



Diesel engine D 2866 LE405
Technical Data

Part A
Page 1
02.07.99

Engine type: four-stroke, direct-injection
 Cylinders : 6 cylinder in line, wet replaceable cylinder liners
 Aspiration : turbocharger, intercooler, wastegate
 Cooling : water circulation by centrifugal pump on engine
 Lubrication: force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit of engine
 Injection: Bosch in-line pump with mechanical speed governor
 Generator: Bosch three-phase generator with rectifier and transistorized governor, 28 V, 55 A
 Starter motor: Bosch solenoid-operated starter, typ KB, 24 V, 5,4 kW

Bore :	128 mm	Starter battery capacity:	143 Ah (24V)
Stroke :	155 mm	Filling capacities:	
Volume :	11,97 l	- Engine lube oil for	
Compression ratio:	15,5:1	standard oil sump (min.):	14 l
		standard oil sump (max.):	18 l
Cooling water temperature:		Inertia moments (SI-Unit):	
- under normal conditions	90° C	- engine and vibration dampers	0,914 kgm ²
- short period under extreme conditions	95° C	- flywheel for :	
- before start of full load (min.)	40° C	variable speed :	
		marine propulsion engine	1,975 kgm ²
Filling capacities:		Speed droop variable speed	max. 15%
- coolant for engine with integrated cooling system and piping approx	58 l		



Diesel engine D 2866 LE405
 Technical data for marine diesel engine

Part A
 Page 2
 02.07.99

Mode of operation		3
Speed	rpm	2200
Maximum rating	kW	449
	HP	610
Exhaust status		IMO/ZKR
Mean effective pressure	bar	20,5
Torque	Nm	1949
Mean piston velocity	m/s	11,37
Fuel consumption (+5% tolerance)		
Mode of operation 1	g/kWh	---
Mode of operation 2	g/kWh	---
Mode of operation 3	g/kWh	233
Lube oil consumption max.	g/h	510
Air for combustion	m ³ /h	1910
Negative pressure at air filter outlet, max. permissible	hPa	80
Exhaust gas heat	kW	300
Exhaust gas temperature	°C	460
Exhaust gas mass flow	kg/h	2200
Exhaust gas volume flow	m ³ /h	4440
Exhaust gas back pressure max. permissible	hPa	80
Jacket water heat incl. water-cooled exhaust manifold	kW	360
Minimum cooling water circulation	l/min	540
Intercooler heat rate	kW	90
delivery quantity of fuel supply pump	l/h	250
Power input for raw water pump	kW	3
delivery quantity of raw water pump at a back pressure of 0,6 bars	l/h	23000
Radiation heat	kW	63



Speed	rpm	2200
Noise at 1m distance	dB(A)	103
Weight (dry, with cooling system)	kg	1160

Examples of application for mode of operation see Part E :

" Definition of application for MAN marine engines "

The nominal ratings are based on reference conditions according to DIN / ISO 3046/1: 298 K (25° Celsius) air temperature, 100 kPa (1000 mbar) air pressure, 60 % air humidity.

Output-related data are referred to the maximum rating specified for each speed.

Maximum permissible seawater temperature : 305 K (32° Celsius)

