- Oil drain valve
  120/230 Volt water jacket heater
  WT and OP sensors for gauges

- Low water level sensor
  Turbo and exhaust gas guards
  Exhaust gas flexible joint
  24 Volt electrical system

#### **Overall dimensions:**



