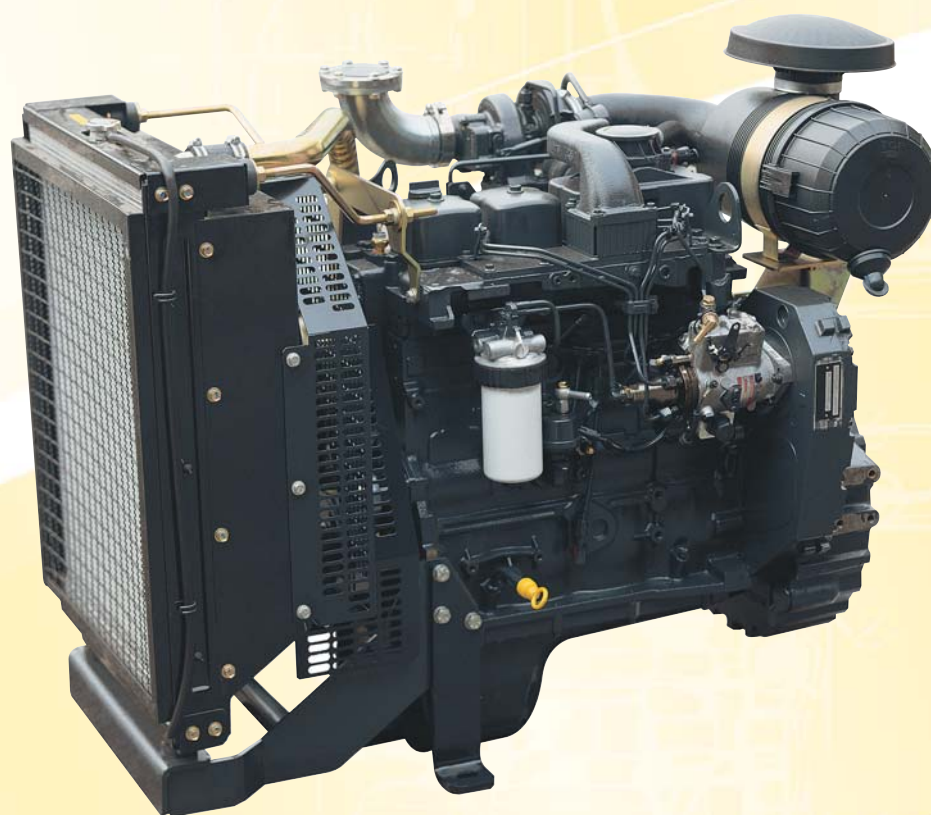


# N45 SM2X

67 kW - 90 HP@1800 rpm

EPA/CARB TIER3



**ENGINE FOR  
POWER GENERATION  
APPLICATIONS**

## N45 SM2X FOR POWER GENERATION APPLICATIONS

### Specifications

Thermodynamic cycle		Diesel 4 stroke	
Air intake		TC	
Arrangement		4, in line	
Bore x stroke	mm (in)	104x132 (4.09 x 5.20)	
Total displacement	l (in <sup>3</sup> )	4.5 (275)	
Valves per cylinder		2	
Injection system		direct	
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	1800	
	100% load l/h (g/kWh)	17.3 (231.7)	
	80% load l/h (g/kWh)	14.4 (236.9)	
	50% load l/h (g/kWh)	10.3 (252.6)	
Coolant capacity: engine only	l (US gal)	~8.5 (1.9)	
	engine+radiator	l (US gal)	~18.5 (4.9)
ATB (without canopy)	°C (°F)	55 (131)	
Lube oil total system capacity including pipes, filters etc.	l (US gal)	~12.8 (3.4)	
Electrical system		12Vcc	
Starting batteries: recommended capacity	Ah	1x100	
Discharge current (EN 50342)	A	650	
Cold starting:	without air preheating	°C (°F)	-10 (14)
	with air preheating	°C (°F)	-25 (-13)

### Performance

Ratings <sup>1</sup>		1800 rpm	
		PRIME	STAND-BY
Rated Output <sup>2</sup>	kWm (HP)	61 (81.8)	67 (89.8)

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 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 SM2X FOR POWER GENERATION APPLICATIONS

### Standard Configuration:

FPT engine N45 SM2X 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
- 12Vdc electrical system
- User's handbook

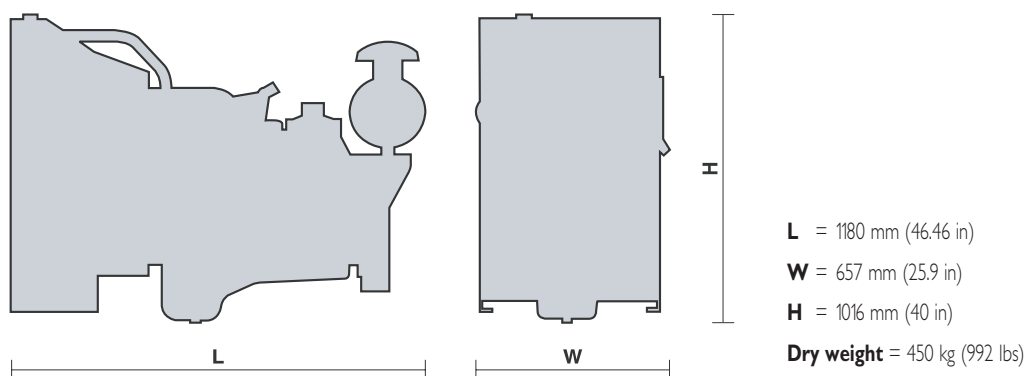
THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

### 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



## ENGINE BENEFITS

- **PERFORMANCE:** Compact packaging; starting temperature as low as 14°F (-10 °C) without starting aids; performance achieved without external EGR; consistent performance up to 104°F (40°C) and 3281 ft (1000 m) a.s.l.; first step load acceptance in class G2 (ISO 8528-5)
- **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 SAE; small size engines; consistency with standard and alternative fuels in compliance with regulatory requirements; complete engine power range

### FIAT POWERTRAIN TECHNOLOGIES

Via Puglia, 15 - 10156 Torino

### FIAT POWERTRAIN TECHNOLOGIES

Viale dell'Industria, 15/17 - 20010 Pregnana Milanese (MI)

[www.ftpowertrain.com](http://www.ftpowertrain.com)

LOCAL DISTRIBUTOR