

Gendrive

Series 12V 1600 G_0

for Generator Drive Application with Air Charge-Air Cooling

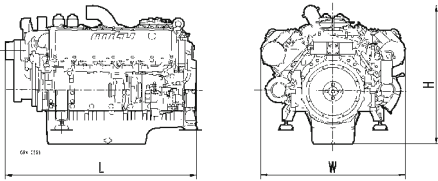


Dimensions and Masses

Engine	Dimensions (LxWxH)	Mass, dry
12V 1600	1715x1594x888 mm (67.5x62.8x35 in)	2075 kg (4575 lbs)

All dimensions are approximate, 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 (1285)
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	<input checked="" type="checkbox"/> or ①	<input checked="" type="checkbox"/> or ①	<input checked="" type="checkbox"/> or ①
Engine type	Nominal Power kW (bhp) at 1500 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	<input checked="" type="checkbox"/> or ①		
Engine type	1500 rpm - 50Hz, for rental markets		
12V 1600 B50F	576 (772)	-	-

Optimization: Fuel consumption

① Exhaust emission (TA-Luft)



Power. Passion. Partnership.

Application Group	Prime Power 3B	Prime Power limited 3C	Standby Power 3D
Optimization	③		③
Engine type	Nominal 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	③		
Engine type	1800/1500 rpm - 60/50Hz, switchable, for rental markets		
12V 1600 B40S	608/ 576 (815/ 772)	-	-

Optimization: ③ Exhaust emission (EPA 40 CFR 89/Tier 2)

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 Detroit Diesel or 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	Electric starter 24 VDC / 2-pole
Alternator	Charging alternator (28 V, 55A)
Lube Oil System	Forced feed lubricating system with piston cooling, lube oil circulation pump, multi stage oil filter, lube oil heat exchanger
Fuel Oil System	Electronically controlled high-pressure injection with single unit injection pumps (EUP)
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, intercooler integrated in radiator, set of dry type air filters
Engine Mounting	Set of engine mounting brackets (rigid mounts) for optional resilient mount
Electronics and Instrumentation	Integrated electronic engine control and monitoring system ADEC

Optional Equipment	
Starting System	Redundant starting system electric/electric
Fuel Oil System	Fuel pre-filter with water separator, fuel cooler
Cooling System	Radiators for different ambient temperatures and duct requirements
Combustion Air System	Air intake pipework, exhaust flange, heavy duty airfilters (03/2010)
Engine Mounting	Resilient engine mounts
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 to standard engine.

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