Gendrive

SERIES 4000 GX4
for power generation standby applications
with water-to-air charge air cooling

<table>
<thead>
<tr>
<th>Engine - Gx4</th>
<th>Dimensions (LxWxH) mm (in)</th>
<th>Mass, dry kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V</td>
<td>2495 x 1611 x 2182 (98 x 65 x 86)</td>
<td>6200 (13669)</td>
</tr>
<tr>
<td>16V</td>
<td>2981 x 1661 x 2182 (117 x 65 x 86)</td>
<td>7700 (16976)</td>
</tr>
<tr>
<td>20V</td>
<td>3486 x 1701 x 2172 (137 x 67 x 86)</td>
<td>9290 (20481)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine</th>
<th>Dimensions (LxWxH) mm (in)</th>
<th>Mass, dry kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V4000 G34F/G94F</td>
<td>2495 x 1611 x 2182 (98 x 65 x 86)</td>
<td>6200 (13669)</td>
</tr>
<tr>
<td>16V4000 G34F/G94F</td>
<td>2981 x 1661 x 2182 (117 x 65 x 86)</td>
<td>8052 (17752)</td>
</tr>
<tr>
<td>20V4000 G44F/G94F</td>
<td>3479 x 1700 x 2252 (137 x 67 x 89)</td>
<td>9650 (21275)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Engine</th>
<th>Bore/stroke mm (in)</th>
<th>Cylinder configuration</th>
<th>Displacement l (cu in)</th>
<th>Displacement, total l (cu in)</th>
<th>Fuel specification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>170/210 (6.7/8.3)</td>
<td>90° V</td>
<td>4.77 (291)</td>
<td>12V: 57.2 (3491), 16V: 76.3 (4655), 20V: 95.4 (5822)</td>
<td>EN 590, Grade No.1-D/2-D (ASTM D975-00), HVO &amp; GtL in acc. to EN15940 and mtu fluids and lubricants specification</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Engine type</th>
<th>Rated power kW (bhp) at 1500 rpm (50Hz)</th>
<th>Optimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V 4000 G74F</td>
<td>1575 (2112)</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G84F</td>
<td>1750 (2347)</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G94F</td>
<td>1930 (2588)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G74F</td>
<td>1965 (2635)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G84F</td>
<td>2185 (2930)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G94F</td>
<td>2387 (3201)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G64F</td>
<td>2420 (3245)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G74F</td>
<td>2670 (3580)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G84F</td>
<td>2850 (3822)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G94F</td>
<td>3088 (4141)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G94LF</td>
<td>3308 (4436)</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G74S</td>
<td>1736 (2328)</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G84S</td>
<td>1910 (2561)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G74S</td>
<td>2280 (3058)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G84S</td>
<td>2500 (3352)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G94S</td>
<td>2740 (3674)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G64S</td>
<td>2740 (3674)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G74S</td>
<td>3010 (4036)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G94S</td>
<td>3490 (4680)</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine type</th>
<th>Rated power kW (bhp) at 1800 rpm (60Hz)</th>
<th>Optimization</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V 4000 G74S</td>
<td>1736 (2328)</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G84S</td>
<td>1910 (2561)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G74S</td>
<td>2280 (3058)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G84S</td>
<td>2500 (3352)</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G94S</td>
<td>2740 (3674)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G64S</td>
<td>2740 (3674)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G74S</td>
<td>3010 (4036)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G94S</td>
<td>3490 (4680)</td>
<td>x</td>
</tr>
</tbody>
</table>

Fuel consumption optimized

19 US EPA Nonroad Tier 2 compliant (40 CFR 89)
24 NEA Singapore for ORDE, compliant EPA Tier 2
31 China NRMM Stage III (GB20981-2014)
36 US EPA Nonroad Tier 2 compliant

* Emission certification in progress

Fan power requirement not considered, reference to emission level in price list
### Prime power for stationary emergency (3E)

