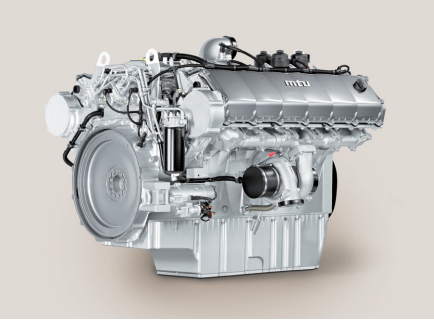
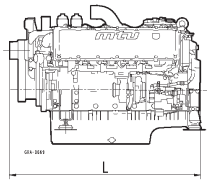
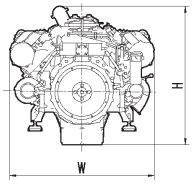
Gendrive

Series 12V 1600 G_0

for GenDrive Application with Air Charge-Air Cooling







Dimensions and Masses

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V 1600	1635x1235x1225 (64.4x48.6x48.2)	2075 (3874)

All dimensions and weights are approximate and without air filters and radiator. For complete information refer to the installation drawing.

Engine Model		
Bore/stroke	mm (in)	122/150 (4.8/5.9)
Cylinder configuration		90°V
Displacement/cylinder	l (cu in)	1.75 (107)
Displacement, total	l (cu in)	21.0 (1282)
Fuel specification		EN 590, Grade No.1-D/2-D (ASTM D975-00)

Application Group	Prime Power 3B	Prime Power limited 3C	Standby Power 3D
Optimization	☒ ① ㉒	☒ ①	☒ ㉒
Engine type	**Rated Power kW (bhp) at1500 rpm (50 Hz)**		
12V 1600 G10F	524 (703)	-	-
12V 1600 G20F	576 (772)	-	-
12V 1600 G40F	-	524 (703)	-
12V 1600 G50F	-	576 (772)	-
12V 1600 G70F	-	-	576 (772)
12V 1600 G80F	-	-	634 (850)
Optimization	☒ ①		
Engine type	**Rated Power kW (bhp) at 1500 rpm (50 Hz, for rental markets)**		
12V 1600 B50F	576 (772)	-	-

Optimization: ☒ Fuel consumption ① Exhaust emission (TA-Luft optimized 1500) ㉒ Exhaust emission ARAI/2004

Power. Passion. Partnership.

Application Group	Prime Power 3B	Prime Power limited 3C	Standby Power 3D
Optimization	③ ⑲		③ ⑲
Engine type	**Rated Power kW (bhp) at 1800 rpm (60 Hz)**		
12V 1600 G10S	561 (752)	-	-
12V 1600 G20S	608 (815)	-	-
12V 1600 G70S	-	-	613 (822)
12V 1600 G80S	-	-	668 (896)
Optimization	☒		
Engine type	**Rated Power kW (bhp) at 1800/1500 rpm (60/50 Hz, switchable, for rental markets)**		
12V 1600 B30S	561/ 524 (752/703)	-	-
12V 1600 B40S	608/ 576 (815/ 772)	-	-

Optimization: ☒ Fuel consumption ③ Exhaust emission (EPA 40 CFR 89/Tier 2) stationary emergency ⑲ Exhaust emission (EPA 40 CFR 89/Tier 2) compliant **
** Not allowed to be operated in the USA

Application	Power definition	
3B	Continuous operation w/variable load	Load factor: < 75%, Operating hours: unrestricted, Overload: 10% capability (ICXN)
3C	Standby operation w/variable load	Load factor: < 75%, Operating hours: max. 1000, Overload: 10% capability (ICXN)
3D	Standby operation w/variable load	Load factor: < 85%, Operating hours: max. 500, Overload: Fuel stop power (IFN)

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 distributor/dealer for the rating that will apply to your specific application.
Rated power is without fan drive. The power consumption of any fan drive has to be deducted during designing of a generator set.

Standard Equipment	
Starting System	Single electric starter 24 VDC/2-pole
Lube Oil System	Forced feed lubricating system with piston cooling, lube oil circulation pump, multi stage oil filter, lube oil heat exchan.
Fuel Oil System	Common-rail fuel injection system with low and high pressure fuel pumps, fuel pressure accumulator and electronically controlled
Cooling System	Coolant circulating pump and coolant thermostat for jacket water circuit, engine mounted fan drive, front type radiator for jacket water and charge air
Combustion Air System	2 exhaust turbochargers, air-to-air intercooler integrated in radiator, set of dry type air filters
Engine Mounting	Set of engine mounting brackets for resilient mount
Flywheel housing/Flywheel	SAE 1/SAE 14
Electronics and Instrumentation	Integrated electronic engine control and monitoring system ADEC

Optional Equipment	
Starting System	Redundant starting system electric/air; electric/electric; air/air
Fuel Oil System	Fuel pre-filter, special pre-filter with water separator
Cooling System	Radiators for different ambient temperatures and duct requirements
Combustion Air System	Heavy-duty air filters
Engine Mounting	Resilient engine mounts, rigid engine mounting
Flywheel housing/Flywheel	SAE 0/SAE 18
Electronics and Instrumentation	Peripheral interface modules, suitable for installation in switchgear cabinet

Reference conditions: > Intake-air temperature: 25°C (77°F) > Ambient air pressure: 1000 mbar > Altitude above sea level: 100 m
Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard.

Europe | Middle East | Africa | Latin America, MTU Friedrichshafen GmbH, 88040 Friedrichshafen, Germany, T +49 7541 90 7006, F +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, T +65 6861 5922, F +65 6861 3615, powergenregion2@mtu-online.com, www.mtu-online.com.sg | **USA | Canada | Mexico,** MTU Detroit Diesel, Inc., 13400 Outer Drive West, Detroit, Michigan 48239, USA, T +1 313 592 5708, F +1 313 592 5158, powergenregion3@mtu-online.com, www.mtu-detroitdiesel.com

Subject to change. | 3233591 | 1/11 | VMC 2011-05.