| Technical Sales Documentation | - ENGINE DATA - | MTU Project No. |
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| No. | | Index | Unit | 12V2000G65 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Application Group<br>MTU data code<br>Intake air temperature<br>Charge-air coolant temperature<br>Barometric pressure<br>Site altitude above sea level<br>Raw-water inlet temperature | | <br><br>°C<br>°C<br>mbar<br>m<br>°C | 3B<br>34<br>25<br>-<br>1000<br>100<br>- | | | | | |
| | 0. DATA-RELEVANT ENGINE DESIGN CONFIGURATION | | | | | | | | |
| 1 | Fuel-consumption optimized | | | - | | | | | |
| 2 | Exhaust-emissions optimized<br>(limit values see Exhaust Emissions, Chapter 21) | | | x | | | | | |
| 16 | Complies with: "TA-Luft" (Edition 1986)<br>(German clean-air standard) | | | x | | | | | |
| 17 | Complies with:<br>Regulations for stationary power plants in France<br>(arrêté du 25 Juillet 1997) | | | - | | | | | |
| 18 | Complies with:<br>US EPA, regulation for nonroad engines<br>(40 CFR 89 - Tier 1 -) | | | - | | | | | |
| 25 | Complies with:<br>US EPA, regulation for nonroad engines<br>(40 CFR 89 - Tier 2 -) | | | - | | | | | |
| 8 | Engine rated speed switchable<br>(1500/1800 rpm) | | | - | | | | | |
| 12 | Engine with sequential turbocharging<br>(turbochargers with cut-in/cut-out control) | | | - | | | | | |
| 13 | Engine without sequential turbocharging<br>(turbochargers without cut-in/cut-out control) | | | x | | | | | |
| 31 | Engine with air-cooled charge air | | | x | | | | | |
| 32 | Engine with water-cooled charge air (external) | | | - | | | | | |
| | 1. POWER-RELATED DATA (power ratings are net brake power to ISO 3046) | | | | | | | | |
| 1 | Engine rated speed | A | rpm | 1500 | | | | | |
| 3 | Mean piston speed | | m/s | 7.5 | | | | | |
| 4 | Continuous power ISO 3046 (10% overload capability)<br>(design power DIN 6280, ISO 8528) | A | kW | 695 | | | | | |
| 5 | Fuel stop power ISO 3046 | A | kW | 765 | | | | | |
| 8 | Mean effective pressure (MEP)<br>(Continuous power ISO 3046) | | bar | 23.3 | | | | | |
| 9 | Mean effective pressure (MEP)<br>(Fuel stop power ISO 3046) | | bar | 25.6 | | | | | |
| | 2. GENERAL CONDITIONS (for maximum power) | | | | | | | | |
| 1 | Intake air depression (new filter) | A | mbar | 15 | | | | | |
| 2 | Intake air depression, max. | L | mbar | 30 | | | | | |
| 3 | Exhaust back pressure | A | mbar | 30 | | | | | |
| 4 | Exhaust back pressure, max. | L | mbar | 50 | | | | | |
| 5 | Fuel temperature at fuel feed connection | R | °C | 25 | | | | | |
| 6 | Fuel temperature at fuel feed connection, max. | L | °C | 60 | | | | | |
| | 3. CONSUMPTION | | | | | | | | |
| 17 | Specific fuel consumption (be) - 100 % CP<br>(+ 5 %; EN 590; 42.8 MJ/kg) | G | g/kWh | 222 | | | | | |
| 18 | Specific fuel consumption (be) - 75 % CP<br>(+ 5 %; EN 590; 42.8 MJ/kg) | R | g/kWh | 216 | | | | | |
| 19 | Specific fuel consumption (be) - 50 % CP<br>(+ 5 %; EN 590; 42.8 MJ/kg) | R | g/kWh | 218 | | | | | |
| 20 | Specific fuel consumption (be) - 25 % CP<br>(+ 5 %; EN 590; 42.8 MJ/kg) | R | g/kWh | 232 | | | | | |

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| 21 | Specific fuel consumption (be) - FSP<br>(+ 5 %; EN 590; 42.8 MJ/kg) | R | g/kWh | 218 | | | | | |
| 73 | No-load fuel consumption | R | kg/h | 12 | | | | | |
| 61 | Lube oil consumption after 100 h of operation<br>(B = fuel consumption per hour) | R | % of B | 0.5 | | | | | |