<table>
<thead>
<tr>
<th>Engine type</th>
<th>Rated power kW (bhp) at 1500 rpm (50Hz)</th>
<th>Optimization</th>
<th>1</th>
<th>24</th>
<th>31</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V 4000 G14F</td>
<td>1420 (1904)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x*</td>
</tr>
<tr>
<td>12V 4000 G24F</td>
<td>1575 (2112)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G34F</td>
<td>1755 (2353)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G14F</td>
<td>1798 (2411)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>16V 4000 G24F</td>
<td>1965 (2635)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x*</td>
</tr>
<tr>
<td>16V 4000 G34F</td>
<td>2170 (2910)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G14F</td>
<td>2200 (2950)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x*</td>
</tr>
<tr>
<td>20V 4000 G24F</td>
<td>2420 (3245)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x*</td>
</tr>
<tr>
<td>20V 4000 G34F</td>
<td>2590 (3473)</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x*</td>
</tr>
<tr>
<td>20V 4000 G44LF</td>
<td>3007 (4032)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>12V 4000 G14S</td>
<td>1520 (2038)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12V 4000 G24S</td>
<td>1736 (2328)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16V 4000 G14S</td>
<td>2020 (2709)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16V 4000 G24S</td>
<td>2280 (3058)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20V 4000 G14S</td>
<td>2490 (3339)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20V 4000 G24S</td>
<td>2740 (3674)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20V 4000 G44S</td>
<td>3010 (4036)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engine type</th>
<th>Rated power kW (bhp) at 1800 rpm (60Hz)</th>
<th>Optimization</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V 4000 G14S</td>
<td>1520 (2038)</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>12V 4000 G24S</td>
<td>1736 (2328)</td>
<td>x</td>
<td></td>
</tr>
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<td>2020 (2709)</td>
<td>x</td>
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<td>2740 (3674)</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>20V 4000 G44S</td>
<td>3010 (4036)</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Fan power requirement not considered, reference to emission level in price list
-  x Fuel consumption optimized
-  1 NOx emission optimized
-  3 US EPA Stationary EMERG Tier 2 (40 CFR 60)
-  24 NEA Singapore for ORDE, compliant EPA Tier 2
-  31 China NRMM Stage III (GB20981-2014)
-  36 US EPA Nonroad Tier 2 compliant
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<tr>
<td></td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>12V 4000 G14F</td>
<td>1420 (1904)</td>
<td>x</td>
</tr>
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<td>x</td>
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<tr>
<td>20V 4000 G34F</td>
<td>2590 (3473)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G44F</td>
<td>2807 (3764)</td>
<td>x</td>
</tr>
<tr>
<td>20V 4000 G44LF</td>
<td>3007 (4032)</td>
<td>x</td>
</tr>
</tbody>
</table>

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<td>20V 4000 G24S</td>
<td>2740 (3674)</td>
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Fan power requirement not considered, reference to emission level in price list
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1 NOx emission optimized
3 US EPA Stationary EMERG Tier 2 (40 CFR 60)
19 US EPA Nonroad Tier 2 compliant (40 CFR 89)
24 NEA Singapore for ORDE, compliant EPA Tier 2
31 China NRMM Stage III (GB20981-2014)
* Emission certification in progress
<table>
<thead>
<tr>
<th><strong>Standard equipment</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting system</td>
<td>2 electric starters (24 VDC/2-pole)</td>
</tr>
<tr>
<td>Fuel system</td>
<td>“Common-Rail” fuel injection system, with low and high pressure fuel pumps, fuel</td>
</tr>
<tr>
<td></td>
<td>pressure accumulator, high pressure fuel lines and electronically controlled injection</td>
</tr>
<tr>
<td>Lube oil system</td>
<td>Forced feed lubrication system with piston cooling, lube oil circulation pump with</td>
</tr>
<tr>
<td></td>
<td>safety valve, lube oil multi-stage filter, lube oil heat exchanger, oil centrifugal</td>
</tr>
<tr>
<td></td>
<td>filter (only for 3G and 3F)</td>
</tr>
<tr>
<td>Combustion air system</td>
<td>Exhaust turbochargers, intercooler</td>
</tr>
<tr>
<td>Cooling system</td>
<td>Coolant circulation pump and coolant thermostat for jacket water cooling circuit,</td>
</tr>
<tr>
<td></td>
<td>coolant circulation pump and coolant thermostat for charge air cooling circuit</td>
</tr>
<tr>
<td>Engine mounting</td>
<td>Set of engine mounting brackets at engine free and driving end</td>
</tr>
<tr>
<td>Engine management</td>
<td>Integrated electronic engine control and monitoring system ADEC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Optional equipment</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting system</td>
<td>Compressed air starter, redundant starting system</td>
</tr>
<tr>
<td>Fuel system</td>
<td>Fuel pre-filter, special fuel pre-filter with water separator</td>
</tr>
<tr>
<td>Lube oil system</td>
<td>Centrifugal lube oil filter, oil replenishment system</td>
</tr>
<tr>
<td>Combustion air system</td>
<td>Heavy duty air filters</td>
</tr>
<tr>
<td>Cooling system</td>
<td>Electric coolant pre-heating unit with circulating pump, thermostat and non-return</td>
</tr>
<tr>
<td></td>
<td>flap</td>
</tr>
<tr>
<td>Engine mounting</td>
<td>Resilient engine mounts (rubber elements), rigid engine mounts</td>
</tr>
</tbody>
</table>

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.