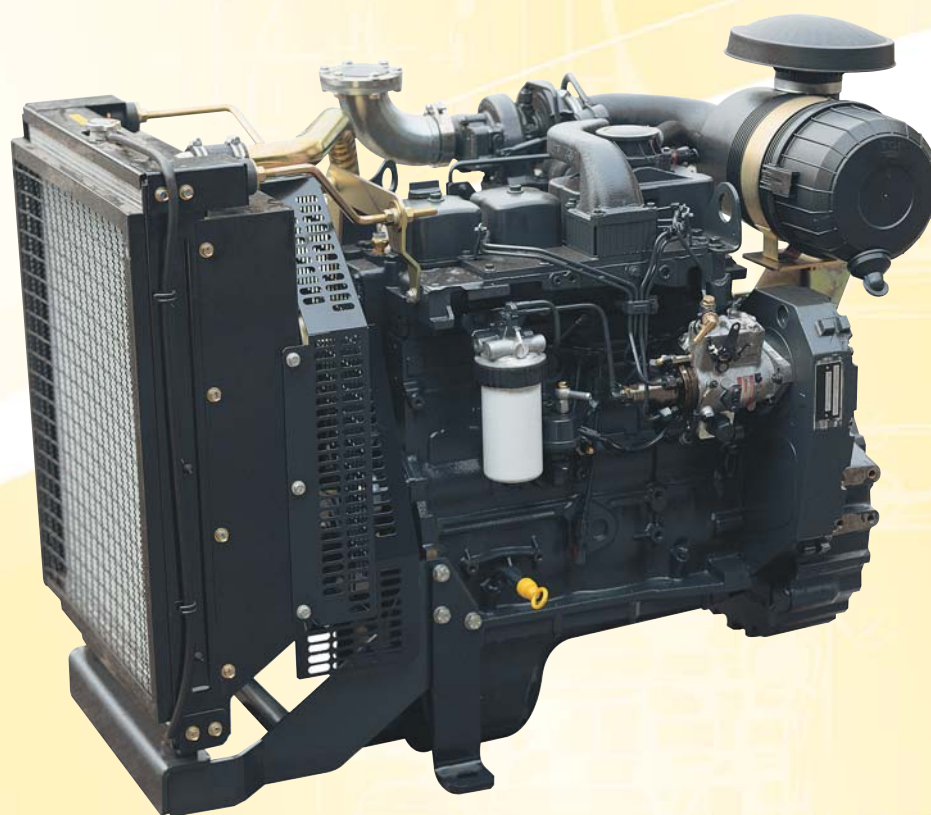


# N45 SM2A

73 kW@1500 rpm

72 kW@1800 rpm

EU 2002/88/EC



**ENGINE FOR  
POWER GENERATION  
APPLICATIONS**

## N45 SM2A FOR POWER GENERATION APPLICATIONS

### Specifications

Thermodynamic 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)	17.1 (214.2)	17.3 (215.5)
	80% load l/h (g/kWh)	12.7 (212.1)	13.0 (216.0)
	50% load l/h (g/kWh)	8.6 (214.1)	9.0 (225.9)
Coolant capacity: engine only	l	~8.5	
	engine+radiator	l	~18.5
ATB (without canopy)	°C	50	
<b>No remote cooling radiator allowed</b>			
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	
	with air preheating	°C	
		-10	
		-25	

### Performance

Ratings <sup>1</sup>		1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY
Rated Output <sup>2</sup>	kWm	66	73	65	72

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 SM2A FOR POWER GENERATION APPLICATIONS

### Standard Configuration:

FPT engine N45 SM2A 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
- Recircled oil breather system
- Oil dipstick
- HWT and LOP sensors
- 12 Vdc electrical system
- User's handbook

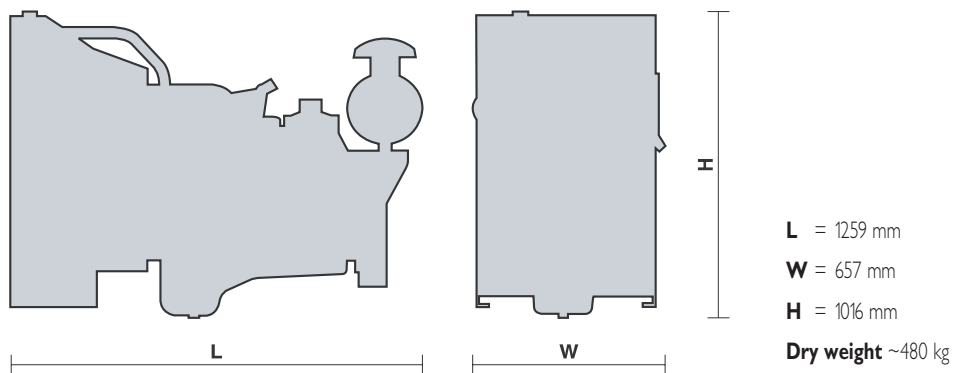
THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

### 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



## 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 switchable 1500/1800 rpm 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 fuel 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 SAE3; small size engines; complete engine power range, constancy with standard and alternative fuels in compliance with regulatory requirements

### FIAT POWERTRAIN TECHNOLOGIES

Via Puglia, 15 - 10156 Torino

### FIAT POWERTRAIN TECHNOLOGIES

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LOCAL DISTRIBUTOR