

# 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



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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)	VG (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)	

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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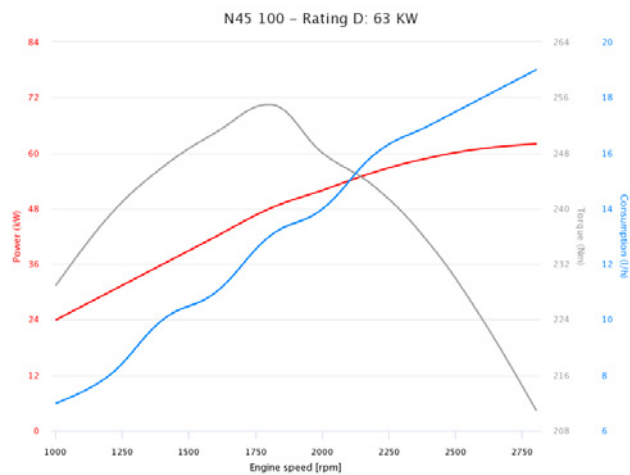
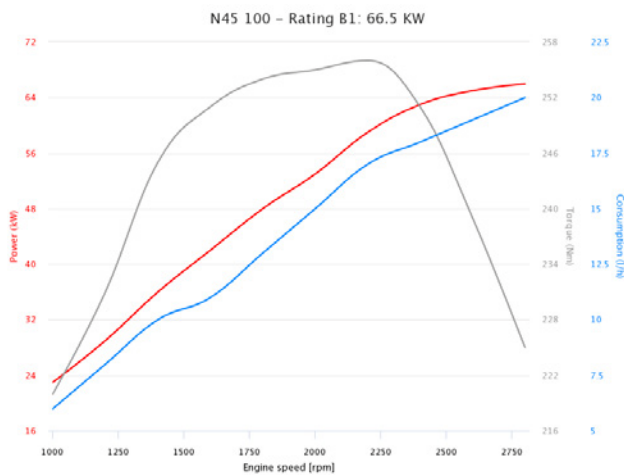


## RATING TYPE

		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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### LEGEND

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