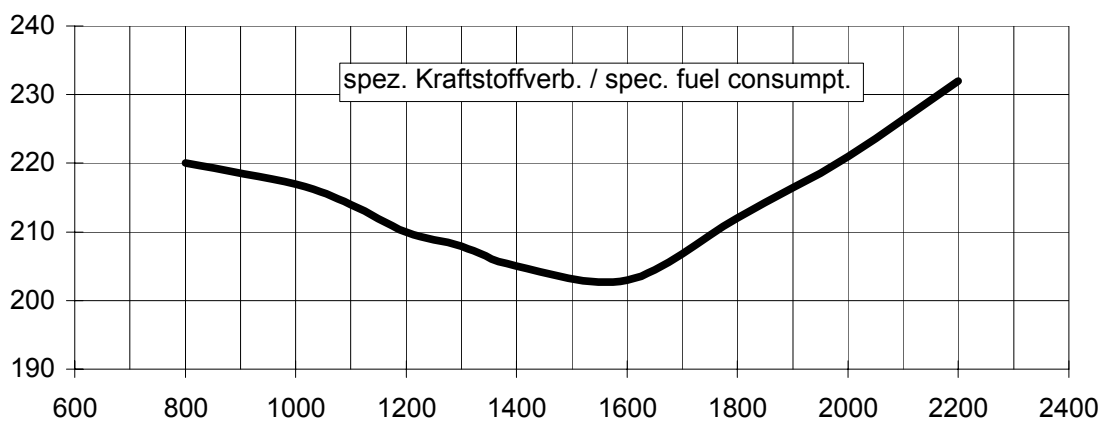
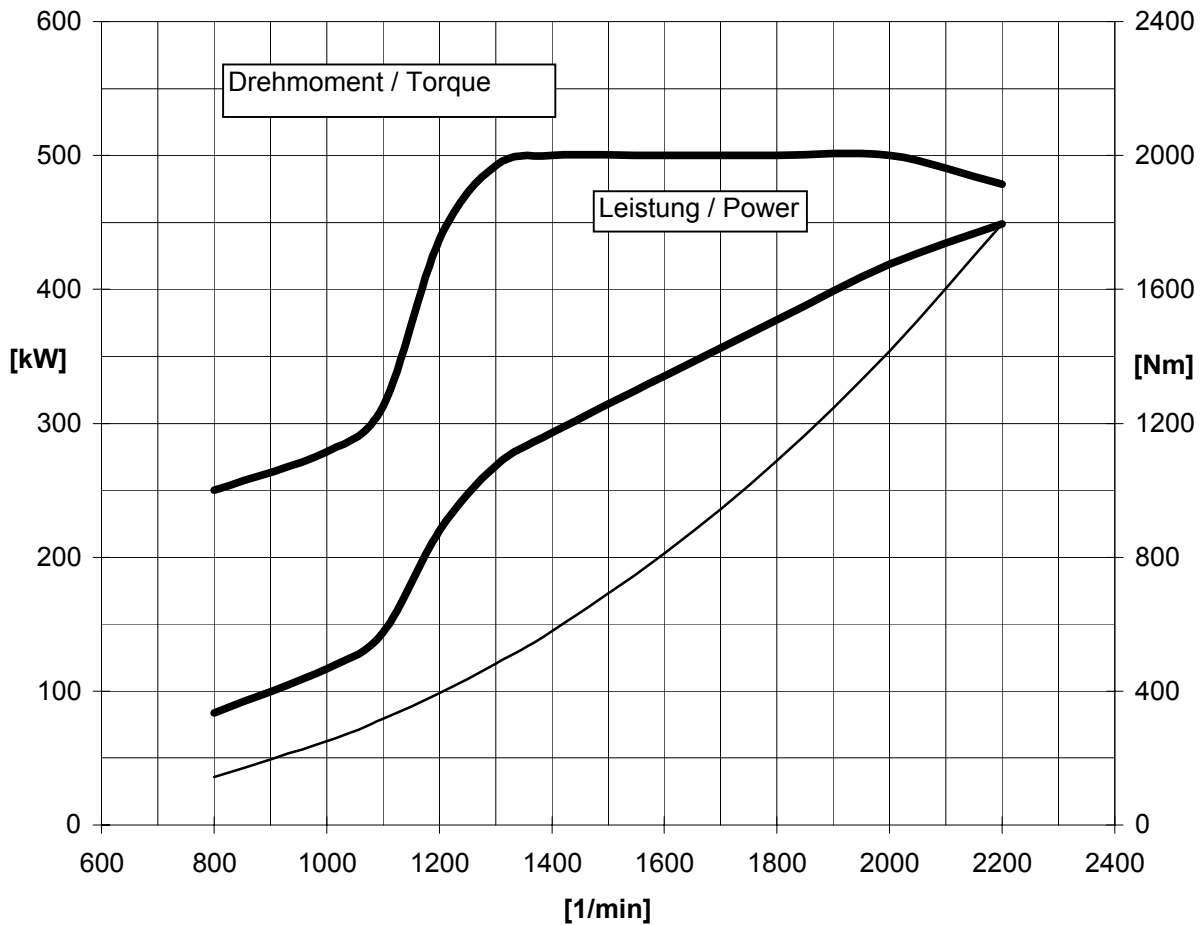
Technical data are subjekt to alterations.



Leistungsdiagramm und Kraftstoffverbrauch
 Performance Curve and Fuel Consumption
 Vorläufige Ausgabe - nicht zur Weitergabe an Dritte !

Motortyp

D2866LE405



Höchstleistung für Boote in Gleiterausführung: 449 kW bei 2200 1/min
 Maximum output for boats with planning hull: 449 kW at 2200 rpm

Leistungsangaben gemäß Bezugszustand DIN 6271 / ISO 3046/1
 The ratings are based on reference conditions according to DIN 6271 / ISO 3046/1

Propellerkurve basiert auf Exponent 2,50
 Propeller curve calculated at 2,50 exponent

VET-N 13.08.02