

# N45 100

## N45 MNA M10

### 4 CYLINDERS IN LINE - DIESEL CYCLE

74 kW (100 HP) @ 2800 rpm (A1)

66.5 kW (90 HP) @ 2800 rpm (B)

63 kW (85 HP) @ 2800 rpm (C)

63 kW (85 HP) @ 2800 rpm (D)

#### Specifications

Thermodynamic cycle		Diesel 4 stroke
Air intake		NA
Arrangement		4L
Bore x Stroke	mm	104 x 132
Total displacement	l	4.5
Valves per cylinder	n.	2
Cooling system		liquid
Direction of rotation (viewed facing flywheel)		CCW
Engine management		mechanical
Injection system		mechanical pump

#### Electrical system

Voltage	V	12
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#### Standard configuration

Flywheel housing	type	SAE 3
Flywheel size	inch	10
Air filter		left side
Turbocharger		Naturally Aspirated (NA)
Heat exchanger		tube type
Exhaust gas - water mixer		-
Water charge tank		included
Fuel filter	n.	1
Fuel prefilter		included (loose)
Fuel pump		included
Oil filter	n.	1
Oil sump		cast iron
Oil vapours blow-by circuit		on valve cover
Oil heat exchanger		built in the crankcase
Oil filler		on timing cover
Starting motor		12V - 3kW
Alternator		12V - 90A with W contact
Engine stop device		electrical excitation
Wiring harness		engine wiring
Painting	color	white "ICE"

#### Not included in the standard configuration

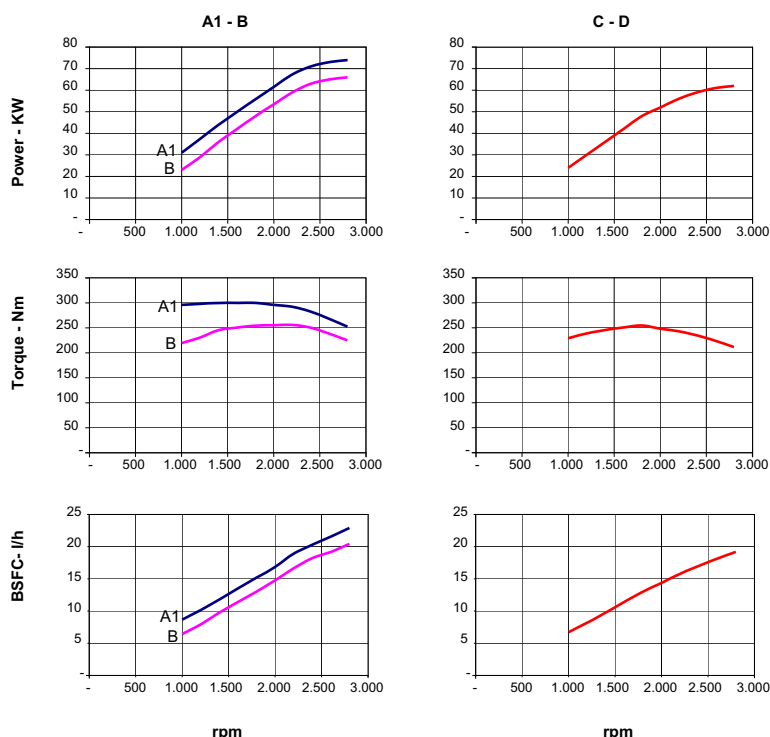
Battery - minimum capacity recommended		180 Ah
Battery - minimum cold cranking capacity recommended		800 A

FPT OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE FPT SALES NETWORK.

Rating type		A1	B	C	D
Maximum power [*]	kW(HP)	70 (100)	66.5 (90)	63 (85)	63 (85)
At speed	rpm	2800	2800	2800	2800
Maximum no load governed speed at max rating	rpm	3100	3100	3100	3100
Minimum idling speed	rpm	650	650	650	650
Mean piston speed at rated speed	m/s	12.3	12.3	12.3	12.3
BMEP at max power	kg/cm <sup>2</sup>	8.6	7.2	7.2	7.2
Specific fuel consumption at full load (best value)	g/kWh @ rpm	230 @ 1800			
Oil consumption at max rating	(% of fuel cons.)	≤ 0.1			
Minimum starting temperature without auxiliaries	°C	-10°			
Oil and oil filter maintenance interval for replacement	hours	600			

\* **Net Power** at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

**Test conditions:** ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity .



**A1** = High performance crafts.

**B** = Light duty.

Full throttle operation restricted within 10% of total use period.

Crushing speed at engine rpm < 90% of rated speed setting - Maximum usage:

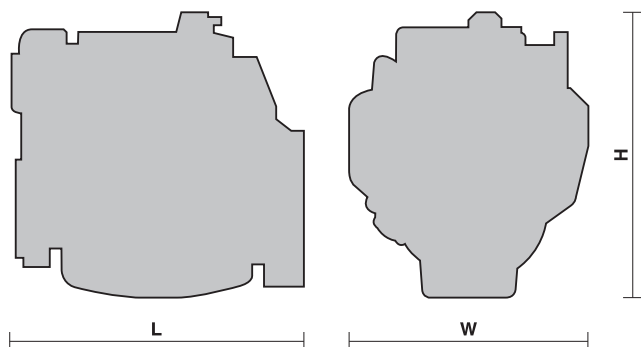
- 300 hours per year (A1 service)
- 1500 hours per year (B service)

**C** = Medium duty.

Full throttle operation < 25% of use period. Crushing speed at engine rpm < 90% of rated speed setting - Maximum usage 3000 hours per year.

**D** = Heavy duty.

Maximum rating utilisation up to 100% of use period, for unlimited hours per year.



**L** = 830 mm.

**W** = 683 mm.

**H** = 830 mm.

**Dry weight** (without marine gear) = 450 kg.