

MTU

Friedrichshafen Products and Services



mtu
Deutsche Motoren



MTU Products

General-Purpose Diesel Engines

Compact, heavy-duty, four-cylinder diesel engines, medium power generation, auxiliary vehicle applications.

Special-Purpose Diesel Engines

Compact, heavy-duty, four-cylinder diesel engines, auxiliary applications in the military domain.

Complementary Products

Transmissions

- Heavy-duty, medium-power gear and planetary applications, also available on forklifts
- Fluid-torque-converter coupling for power transmission, gear-compensated availability

Electrics

- Electrical generators, industrial systems up to 1000 kVA, generator sets and power MTU engine units for mobile power generation

More Features

Comprehensive maintenance-free design to lower engine life-cycle expenses. Available electronic (EM) fuel control system. The latest emissions and performance strategies ensure compliance in addition to 100% availability. Superior design and construction, the strength of 10-year program, longer service life (10,000 hours/20,000 hrs).

MTU's product portfolio has become increasingly diversified since 1990, as new divisions have consolidated MTU's core competencies under MTU.

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Technical data highlights of various applications showing MTU's strong position in generating power.

Program and Ratings

General-Purpose Diesel Engines			
Year of Delivery	Engine Model	Power (kW)	EM
1990	4000	100	EM
1990	4000	100	
1990	4000	100	
1990	4000	100	
1990	4000	100	

Special-Purpose Diesel Engines			
Year of Delivery	Engine Model	Power (kW)	EM
1990	4000	100	EM
1990	4000	100	
1990	4000	100	



Year	2018	2019	2020
Phase 1	Active	Active	
Phase 2		Active	Active
Phase 3			Active

Complementary Products	
	High-quality, durable, and reliable gear.
	High-quality, durable, and reliable gear.
	High-quality, durable, and reliable gear.

Key Features	
The most advanced and integrated technology in the industry.	
	1,000,000
	1,000,000

Series

099



Volvo Penta 099

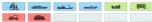
Technical Data

Engine model		099
HP at 5000rpm		60 / 55
Cylinder arrangement		6-cyl
Stroke/cyl	mm	87-87.5
Max. fuel intake	l/h (gph)	28.2 (38.5)
Max. speed	km/h	30.0

Typical Applications



Application Spectrum





183 HP 183C

Technical Data

Engine model	183-B	183-C		
No. of cylinders	4 (2x2) 50° DIY	4	4 (2x2)	
Cylinder arrangement	DIY	in-line	DIY	
Block/crank	mm 128x142	128x142	128x142	
Max. net output	HP (kW)	242 (176)	242 (176)	242 (176)
Max. speed	rpm	3000	3000	3000

Typical Applications



Application Spectrum



Series

396



396 T304

Technical Data

Engine model	396 T304	396 T304	396 T304
No. of cylinders	6x 120/150	6x 120/150	7x 150
Cylinder arrangement	60°V	60°V	60°V
Bore/stroke	mm 150/150	150/150	150/150
Power and output kW/HP	172/230	140/190	160/216
Rev. speed rpm	900	2100	2100

Typical Applications



Application Spectrum



Series

538



2012/13 538

Technical Data

Engine model	538-01	538-02
No. of cylinders	18V 18V 20V	18V 20V
Compression ratio	20:1	20:1
Displacement	lit	185/200
Max. HP (kW)	167 (120)	200 (146)
Max. speed	km	130

Typical Applications



Application Spectrum



Series

956/1163



Technical Data

956/1163 9563

Engine model	956-C1	956-C2	1163-C1	1163-C2
Net power (kW)	224 (304.350)		324 (438.300)	
Cylinder arrangement	60°V			
Displacement (cm ³)	226,000		280,000	
Max. net output (kW (bhp))	224 (304)	224 (304)	280 (380)	320 (430)
Max. speed (rpm)	1800			

Typical Applications



Application Spectrum



Power Transmission

Marine Gears Hydrodynamic Couplings



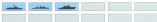
Technical Data

Model	Marine Gears				Hydrodynamic Couplings	
	K22 41	K22 90	K22 90	K22 80V	K22 80	K22 90
Max torque	Nm	300	2000	2000	4000	4000
Max input speed	rpm	300	500	500	300	500
Ratio		1.0-2.88	1.0-2.88	1.1-3.2	1.04-2.88	-
Weight	kg	550	500	240	240	550

Typical Applications



Application Spectrum



Series

837



837 837

Technical Data

Engine model	837B3		837B3	837B3
No. of cylinders	6		6	6
Cylinder arrangement	90°V			
Bore/stroke	mm	160/175		
Max power	600 (gross)	620 (gross)	640 (gross)	660 (gross)
Max speed	rpm	2200	2200	2200

Typical Applications



Application Spectrum



Series

870



M870

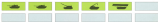
Technical Data

Engine model		M870	M870
No. of cylinders		6	7
Cylinder arrangement		V6/V7	
Bore/stroke	mm	175/205	
Max. power	horsepower	660 (500)	600 (450)
Max. speed	rpm	2000	2000

Typical Applications



Application Spectrum



Series

880



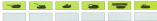
Technical Data

Engine model	880 800	880 800	880 800	880 800
No. cylinders	6*	6*	10*	10*
Cylinder arrangement	90°V			
Stroke	98/102			
Max. power	400 (284) kW	500 (355) kW	700 (500) kW	1000 (720) kW
Max. speed	900	800	800	800

Typical Applications



Application Spectrum



Series

870



140 870

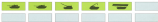
Technical Data

Engine model		140 870	140 870
No. of cylinders		6H	7D
Cylinder arrangement		60°V	
Bore/stroke	mm	175/205	
Max. power	horsepower	680 (5000)	620 (1800)
Max. speed	rpm	2000	2000

Typical Applications



Application Spectrum



MTU's Scope of Services

System Components

Single-point responsibility is one of the major elements of MTU's propulsion system offerings. In addition to system components designed and produced "in house", MTU identifies subcontractor equipment.



Propellers



Shaft and Shaft-related components



Shaft and Gear-related technology



Shaft and Gear-related parts



Shaft and Gear-related components for auxiliary systems



Shaft and Gear-related components for auxiliary systems



Shaft and Gear-related components for auxiliary systems

Management and Engineering

In addition, MTU provides total engineering and management services for the propulsion system. This includes system management, design, production, and engineering support, project handling, and the complete test & trial effort.

System Management



Application Engineering

Installation/Investigation



Product Support

Standing firm
through all your
Management
needs for a price

System Integrators

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IBM's Product Support options guarantee comprehensive system-level IT, onsite and/or remote, 24x7x365, and special consideration being given to equipment maintenance and care.

The all-encompassing support solution starts as early as the system definition phase and spans the entire life of the product, in both hardware and software markets, to deliver specific supportable.



Customer Support

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Onsite Support

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Hardware Maintenance

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Software Support

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Training

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Field Service

- 24x7x365 Support
- IBM, HP, Dell, and other
- Remote Support

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Elektrotechnik

MTU, Fabrikanten und Lieferanten für Antriebstechnik GmbH

P.O. Box 10000 • D-70809 Ludwigsburg • Germany

Phone: 0194 41084 • Telex: 710240 G m m d • Telex: 679 410200-1

<http://www.mtu.com>