| 62 | Lube oil consumption after 100 h of operation, max.<br>(B = fuel consumption per hour) | L | % of B | 1.0 | | | | | |
| | 4. MODEL-RELATED DATA (basic design) | | | | | | | | |
| 3 | Engine with exhaust turbocharger (ETC) and intercooler | | | x | | | | | |
| 4 | Exhaust piping, non-cooled | | | x | | | | | |
| 5 | Exhaust piping, liquid-cooled | | | - | | | | | |
| 33 | Working method: four-cycle, diesel, single-acting | | | x | | | | | |
| 34 | Combustion method: direct injection | | | x | | | | | |
| 36 | Cooling system: conditioned water | | | x | | | | | |
| 37 | Direction of rotation: c.c.w. (facing driving end) | | | x | | | | | |
| 6 | Number of cylinders | | | 12 | | | | | |
| 7 | Cylinder configuration: V angle | | degrees | 90 | | | | | |
| 10 | Bore | | mm | 130 | | | | | |
| 11 | Stroke | | mm | 150 | | | | | |
| 12 | Displacement, cylinder | | liter | 1.99 | | | | | |
| 13 | Displacement, total | | liter | 23.88 | | | | | |
| 14 | Compression ratio | | | 16 | | | | | |
| 40 | Cylinder heads: single-cylinder | | | x | | | | | |
| 41 | Cylinder liners: wet, replaceable | | | x | | | | | |
| 24 | Number of inlet valves, per cylinder | | | 2 | | | | | |
| 25 | Number of exhaust valves, per cylinder | | | 2 | | | | | |
| 15 | Number of turbochargers | | | 2 | | | | | |
| 18 | Number of intercoolers | | | 1 | | | | | |
| 28 | Standard flywheel housing flange (engine main PTO) | | SAE | 0 | | | | | |
| 43 | Flywheel interface | | DISC | 18" | | | | | |
| 46 | Engine mass diagram, drawing No. | | | N | | | | | |
| 47 | Engine mass diagram, drawing No. (cont.) | | | N | | | | | |
| | 5. COMBUSTION AIR / EXHAUST GAS | | | | | | | | |
| 39 | Pressure differential in external<br>air-to-air intercooler, max. | L | mbar | 130 | | | | | |
| 8 | Charge-air pressure before cylinder - CP | R | bar abs | 4.0 | | | | | |
| 27 | Charge-air pressure before cylinder - FSP | R | bar abs | 4.2 | | | | | |
| 9 | Combustion air volume flow - CP | R | m³/s | 1.20 | | | | | |
| 10 | Combustion air volume flow - FSP | R | m³/s | 1.25 | | | | | |
| 11 | Exhaust volume flow (at exhaust temperature) - CP | R | m³/s | 2.80 | | | | | |
| 12 | Exhaust volume flow (at exhaust temperature) - FSP | R | m³/s | 2.90 | | | | | |
| 15 | Exhaust temperature after turbocharger - CP | R | °C | 525 | | | | | |
| 16 | Exhaust temperature after turbocharger - FSP | R | °C | 530 | | | | | |
| | 6. HEAT DISSIPATION | | | | | | | | |

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| 15 | Heat dissipated by engine coolant - CP<br>with oil heat, without charge-air heat | R | kW | 305 | | | | | |
| 16 | Heat dissipated by engine coolant - FSP<br>with oil heat, without charge-air heat | R | kW | 335 | | | | | |
| 26 | Charge-air heat dissipation - CP | R | kW | 215 | | | | | |
| 27 | Charge-air heat dissipation - FSP | R | kW | 225 | | | | | |
| 33 | Radiation and convection heat, engine - CP | R | kW | 40 | | | | | |
| 34 | Radiation and convection heat, engine - FSP | R | kW | N | | | | | |
| | 7. COOLANT SYSTEM (high-temperature circuit) | | | | | | | | |
| 17 | Coolant temperature<br>(at engine outlet to cooling equipment) | A | °C | 95 | | | | | |
| 20 | Coolant temperature after engine, alarm | R | °C | 97 | | | | | |
| 21 | Coolant temperature after engine, shutdown | L | °C | 102 | | | | | |
| 25 | Coolant antifreeze content, max. | L | % | 50 | | | | | |
| 30 | Cooling equipment: coolant flow rate | A | m³/h | 40 | | | | | |
| 35 | Coolant pump: inlet pressure, min. | L | bar | 0.4 | | | | | |
