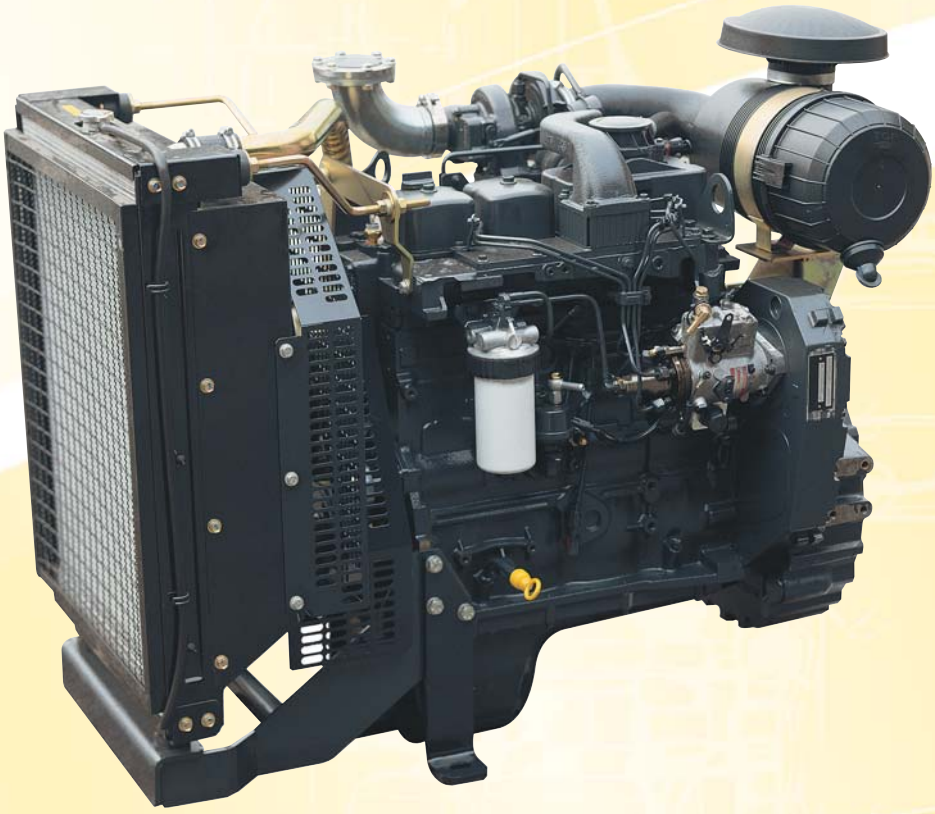
N45 SM1A

59 kW@1500 rpm
72 kW@1800 rpm
EU 2002/88/EC



ENGINE FOR POWER GENERATION APPLICATIONS

FPT
POWERTRAIN TECHNOLOGIES

N45 SM1A FOR POWER GENERATION APPLICATIONS

Specifications

Thermodinamic cycle			Diesel 4 stroke, D.I.	
Air intake			TC	
Arrangement			4, in line	
Bore x stroke		mm	104x132	
Total displacement		l	4.5	
Valves per cylinder			2	
Injection system			mechanical	
Speed governor			mechanical	
Cooling system			liquid (water + 50% Paraflu11)	
Flywheel housing/flywheel		type	SAE3 / 11" 1/2	
Flywheel rotation			CCW	
Lube oil specifications			ACEA E3-E5	
Lube oil consumption			<0.1% of fuel consumption	
Fuel specifications			EN 590	
Oil and filters intervals for replacement		hours	600	
Fuel consumption at:		rpm	1500	1800
		100% load l/h (g/kWh)	13.7 (210.8)	15.5 (213.4)
		80% load l/h (g/kWh)	10.2 (210.2)	11.7 (214.5)
		50% load l/h (g/kWh)	7.0 (216.3)	8.2 (226.6)
Coolant capacity:	engine only	l	~8.5	
	engine+radiator	l	~18.5	
ATB (without canopy)		°C	50	
No remote cooling radiator allowed				
Lube oil total system capacity including pipes, filters etc.		l	~12.8	
Electrical system			12Vcc	
Starting batteries: recommended capacity		Ah	1x100	
Discharge current (EN 50342)		A	650	
Cold starting:	without air preheating	°C	-10	
	with air preheating	°C	-25	

Performance

Ratings[1]		1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY
Rated Output[2]	kWm	53.5	59	59	65

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 ±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.

N45 SM1A FOR POWER GENERATION APPLICATIONS

Standard Configuration:

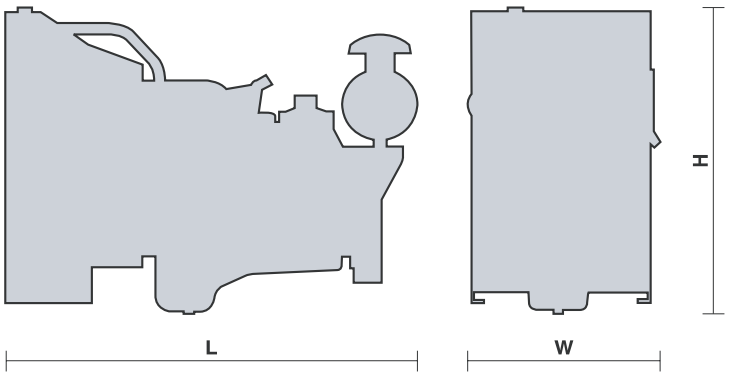
FPT engine N45 SM1A equipped with:
- Mounted radiator
- Mounted belt driven pusher fan
- Fan guard
- Mounted air filter with replaceable cartridges
- Fuel filter
- Primary fuel filter/water separator
- Replaceable oil filter
- Front engine mounting brackets
- Flywheel housing SAE3 and flywheel 11"1/2
- 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



L = 1259 mm
W = 657 mm
H = 1016 mm
Dry weight ~480 kg

ENGINE BENEFITS

- **PERFORMANCE:** Lean lay-out; starting temperature without auxiliaries down to -15°C; performance achieved without external EGR; power before derating up to 40°C and 1000 m a.s.l.; engine 1500/1800 rpm switchable; good first step load acceptance in G2 (ISO 8528-5) class
- **SERVICEABILITY:** Worldwide service network
- **RELIABILITY:** By-pass valve on oil and fuel filters
- **COST EFFECTIVENESS:** New extended 600 h maintenance intervals (oil and filters change); reduced oil and fuel consumption; new blow-by recirculation system
- **ENVIRONMENTALLY FRIENDLY:** Reduced noise; emission legislation compliance
- **CUSTOMER ORIENTATION:** On demand production; standard generator interface SAE 3; small size engines; complete engine power range, consistency with standard and alternative fuels in compliance with regulatory requirements

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LOCAL DISTRIBUTOR

Publication P4A04N027E - 0108

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