

MARINE Commercial N45

N45 100

66.5 kW

Rating type B: 66.5 kW (90 HP) @ 2800 rpm
Rating type D: 63 kW (85 HP) @ 2800 rpm

SPECIFICATIONS

Thermodynamic cycle	Diesel 4 stroke	
Air Feeding	NA	
Cylinders arrangement	4L	
Bore x Stroke	millimeters	104 x 132
Total displacement	liters	4.5
Valves per cylinder	number	2
Cooling System	liquid	
Direction of Rotation (viewed facing flywheel)	CCW	
Engine management	mechanical	
Injection System	MPI	

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 - Exhaust cooled elbow	-	
Water charge tank	included	
Fuel filter	number	1
Fuel prefilter	included (loose)	
Fuel pump	included	
Oil filter	number	1
Oil sump	cast iron	
Oil vapours blow-by circuit	on valve cover	
Oil heat exchanger	built in the crankcase	
Oil filler	by cylinder head cover	
Starter	12V - 3kW	
Alternator	12 V - 90 A with W contact	
Engine stop device	electrical excitation	
Wiring harness	with negative to ground connection	
Painting color	white "ICE"	

WEIGHT AND DIMENSIONS

Dimensions (L x W x H)	mm	811 x 700 x 836
Dry Weight	Kg	450

DIMENSIONS CAN BE CHANGED ACCORDING TO ENGINE OPTIONS



COMMERCIAL

IMAGES SHOWN ARE FOR ILLUSTRATION PURPOSE ONLY

ELECTRICAL SYSTEM

Voltage	V	12
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NOT INCLUDED IN STANDARD CONFIGURATION

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

LEGEND

Arrangement	Air Handling	Turbocharger	Injection System	Exhaust System
L (in line)	TC (Turbocharged)	WG (Wastegate)	M (Mechanical)	EGR (Exhaust Gas Recirculation)
V (90° "V" configuration)	NA (Naturally Aspirated)	VGT (Variable Geometry Turbocharger)	CR (Common Rail)	SCR (Selective Catalytic Reduction)
	TCA (Turbocharged with aftercooler)	TST (Twin Stage Turbocharger)	EUI (Electronic Unit Injector)	
			MPI (Multi Point Injection)	

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A1 High Performance Crafts. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 300 hours per year.
A2/B1 Pleasure Commercial Vessels. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1000 hours per year.
B Light Duty: Full throttle operation restricted within 10% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1500 hours per year.
C Medium Duty: Full throttle operation < 25% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 3000 hours per year.
D Heavy Duty

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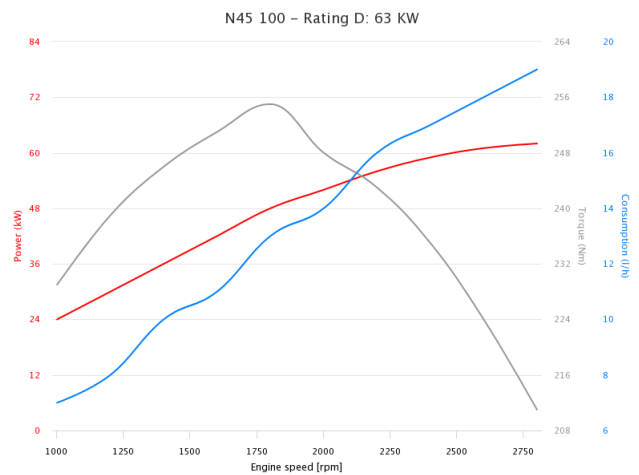
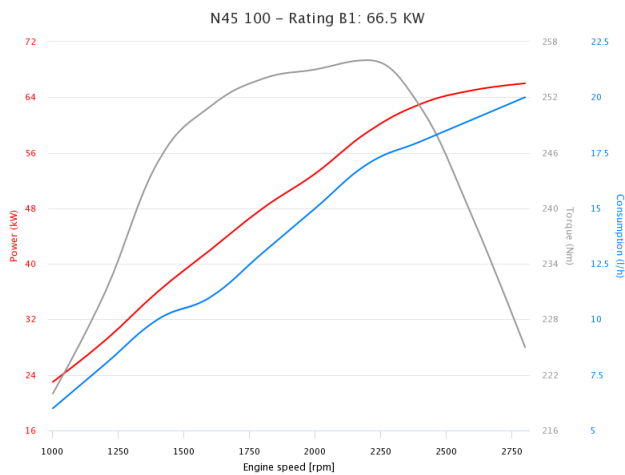


RATING TYPE

		B	D
Maximum power [*]	kW (HP)	66.5 (90)	63 (85)
At speed	rpm	2800	2800
Maximum no load governed speed at max rating	rpm	3100	3100
Minimum idling speed	rpm	650	650
Mean piston speed at rated speed	m/s	12.3	12.3
BMEP at max power	bar	7.2	7.2
Specific fuel consumption (best value)	g/kWh @ rpm	230 @ 1800	230 @ 1800
IMO Marpol Tier 2 (IMO Annex VI Technical Code 2008)		-	-
RCD Stage 2 (2013/53/EC)		-	-
IWW Stage V (EU 2016/1628)		-	-
EPA Tier 3 Commercial		-	-
EPA Tier 3 Recreational		-	-
China GB I (GB15097-2016)		-	-
China GB II (GB15097-2016)		-	-
Oil consumption at max rating	(% of fuel cons.)	= 0.1	= 0.1
Minimum starting temperature without auxiliaries	°C	-10°	-10°
Oil and oil filter maintenance interval for replacement	hours	600	600

* Net Power at flywheel according to ISO 8665, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

POWER & TORQUE



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