| 36 | Coolant pump: inlet pressure, max. | L | bar | 1.52 | | | | | |
| 41 | Pressure loss in off-engine cooling system, max. | L | bar | 0.7 | | | | | |
| 47 | Breather valve (expansion tank)<br>opening pressure (excess pressure) | R | bar | N | | | | | |
| 48 | Breather valve (expansion tank)<br>opening pressure (depression) | R | bar | N | | | | | |
| 49 | Pressure in cooling system, max. | L | bar | N | | | | | |
| 54 | Cooling equipment: height above engine, max. | L | m | 15.2 | | | | | |
| 53 | Cooling equipment: operating pressure | A | bar | 2.2 | | | | | |
| 73 | Coolant level in expansion tank, below min.<br>alarm | L | | - | | | | | |
| 74 | Coolant level in expansion tank, below min.<br>shutdown | L | | x | | | | | |
| | 8. COOLANT SYSTEM (low-temperature circuit) | | | | | | | | |
| 76 | Temperature differential between intake air and<br>charge-air coolant before intercooler | A | K | - | | | | | |
| 75 | Temperature differential between intake air and<br>charge-air coolant before intercooler, max. | L | K | - | | | | | |
| | 10. LUBE OIL SYSTEM | | | | | | | | |
| 1 | Lube oil operating temp. before engine, from | R | °C | 88 | | | | | |
| 2 | Lube oil operating temp. before engine, to | R | °C | 98 | | | | | |
| 5 | Lube oil temperature before engine, alarm | R | °C | 100 | | | | | |
| 6 | Lube oil temperature before engine, shutdown | L | °C | 105 | | | | | |
| 8 | Lube oil operating press. bef. engine, from | R | bar | 6.2 | | | | | |
| 9 | Lube oil operating press. bef. engine, to | R | bar | 7.5 | | | | | |
| 10 | Lube oil pressure before engine, alarm | R | bar | 4.6 | | | | | |
| 11 | Lube oil pressure before engine, shutdown | L | bar | 4.1 | | | | | |
| 19 | Lube oil fine filter (main circuit):<br>number of units | | | 1 | | | | | |
| 20 | Lube oil fine filter (main circuit):<br>number of elements per unit | | | 2 | | | | | |

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| 21 | Lube oil fine filter (main circuit):<br>particle retention | R | mm | 0.009 | | | | | |
| 32 | Lube oil fine filter (main circuit):<br>pressure differential, max. | L | bar | 0.8 | | | | | |
| | 11. FUEL SYSTEM | | | | | | | | |
| 1 | Fuel pressure at fuel feed connection, min.<br>(when engine is starting) | L | bar | -0.3 | | | | | |
| 2 | Fuel pressure at fuel feed connection, max.<br>(when engine is starting) | L | bar | +0.5 | | | | | |
| 37 | Fuel supply flow, max. | R | liter/min | 8.0 | | | | | |
| 8 | Fuel return flow, max. | R | liter/min | 3.5 | | | | | |
| 10 | Fuel pressure at return connection on engine, max. | L | bar | 0.5 | | | | | |
| 15 | Fuel prefilter: number of units | A | | - | | | | | |
| 16 | Fuel prefilter: number of elements per unit | A | | - | | | | | |
| 17 | Fuel prefilter: particle retention | A | mm | - | | | | | |
| 18 | Fuel fine filter (main circuit): number of units | A | | 1 | | | | | |
| 19 | Fuel fine filter (main circuit): number of elements per unit | A | | 1 | | | | | |
| 20 | Fuel fine filter (main circuit): particle retention | A | mm | 0.005 | | | | | |
| 21 | Fuel fine filter (main circuit): pressure differential, max. | L | bar | 1.0 | | | | | |
| | 12. GENERAL OPERATING DATA | | | | | | | | |
| 1 | Cold start capability: air temperature<br>(w/o starting aid, w/o preheating) - (case A) | R | °C | 0** | | | | | |
| 2 | Additional condition (to case A):<br>engine coolant temperature | R | °C | N | | | | | |
| 3 | Additional condition (to case A): lube oil temperature | R | °C | +10** | | | | | |
