



#### N45 TM2A FOR POWER GENERATION APPLICATIONS

# **Specifications**

Thermodinamic cycle		Diesel 4 stroke, D.I.	
Air intake		TAA	
Arrangement		4, in line	
Bore x stroke	mm	104×132	
Total displacement		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)	22.0 (207.7)	26.3 (221.0)
	80% load l/h (g/kWh)	16.2 (203.5)	19.3 (220.0)
	50% load I/h (g/kWh)	11.0 (206.5)	13.5 (226.0)
Coolant capacity: engine only		~8.5	
engine+radiator		~18.5	
ATB (without canopy)	°C	50	
No remote cooling radiator allowed			
Lube oil total system capacity including pipes, filters etc.		~12.8	
Electrical system		12Vcc	
Starting batteries: recommended capacity	Ah	1×100	
Discharge current (EN 50342)	А	650	
Cold starting: without air preheating	°C	-15	
with air preheating	°C	-25	

## **Performance**

Ratings <sup>1</sup>		150	1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY	
Rated Output <sup>2</sup>	kWm	87	96	97	107	

<sup>1)</sup> 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 TM2A FOR POWER GENERATION APPLICATIONS

# **Standard Configuration:**

FPT engine N45 TM2A equipped with:

- Mounted radiator incorporating air-to-air charge cooler
- 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
- Redirectable exhaust gas elbow
- Recirculed oil breather system
- Oil dipstick
- HWT and LOP sensors
- 12 Vdc electrical system
- User's handbook

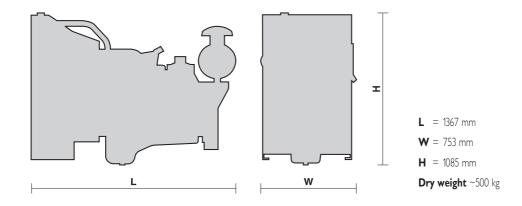
THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

## **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 Vdc electrical system

### **Overall dimensions**



### **ENGINE BENEFITS**

- PERFORMANCE: Lean lay-out; starting temperature without auxiliares 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 class (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 3; small size engines; complete engine power range; consistency with standard and alternative fuels in compliance with regulatory requirements

**FIAT POWERTRAIN TECHNOLOGIES** Via Puglia, 15 - 10156 Torino

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

www.fptpowertrain.com

LOCAL DISTRIBUTOR



