



中国兵器
第一机械

河北华北柴油机有限责任公司

CNGC FIRMACO HEBEI HUABEI DIESEL ENGINE CO., LTD.

华柴动力

Huachai gen-set engine performance data



华柴动力
HUACHAI POWER

DEUTZ LICENSE FACTORY

Engine Model: BF8M1015C-LA G1A



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Gen-set engine performance data	Engine Model: BF8M1015C-LA G1A	
Control Systems: mechanical /electronic	Power: 418KW	No. of cylinder: 8
Aspiration Mode: Turbocharged	Inter-cooling Method: CAC	
Cylinder Type: One-cylinder-one-head	Displacement: 15.874L Cylinder Arrangement: V-form 90° angle	

Rotation speed and power:

Specification	Rotation Speed	1500rpm 50Hz
	Power	418KW
Effective Pressure		23.1 bar
MAX. exhaust gas temperature		540℃
Charge air temperature		220℃
Inlet air (25 °C/1000m bar)		1909 m ³ /h
Emission		2320 kg/h
Notes: 1.While engine under testing, fan and alternator not included. 2. According: ISO3046-1		



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Engine Data:		1500rpm
Dry weight	kg	1060
Max. engine width	mm	920.5
Max. engine length	mm	1143.1
Bore	mm	132
Stroke	mm	145
Compression ratio		16.5
Rotation direction (View from flywheel)		Anti-clockwise
Flywheel housing		SAE1
Flywheel		14 "
No. of flywheel teeth		167
Engine support		Rigid
Max. noise value at 1m (left and right sides of engine)	dBA	≤98
Power decrease value: By increasing per 100m while exceeding an altitude of 1000m		≤0.90%
Power decrease value: By increasing per 10 °C while exceeding a temperature of 30 °C		≤4%
Battery voltage	V	24
Starter rated power	kW	9
Generator Capacity	A	55
Generator voltage	V	28.5
Max. exhaust backpressure	mbar	50
Max. allowable air inlet resistance	mbar	50
Turbocharger inlet size	mm	150
Turbocharger exhaust flange connect bolt		2-4×M10
Turbocharger exhaust flange inner diameter size	mm	117
Lubrication system:		
Min. oil pressure at 1500rpm (oil temperature 90℃)	bar	≥3
Min. oil pressure at 600rpm (oil temperature 90 °C)	bar	≥1
Oil temperature of normal operation	°C	<130
Oil consumption rate		<0.3% of fuel consumption
Oil pan		Flywheel side
Oil pan inclination	°	22.5
Initial oil filling	L	48
Oil filter element type		Disposable filter



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No. of oil filter element		1
Cooling System:		
Engine coolant capacity	L	21
Water-pump flow	L/min	347
Water-pump pressure	bar	1.25
Allowable pressure loss of cooling system (include pipeline)	bar	≤0.35
Heat carry off by coolant	kW	223
In & Outlet coolant size	mm	70
Temperature of switch on two thermostats respectively	°C	79/87
Temperature of switch on two thermostats totally	°C	94/102
Max. allowable operating temperature	°C	103
Temperature difference between inlet and outlet coolant	°C	≤8
Inter-cooler cooling power	kW	109
Charge air outlet size	mm	127
Fan		Exhaust type
Fan connection		Gear drive + coupler
Fan diameter	mm	980
Air volume of fan	m ³ /s	4.6
Fan power consumption	kW	≤14.1
Fan transmission ratio		0.96
Cold starting system:		
Lowest ambient temperature of cold starting without assistant (standard configuration)	°C	-17
Lowest ambient temperature of cold starting with flame preheat plug	°C	-32
Fuel System:		
Cylinder ignition sequence		1-6-3-5-2-4
Idle speed	rpm	600±50
Low-pressure pump oil load capacity	L/h	190
Fuel filter element type		Disposable filter
No. of the fuel filter element		2