| 4 | Additional condition (to case A): lube oil viscosity | R | SAE | 30** | | | | | |
| 9 | Cold start capability: air temperature<br>(w/o starting aid, w/ preheating) - (case C) | R | °C | -10** | | | | | |
| 10 | Additional condition (to case C):<br>engine coolant temperature | R | °C | +40** | | | | | |
| 11 | Additional condition (to case C): lube oil temperature | R | °C | -5** | | | | | |
| 12 | Additional condition (to case C): lube oil viscosity | R | SAE | 10W30 | | | | | |
| 21 | Coolant preheating, heater performance (standard) | R | kW | 3 | | | | | |
| 22 | Coolant preheating, preheating temperature (min.) | R | °C | 32 | | | | | |
| 28 | Breakaway torque (without driven machinery)<br>coolant temperature +5°C | R | Nm | 580 | | | | | |
| 30 | Breakaway torque (without driven machinery)<br>coolant temperature +40°C | R | Nm | 330* | | | | | |
| 29 | Cranking torque at firing speed (without driven machinery)<br>coolant temperature +5°C | R | Nm | 380* | | | | | |
| 31 | Cranking torque at firing speed (without driven machinery)<br>coolant temperature +40°C | R | Nm | 305* | | | | | |
| 96 | Starting is blocked if the engine coolant temperature is below | | °C | 0 | | | | | |
| 37 | High idling speed, max. (static) | L | rpm | 1660 | | | | | |
| 38 | Limit speed for overspeed alarm / emergency shutdown | L | rpm | 1800 | | | | | |
| 42 | Firing speed, from | R | rpm | 100 | | | | | |
| 43 | Firing speed, to | R | rpm | 120 | | | | | |

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| 44 | Engine coolant temperature before starting full-load operation, recommended min. (for emergency/standby sets with coolant preheating: at least the preheating temperature) | L | °C | 40 | | | | | |
| 48 | Minimum continuous load | R | % | 20 | | | | | |
| 49 | Extended low or no-load operation possible (consultation required) | | | x | | | | | |
| 50 | Engine mass moment of inertia (without flywheel) | R | kgm² | 1.12 | | | | | |
| 51 | Engine mass moment of inertia (with standard flywheel) | R | kgm² | 3.92 | | | | | |
| 52 | Standard flywheel mass moment of inertia | R | kgm² | 2.80 | | | | | |
| 69 | Speed droop (with electronic governor) adjustable, from | R | % | 0 | | | | | |
| 70 | Speed droop (with electronic governor) adjustable, to | R | % | 5 | | | | | |
| 95 | Number of starter ring-gear teeth on engine flywheel | | | 160 | | | | | |
| | 13. STARTING (electric) | | | | | | | | |
| 12 | Starter, rated power (make DELCO) (standard design) | R | kW | 9.0 | | | | | |
| 2 | Starter, rated voltage (standard design) | R | V= | 24 | | | | | |
| 14 | Starter, power requirement max. (make DELCO) | R | A | 1750 | | | | | |
| 15 | Starter, power requirement at firing speed (make DELCO) | R | A | 800 | | | | | |
| 16 | Start attempt duration (engine preheated) | R | s | - | | | | | |
| 17 | Start attempt duration (engine not preheated) | R | s | - | | | | | |
| 18 | Start attempt duration, max. | L | s | 6 | | | | | |
| | 15. STARTING (pneumatic/oil pressure starter) | | | | | | | | |
| 5 | Starting air pressure before starter motor, min. | R | bar | 17 | | | | | |
| 6 | Starting air pressure before starter motor, max. | R | bar | N | | | | | |
| 7 | Starting air pressure before starter motor, min. | L | bar | N | | | | | |
| 8 | Starting air pressure before starter motor, max. | L | bar | N | | | | | |
| 18 | Start attempt duration (engine preheated) | R | s | N | | | | | |
| 19 | Start attempt duration (engine not preheated) | R | s | N | | | | | |
