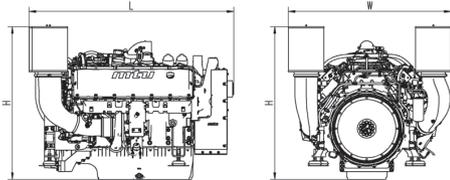
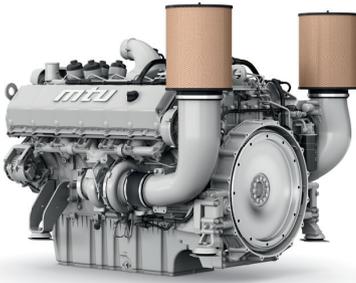




Gendrive

SERIES 1600 GX0 AND GX1

for power generation standby applications
with air-to-air charge air cooling



Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V 1600 Gx0	1763 x 1318 x 1327 (69 x 52 x 52)	1855 (4090)
12V 1600 Gx1	1817 x 1445 x 1365 (72 x 57 x 54)	2170 (4784)

All dimensions & weights are approximate, for complete information refer to the installation drawing.

Engine model	Gx0	Gx1
Bore/stroke mm (in)	122/150 (4.8/5.9)	126/150 (5.0/5.9)
Cylinder configuration	12 cyl. - 90°V	12 cyl. - 90°V
Displacement, cylinder l (cu in)	1.75 (107)	1.87 (114)
Displacement, total l (cu in)	21.0 (1282)	22.4 (1367)
Fuel specification	EN 590, Grade No.1-D/2-D (ASTM D975-00), EN 15949 (e.g. HVO)	

Application group	Power definition	
Standby power (3D)	Emergency standby power, IFN	Load factor: ≤ 85%, operating hours: max. 500/year, overload capability: no (IFN)
Prime power for stationary emergency (3E)	Emergency service, ICXN	Load factor: ≤ 85%, operating hours: max. 500/year, overload capability: 10% (ICXN)
Data center continuous power (3F)	Heavy duty for DCP, unrestricted, ICXN	Load factor ≤ 100%, operating hours: unlimited, overload capability: 10% (ICXN)

Power definition according to ISO 3046 (ratings also correspond to SAE J 1995 and SAE J 1349 standard conditions). Consult your **mtu** distributor 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.



A Rolls-Royce solution

Standby power (3D)

Engine type	Rated power kW (bhp) at	Optimization					
		1500 rpm (50Hz)	1	8	19	24	25*
12V 1600 G70F	576 (772)	x				x	x*
12V 1600 G80F	634 (850)	x				x	x*
12V 1600 G71F	740 (992)	x			x	x	
12V 1600 G81F	787 (1055)	x			x	x	
12V 1600 G91F	888 (1191)	x			x	x	
	1800 rpm (60Hz)	x	3	7	19	20	
12V 1600 G70S	613 (822)		x		x		
12V 1600 G80S	668 (896)		x		x		
12V 1600 G51S	730 (979)		x			x	
12V 1600 G61S	783 (1050)		x			x	
12V 1600 G71S	836 (1121)		x			x	
12V 1600 G81S	890 (1194)		x			x	
12V 1600 G91S	996 (1336)		x			x	

Fan power requirement not considered, reference to emission level in price list

- x Fuel consumption optimized
- 1 NOx emission optimized (only for stationary application)
- 3 US EPA Stationary EMERG Tier 2 (40 CFR 60)
- 7 US EPA Stationary EMERG Tier 3 (40 CFR 60)
- 8 EU 97/68 EC Stage III A compliant (for stationary application)
- 19 US EPA Nonroad Tier 2 compliant (40 CFR 89)
- 20 US EPA Nonroad Tier 3 compliant (40 CFR 89)
- 24 NEA Singapore for ORDE
- 25 MoEF India/CPCB Stage II
- * on request only

Prime power for stationary emergency (3E)

