



BF6M1015C (D2OC314) - 50 Hz

Technical data

General engine data

Engine Type	BF6M1015C
EKZ	03652
Standard KLU	25015857
Power level	G1
Engine Code	D2OC314
Speed	1500 min ⁻¹
Net frequency	50 Hz
Exhaust emission standard	TAL 2000/Stage II

Specific engine data

Aspiration	turbo
No of cylinders	6
Configuration	V
Injection system	Bosch inline pump
Displacement	11.9 l
Bore	132 mm
Stroke	145 mm
Compression ratio	16.5
Mean effective pressure (PRP)	19.1 bar
Piston speed	7.26 m/s
Rotation (looking at flywheel)	counter clock wise
No of teeth on flywheel ring gear	167
Governor type	electronical (EMR2)
Frequency setting	parallel operation
Governor performance: speed droop (static) mechanical governor	-
Governor performance: speed droop (static) electrical governor (EMR or GAC)	0 %
Governing standards ¹	G2

Moment of inertia

Engine without flywheel	0.9 kg m ²
Flywheel (standard genset specification)	2.2 kg m ²
Maximum step load acceptance, 1st step (in progress)	65 %
Sound power at full load, including cooling system ²	115 dB(A)
Sound pressure (1 m average distance, full load), including cooling system	101 dB(A)

Weight

Engine dry without cooling system ³	approx. 850 kg
Engine dry with cooling system	approx. 1020 kg

Lubrication system

Oil specification	TR0199-99-1217
Oil consumption (as % of fuel consumption)	0.3 %
Oil capacity (sump)	34 l
Minimum oil pressure (warning)	3 bar

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Minimum oil pressure (shut down)	2.7 bar
Maximum permissible oil temperature (oil pan)	130 °C

Power output³

Gross output (LTP) ⁴	314.0 kW
Fan power consumption ⁷ /reduction (LTP)	14.0 kW
Net flywheel (LTP)	300.0 kW
Gross output (PRP) ⁵	285.0 kW
Fan power consumption ⁷ /reduction (PRP)	14.0 kW
Net flywheel (PRP)	271.0 kW
Alternator efficiency ⁸	93 %
Electrical output kVA (LTP) ⁹	349 kVA
Electrical output kVA (PRP) ⁹	315 kVA
Gross output (COP) ⁶	250.0 kW

Fuel consumption (PRP)¹⁰

25% load	18.7 l/h
50% load	34.6 l/h
75% load	51.7 l/h
100% load	70.0 l/h
25% load	219 g/kWh
50% load	203 g/kWh
75% load	202 g/kWh
100% load	205 g/kWh
Maximum suction head of fuel feed pump	2 m

Engine cooling system

Maximum permitted coolant outlet temperature	103 °C
Maximum permitted flow resistance (cooling system and piping)	0.35 bar
Maximum temperature of coolant (warning)	105 °C
Maximum temperature of coolant (shutdown)	108 °C
Temperature at which thermostat starts to open	79 °C
Temperature at which thermostat is fully open	94 °C
Temperature at which second thermostat starts to open	87 °C
Temperature at which second thermostat is fully open	102 °C
Delivery of coolant pump	15.6 m ³ /h
Minimum pressure before coolant pump	0.8 bar
Temperature at charge air cooler outlet at standard conditions	50 °C
Coolant capacity (engine)	17 l
Coolant capacity (including cooling unit)	91 l
Air to boil (maximum permissible cooling air temperature at fan)	53 °C
Cooling air flow	20160 m ³ /h
Air pressure loss	1.5 mbar

Heat Balance

Heat dissipation (engine radiator) ¹¹	149 kW
Heat dissipation (charge air cooler) ¹¹	64 kW

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Heat dissipation (convection) 24 kW

Inlet/Exhaust Data (PRP)

Maximum intake depression (switch setting)	50 mbar
Combustion air volume	1460 m ³ /h
Maximum exhaust back pressure	50 mbar
Maximum exhaust gas temperature	510 °C
Exhaust gas flow (at above temp)	3995 m ³ /h
Exhaust flange / pipe diameter	90 mm

Electrical System

Voltage	24 V
Starter	5.5 kW
Alternator output	55 A
Battery: minimum capacity (for cold start limit -5°C)	143 Ah

Automatic power limitation at altitude

Air temperature: 4.0 % per 10 °C above 30 °C
Altitude above sea level: 0.9 % per 100 m above 1000 m

¹ According to ISO 8528 Parts 1 and 5

² Sound power values measured in accordance with ISO 6798.

³ Technical data for BF2012, BF1013, BFM1015 refers to HT cooling system. For NT cooling system please see DEUTZ Technical Information System.

⁴ Limited time power 100%, which is capable for up to 500 h/year of which maximum of 300 h/year is continuous running, not exceedable, but required power for governing purpose only has to be considered. Necessary supply of engine power usually 10% for governing purpose only.

⁵ Prime power 100% , average power output ≤ 80%, no time limitation, plus 5% (at BFM 1015 plus 10%) additional power for governing purpose only (if 1 h overload within 12 h operation time is requested please contact head quarters).

⁶ Continuous power 100% , no time limitation, plus 10% additional power for governing purpose only.

⁷ Technical data and max. permissible torque for fan drive see data sheet.

⁸ Assumed alternator efficiencies: 12 to 29 kVA: 89 %, 30 to 139 kVA: 90 %, 140 to 299 kVA: 92 %, 300 to 550 kVA: 93 %

⁹ Ratings in accordance with ISO 8528. Power factor $\cos \varphi = 0.8$.

¹⁰At calorific value 42700 kJ/kg + 5 %, density 0.835 kg/dm³, at temperature 288 K.

¹¹The heat quantities are valid for the dimensioning of the cooling system. They are given for the engine with the highest (overload) power output (LTP) at 3% tolerance of fuel consumption and a radiant heat percentage of 3 %.

Power output (kW) in accordance with DIN ISO 14396.

For further information please see DEUTZ Technical Information System.

All data are provided for informational purposes only and are subject to amendment.