| 20 | Start attempt duration, max. | L | s | N | | | | | |
| 21 | Air consumption / start attempt (engine preheated) | R | m^3n | 0.49 | | | | | |
| 23 | Starting air tank for 3 start attempts (max. 40 bar) (engine preheated) | R | liter | N | | | | | |
| 24 | Starting air tank for 3 start attempts (max. 30 bar) (engine preheated) | R | liter | N | | | | | |
| 25 | Starting air tank for 6 start attempts (max. 40 bar) (engine preheated) | R | liter | N | | | | | |
| 26 | Starting air tank for 6 start attempts (max. 30 bar) (engine preheated) | R | liter | N | | | | | |
| 27 | Starting air tank for 10 start attempts (max. 40 bar) (engine preheated) | R | liter | N | | | | | |
| 28 | Starting air tank for 10 start attempts (max. 30 bar) (engine preheated) | R | liter | N | | | | | |
| | 16. INCLINATIONS - STANDARD OIL SYSTEM (ref.: waterline) | | | | | | | | |
| 15 | Longitudinal inclination, continuous max. driving end down (Option: max. operating inclinations) | L | degrees | 5 | | | | | |

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| 17 | Longitudinal inclination, continuous max.<br>driving end up<br>(Option: max. operating inclinations) | L | degrees | 5 | | | | | |
| 19 | Transverse inclination, continuous max.<br>(Option: max. operating inclinations) | L | degrees | 10 | | | | | |
| | 18. CAPACITIES | | | | | | | | |
| 1 | Engine coolant capacity (without cooling equipment) | R | liter | 90 | | | | | |
| 11 | On-engine fuel capacity | R | liter | 5 | | | | | |
| 14 | Engine oil capacity, initial filling<br>(standard oil system)<br>(Option: max. operating inclinations) | R | liter | 77 | | | | | |
| 20 | Oil change quantity, max.<br>(standard oil system)<br>(Option: max. operating inclinations) | R | liter | 74 | | | | | |
| 28 | Oil pan capacity, dipstick mark min.<br>(standard oil system)<br>(Option: max. operating inclinations) | L | liter | 50 | | | | | |
| 29 | Oil pan capacity, dipstick mark max.<br>(standard oil system)<br>(Option: max. operating inclinations) | L | liter | 67 | | | | | |
| | 19. WEIGHTS / DIMENSIONS | | | | | | | | |
| 9 | Engine weight, dry<br>(basic engine configuration acc. to<br>scope of supply specification) | R | kg | 2490 | | | | | |
| 10 | Engine weight, wet<br>(basic engine configuration acc. to<br>scope of supply specification) | R | kg | 2660 | | | | | |
| | 20. FAN / FAN COOLER | | | | | | | | |
| 3 | Fan, pusher-type | | | x | | | | | |
| 18 | Fan arrangement: vertical above crankshaft | | | x | | | | | |
| 9 | Fan drive: mechanical via V-belt | | | x | | | | | |
| 13 | Fan: speed | R | rpm | N | | | | | |
| 19 | Standard fan cooler, supplied by MTU,<br>design and specific data acc. to case A / B / C | | | N | | | | | |
| 21 | (Case A) - fan cooler, designed for:<br>- ambient temperature | A | °C | N | | | | | |
| 54 | (Case A) - fan cooler, designed for:<br>- site altitude, max. | A | m | N | | | | | |
| 22 | (Case A) - fan cooler, designed for:<br>- coolant antifreeze content, max. | A | % | N | | | | | |
| 55 | (Case A) - fan: power consumption<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 56 | (Case A) - fan: power consumption<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 57 | (Case A) - fan: power consumption<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 27 | (Case A) - cooling-air flow rate<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | $m^3/s$ | N | | | | | |

