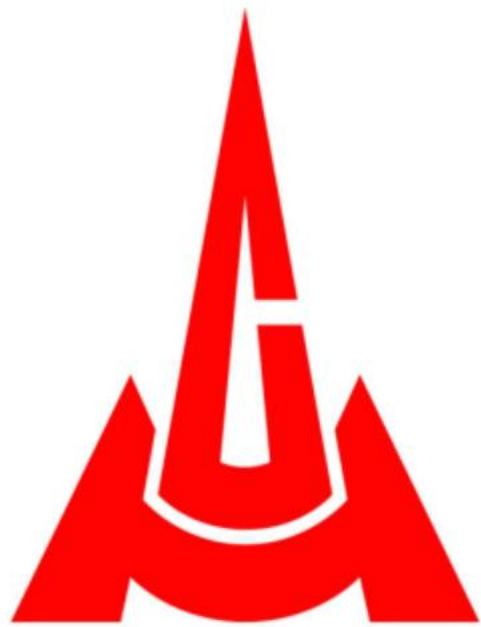




中国兵器工业集团
北方通用动力集团

河北华北柴油机有限责任公司

Huachai gen-set engine performance data



华柴动力
HUACHAI POWER

DEUTZ LICENSE FACTORY

Engine Model: HC12V132ZL-LA G1A



中国兵器工业集团
北方通用动力集团

河北华北柴油机有限责任公司

Gen-set engine performance data	Engine Model: HC12V132ZL-LA G1A	
Control Systems: electronic	Power: 670KW	No. of cylinder: 12
Aspiration Mode: Turbocharged	Inter-cooling Method: air-air	
Cylinder Type: One-cylinder-one-head	Displacement: 23.812L Cylinder Arrangement: V-form 90° angle	

Rotation speed and power:

Specification	Rotation Speed	1500rpm 50Hz
Power		670KW
Effective Pressure		32.9bar
MAX. exhaust gas temperature		560℃
Charge air temperature		220℃
Fuel Consumption		197g/kw • h
Notes: 1.While engine under testing, fan and alternator not included. 2. According: ISO3046-1		



中国兵器工业集团
北方通用动力集团

河北华北柴油机有限责任公司

Engine Data:		1500rpm
Dry weight	kg	1600
Max. engine width	mm	920
Max. engine length	mm	1763
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 support
Max. noise value at 1m (left and right sides of engine)	dBA	≤99
Power decrease value: By increasing per 100m while exceeding an altitude of 1000m		≤0.90%
Power decrease value: By increasing per 10℃ while exceeding a temperature of 30℃		≤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	127
Turbocharger exhaust flange connect bolt		M12
Turbocharger exhaust flange inner diameter size	mm	117
Lubrication systems:		
Min. oil pressure at 1500rpm (oil temperature 90℃)	bar	≥3
Min. oil pressure at 600rpm (oil temperature 90℃)	bar	≥1
Oil temperature of normal operation	℃	<130
Oil consumption rate		<0.3% of fuel consumption
Oil pan		Flywheel side
Oil pan inclination	°	22.5
Initial oil filling	L	54
Oil filter element type		Disposable filter



中国兵器工业集团
北方通用动力集团

河北华北柴油机有限责任公司

No. of oil filter element		1
Cooling Systems:		
Engine coolant capacity	L	30
Water-pump flow	L/min	470
Water-pump head	Mpa	0.29
Allowable pressure loss of cooling system (include pipeline)	bar	≤0.35
Heat carry off by coolant	kW	348
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	220
Charge air outlet size	mm	127
Fan		Exhaust type
Fan connection		V-belt drive
Fan diameter	mm	1320
Air volume of fan	m ³ /s	19
Fan power consumption	kW	≤26
Fan transmission ratio		0.76
Cold starting systems:		
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 Systems:		
Cylinder ignition sequence		1-8-5-10-3-7-6-11-2-9-4-12
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