Engine type	Rated power kW (bhp) at	Optimization					
		1500 rpm (50Hz)	1	8	19	24	25*
	1500 rpm (50Hz)	x	1	8	19	24	25*
12V 1600 G10F	524 (703)	x	x			x	x*
12V 1600 G20F	576 (102)	x	x			x	x*
12V 1600 G11F	673 (903)	x			x	x	
12V 1600 G21F	715 (959)	x			x	x	
12V 1600 G31F	806 (1081)	x			x	x	
	1800 rpm (60Hz)	3	7	19	20		
12V 1600 G10S	561 (752)	x					
12V 1600 G20S	608 (815)	x					
12V 1600 G01S	664 (890)	x					
12V 1600 G11S	712 (955)	x					
12V 1600 G21S	760 (1019)	x					
12V 1600 G31S	809 (1085)	x					
12V 1600 G41S	905 (1214)	x					

Fan power requirement not considered, reference to emission level in price list

x Fuel consumption optimized

1 NOx emission optimized (only for stationary application)

3 US EPA Stationary EMERG Tier 2 (40 CFR 60)

7 US EPA Stationary EMERG Tier 3 (40 CFR 60)

8 EU 97/68 EC Stage III A compliant (for stationary application)

19 US EPA Nonroad Tier 2 compliant (40 CFR 89)

20 US EPA Nonroad Tier 3 compliant (40 CFR 89)

24 NEA Singapore for ORDE

25 MoEF India/CPCB Stage II

* on request only

Data center continuous power (3F)

Engine type	Rated power kW (bhp) at	Optimization					
		x	1	8	19	24	25*
	1500 rpm (50Hz)	x	1	8	19	24	25*
12V 1600 G10F	524 (703)	x	x			x	x*
12V 1600 G20F	576 (102)	x	x			x	x*
12V 1600 G11F	673 (903)	x			x	x	
12V 1600 G21F	715 (959)	x			x	x	
12V 1600 G31F	806 (1081)	x			x	x	
	1800 rpm (60Hz)	x	3	7	19	20	
12V 1600 G10S	561 (752)		x		x		
12V 1600 G20S	608 (815)		x		x		
12V 1600 G01S	664 (890)		x			x	
12V 1600 G11S	712 (955)		x			x	
12V 1600 G21S	760 (1019)		x			x	
12V 1600 G31S	809 (1085)		x			x	
12V 1600 G41S	905 (1214)		x			x	

Fan power requirement not considered, reference to emission level in price list

x Fuel consumption optimized

1 NOx emission optimized (only for stationary application)

3 US EPA Stationary EMERG Tier 2 (40 CFR 60)

7 US EPA Stationary EMERG Tier 3 (40 CFR 60)

8 EU 97/68 EC Stage III A compliant (for stationary application)

19 US EPA Nonroad Tier 2 compliant (40 CFR 89)

20 US EPA Nonroad Tier 3 compliant (40 CFR 89)

24 NEA Singapore for ORDE

25 MoEF India/CPCB Stage II

* on request only

Standard equipment	
Starting system	1 electric starter (24 VDC/2-pole)
Fuel system	“Common-rail“ fuel injection system, with low and high pressure fuel pumps, fuel pressure accumulator, high pressure fuel lines and electronically controlled injection
Lube oil system	Forced feed lubrication system with piston cooling, lube oil circulation pump with safety valve, lube oil filter, lube oil heat exchanger
Combustion air system	Exhaust turbochargers, intercooler - integrated in radiator
Cooling system	Coolant circulation pump and coolant thermostat for jacket water cooling circuit, engine mounted fan drive, front type radiator for jacket water and charge air cooling circuit with integrated expansion tank
Engine mounting	Set of engine mounting brackets at engine free and driving end
Engine management	Integrated electronic engine control and monitoring system ECU & Smart Connect
Optional equipment	
Starting system	Redundant starting system electric; electric/electric
Fuel system	Fuel pre-filter, special pre-filter with water separator
Lube oil system	Hand pump for oil extraction
Combustion air system	Heavy duty air filters, intake air silencer (only for Gx0)
Engine mounting	Resilient engine mounts fixed height, resilient engine mounts height adjustable, rigid engine mounting
Exhaust system	Companion flanges, exhaust compensators, heat protection shield

Reference conditions:

- > Intake-air temperature: 25°C (77°F)
- > Ambient air pressure: 1 bar (14.5 psi)
- > Altitude above sea level: 100 m (328 ft)

Customization possible. Engines illustrated in this document may feature options not fitted as standard. For more information please contact your **mtu** dealer.