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| 28 | (Case A) - cooling-air flow rate<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 29 | (Case A) - cooling-air flow rate<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 58 | (Case A) - fan: weight | R | kg | N | | | | | |
| 59 | (Case A) - fan cooler: weight, dry (incl. pipework) | R | kg | N | | | | | |
| 31 | (Case A) - fan cooler: coolant capacity | R | liter | N | | | | | |
| 32 | (Case B) - fan cooler, designed for:<br>- ambient temperature | A | °C | N | | | | | |
| 60 | (Case B) - fan cooler, designed for:<br>- site altitude, max. | A | m | N | | | | | |
| 33 | (Case B) - fan cooler, designed for:<br>- coolant antifreeze content, max. | A | % | N | | | | | |
| 61 | (Case B) - fan: power consumption<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 62 | (Case B) - fan: power consumption<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 63 | (Case B) - fan: power consumption<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 38 | (Case B) - cooling-air flow rate<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 39 | (Case B) - cooling-air flow rate<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 40 | (Case B) - cooling-air flow rate<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 64 | (Case B) - fan: weight | R | kg | N | | | | | |
| 65 | (Case B) - fan cooler: weight, dry (incl. pipework) | R | kg | N | | | | | |
| 42 | (Case B) - fan cooler: coolant capacity | R | liter | N | | | | | |
| 43 | (Case C) - fan cooler, designed for:<br>- ambient temperature | A | °C | N | | | | | |
| 66 | (Case C) - fan cooler, designed for:<br>- site altitude, max. | A | m | N | | | | | |
| 44 | (Case C) - fan cooler, designed for:<br>- coolant antifreeze content, max. | A | % | N | | | | | |
| 67 | (Case C) - fan: power consumption<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 68 | (Case C) - fan: power consumption<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 69 | (Case C) - fan: power consumption<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | kW | N | | | | | |
| 49 | (Case C) - cooling-air flow rate<br>at 1 mbar / 100 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |

Explanation:
CP = Ref.value: Continuous power FSP = Ref.value: Fuel stop power
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|---|---|---|---|---|---|---|---|---|---|
| | Application Group<br>MTU data code<br>Intake air temperature<br>Charge-air coolant temperature<br>Barometric pressure<br>Site altitude above sea level<br>Raw-water inlet temperature | | <br><br>°C<br>°C<br>mbar<br>m<br>°C | 3B<br>34<br>25<br>-<br>1000<br>100<br>- | | | | | |
| 50 | (Case C) - cooling-air flow rate<br>at 2 mbar / 200 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 51 | (Case C) - cooling-air flow rate<br>at 3 mbar / 300 Pa duct allowance<br>(pressure and suction sides, total) | R | m³/s | N | | | | | |
| 70 | (Case C) - fan: weight | R | kg | N | | | | | |
| 71 | (Case C) - fan cooler: weight, dry (incl. pipework) | R | kg | N | | | | | |
| 53 | (Case C) - fan cooler: coolant capacity | R | liter | N | | | | | |
| | 21. EXHAUST EMISSIONS | | | | | | | | |
| 307 | Regulation: "TA-Luft" (Edition 1986) - CP<br>Nitric oxide (NOx) (5% O2) | G | mg/m^3n | 1500 | | | | | |
| 308 | Regulation: "TA-Luft" (Edition 1986) - CP<br>Carbon monoxide (CO) (5% O2) | G | mg/m^3n | 300 | | | | | |
| 309 | Regulation: "TA-Luft" (Edition 1986) - CP<br>Unburned hydrocarbons (HC) | G | mg/m^3n | - | | | | | |
