



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	SAE 3 / 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	1800
	100% load I/h (g/kWh)	15.05 (235.7)
	80% load I/h (g/kWh)	12.7 (240.7)
	50% load I/h (g/kWh)	8.9 (258.1)
Coolant capacity: engine only	1	~8.5
engine+radiator		~18.5
ATB (without canopy)	°C	52
Lube oil total system capacity including pipes, filters etc.		~12.8
Electric system		12 Vcc
Starting batteries: recommended capacity	Ah	1 × 100
Discharge current (EN 50342)	А	650
Cold starting: without air preheating	°C	-10
with air preheating	°C	-25

## **Performances**

Ratings <sup>1</sup>		1800 rpm	
		PRIME	STAND-BY
Rated Output <sup>2</sup>	kWm	52	57

- 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.

**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 SM1X 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

## **Overall dimensions:**





