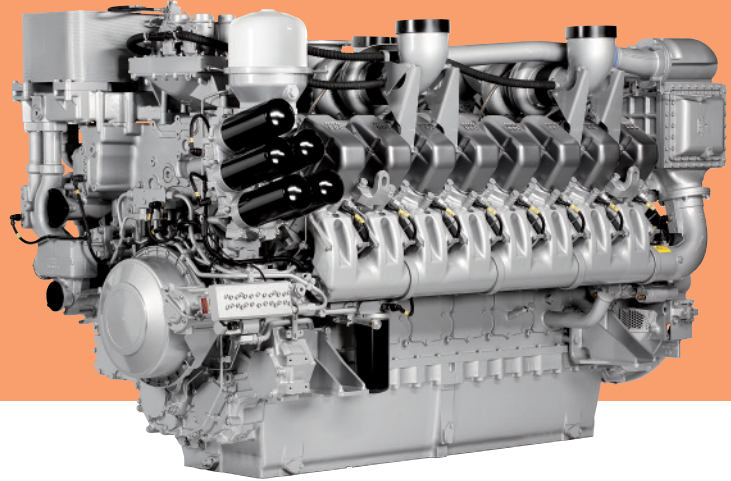


Series 4000-03

for PowerGen Applications



Application Group	Prime Power 3B	Standby Power 3D
Engine typ	Rated Power kW (bhp) at 1500 rpm (50 Hz)	
Optimization	<input checked="" type="checkbox"/> or ①	<input checked="" type="checkbox"/>
12V 4000 G23	1420 (1904)	1575 (2112)
12V 4000 G63	1575 (2112)	1750 (2347)
16V 4000 G23	1798 (2411)	1965 (2635)
16V 4000 G63	1965 (2635)	2185 (2930)
20V 4000 G23	2200 (2950)	2420 (3245)
20V 4000 G63	2420 (3245)	2670 (3580)
20V 4000 G63 L	2590 (3473)	2850 (3822)
Engine typ	Rated Power kW (bhp) at 1800 rpm (60 Hz)	
Optimization	<input checked="" type="checkbox"/> or ③	<input checked="" type="checkbox"/> or ③
12V 4000 G43	1520 (2038)	1736 (2328)
12V 4000 G83	1736 (2328)	1910 (2561)
16V 4000 G43	2020 (2709)	2280 (3058)
16V 4000 G83	2280 (3058)	2500 (3352)
20V 4000 G43	2490 (3339)	2740 (3674)
20V 4000 G83	2740 (3674)	3010 (4036)
20V 4000 G83 L	3010 (4036)	3490 (4680)

Optimization: ① Exhaust emission TA-Luft
 ③ Exhaust emission EPA 40 CFR 89/Tier 2
 Fuel consumption

Fan drive power not included

Application	Definition	
3B	Continuous operation with variable load	Load factor: < 75 %
		Operating hours/year: unrestricted
		Overload: 10% capability (ICXN)
3D	Standby operation with variable load	Load factor: < 85 %
		Operating hours/year: max. 500 h/year
		Overload: Fuel stop power (ICFN)

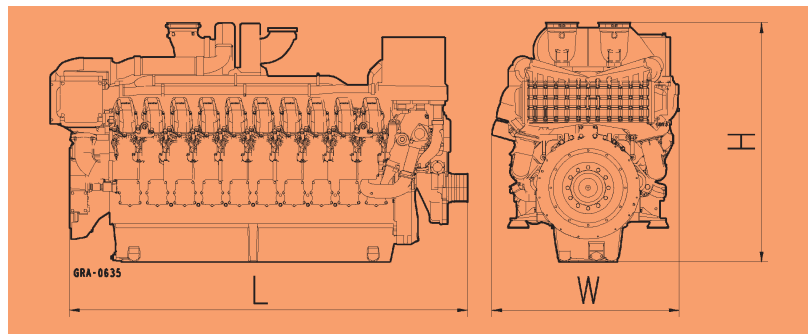
Power output within 5% tolerance at standard conditions. Power definition according to ISO 3046 (ratings also correspond to SAE J 1995 and SAE J 1349 standard conditions). Consult your MTU Detroit Diesel or MTU distributor/dealer for the rating that will apply to your specific application.



Technical Data

Engine Specifications

Cyl. configuration	90°V
Bore/Stroke	170/210 mm (6.7/8.3 in)
Cyl. displacement	4.77 lit. (291 cu in)
Displacement, total	12V: 57.3 lit. (3493 cu in)
	16V: 76.3 lit. (4656 cu in)
	20V: 95.4 lit. (5822 cu in)
Fuel specification	EN 590, Grade No. 1-D/2-D (ASTM D975-00)



Reference conditions:

Intake air temperature:	25°C (77° F)
Charge air coolant temp.:	55°C (131° F) ① ☒
Charge air coolant temp.:	45°C (113° F) at standby power and ③
Ambient air pressure:	1000 mbar
Altitude above sea level:	100 m
Rated power available up to 40°C und 400 m	

Engine	Dimensions (L x W x H) mm (in)	Mass, dry kg (lbs)
12V	2410 x 1660 x 2160 (95 x 65 x 85)	6200 (13670)
16V	2865 x 1660 x 2155 (113 x 65 x 85)	7700 (16975)
20V	3410 x 1615 x 2050 (134 x 64 x 81)	9640 (21255)

All dimensions are approximate; for complete information refer to the installation drawing.

Standard Equipment

Starting System	Electric starter 24 VDC / 2-pole
Lube Oil System	Forced-feed lubrication system with piston cooling, lube oil circulation pump, lube oil multi-stage filter, lube oil heat exchanger
Fuel Oil System	„Common-Rail“ fuel injection system, with low and high pressure fuel pumps, fuel pressure accumulator, high pressure lines and electronically controlled injection,
Coolant System	Coolant circulating pump and coolant thermostat for jacket water and Charge air cooling circuit.
Combustion Air System	Exhaust turbochargers, intercooler, Set of dry-type air filters .
Engine Mounting	Set of engine mounting brackets for resilient mounting.
Engine management	Integrated electronic engine control and monitoring system MDEC
ESCM	Engine Site Condition Management system

Optional Equipment

Starting System	Compressed air starter motor, redundant starting systems.
Lube Oil System	Centrifugal oil filter, oil replenishment system.
Fuel Oil System	Fuel pre-filter, special pre-filter with water separator
Coolant System	Electric coolant preheating unit, radiator-cooler mech. or electric driven.
Combustion Air System	Heavy duty air filter
Engine Mounting	Resilient engine mounts, rigid engine mounting.
System Management	Service and Application Module (SAM), suitable for installation in switchgear cabinet.

Subject to change without notice. Customization possible. Engines illustrated in this pamphlet may feature options not fitted as standard.

Tognum Group Companies

Europe / Middle East / Africa / Latin America

MTU Friedrichshafen GmbH
88040 Friedrichshafen
Germany
Phone +49 7541 90 7006
Fax +49 7541 90 7084
powergenregion1@mtu-online.com
www.mtu-online.com

Asia / Australia / Pacific

MTU Asia Pte. Ltd.
1, Benoi Place
Singapore 629923, Republic of Singapore
Phone +65 6861 5922
Fax +65 6861 3615
powergenregion2@mtu-online.com
www.mtu-friedrichshafen.com.sg

USA / Canada / Mexico

MTU Detroit Diesel, Inc.
13400 Outer Drive West
Detroit, Michigan 48239, USA
Phone +1 313 592 5708
Fax +1 313 592 5158
powergenregion3@mtu-online.com
www.mtudetroitdiesel.com