| 310 | Regulation: "TA-Luft" (Edition 1986) - CP<br>Dust (5% O2) | G | mg/m^3n | 20 | | | | | |
| 366 | Regulation: "TA-Luft" (Edition 1986) - CP<br>Formaldehyde (5% O2) | G | mg/m^3n | 60 | | | | | |
| 311 | Regulation: stationary power plants in France - CP<br>Nitric oxide (NOx) (5% O2) | G | mg/m^3n | - | | | | | |
| 312 | Regulation: stationary power plants in France - CP<br>Carbon monoxide (CO) (5% O2) | G | mg/m^3n | - | | | | | |
| 313 | Regulation: stationary power plants in France - CP<br>Unburned hydrocarbons (NMHC) | G | mg/m^3n | - | | | | | |
| 314 | Regulation: stationary power plants in France - CP<br>Dust / particulates (5% O2) | G | mg/m^3n | - | | | | | |
| 316 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 1 -)<br>Nitric oxide (NOx) | G | g/kWh | - | | | | | |
| 317 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 1 -)<br>Carbon monoxide (CO) | G | g/kWh | - | | | | | |
| 318 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 1 -)<br>Unburned hydrocarbons (HC) | G | g/kWh | - | | | | | |
| 319 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 1 -)<br>Particulates | G | g/kWh | - | | | | | |
| 320 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 2 -)<br>Nitric oxide (NOx) + unburned hydrocarbons (HC) | G | g/kWh | - | | | | | |
| 321 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 2 -)<br>Carbon monoxide (CO) | G | g/kWh | - | | | | | |
| 323 | Regulation: US EPA "Nonroad"<br>(40 CFR 89 - Tier 2 -)<br>Particulates | G | g/kWh | - | | | | | |
| 141 | Exhaust volume flow, dry - CP<br>(standard conditions) | R | m³/h | 3300 | | | | | |
| 143 | Exhaust mass flow - CP<br>(reference conditions) | R | kg/h | 4400 | | | | | |

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| 144 | Residual oxygen content (O2) in dry exhaust - CP (standard conditions) | R | % (vol.) | 9.4 | | | | | |
| 145 | Total combustion calorific value - CP | R | kW | 1850 | | | | | |
| 37 | Smoke index, BOSCH - FSP | R | | 0.5 | | | | | |
| | 22. ACOUSTICS | | | | | | | | |
| 101 | Exhaust noise, unsilenced - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) | R | dB(A) | 114 | | | | | |
| 201 | Exhaust noise, unsilenced - CP (sound power level LW, ISO 6798) | R | dB(A) | 127 | | | | | |
| 103 | Exhaust noise, unsilenced - FSP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No. | | | 734 248e | | | | | |
| 203 | Exhaust noise,unsilenced - CP (sound power level LW, ISO 6798) Spectrum No. | | | N | | | | | |
| 109 | Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) | R | dB(A) | 100 | | | | | |
| 209 | Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) | R | dB(A) | 118 | | | | | |
| 111 | Engine surface noise with attenuated intake noise (filter) - CP (free-field sound-pressure level Lp, 1m distance, ISO 6798) Spectrum No. | | | 734 244e | | | | | |
| 211 | Engine surface noise with attenuated intake noise (filter) - CP (sound power level LW, ISO 6798) Spectrum No. | | | N | | | | | |
| 125 | Structure borne noise at engine mounting brackets in vertical direction above resilient engine mounts - CP Spectrum No. | | | 734 246e | | | | | |
| 129 | Test stand impedance spectrum, Diagram No. | | | N | | | | | |
| 130 | Test stand impedance spectrum, Diagram No. (cont.) | | | N | | | | | |
| | 23. TBO AND LOAD PROFILE (case A) | | | | | | | | |
| 15 | Maintenance schedule No. | | | N | | | | | |
| 16 | Maintenance schedule No. (cont.) | | | N | | | | | |

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