

Stroke: 135mm

DONGFENG CUMMINS ENGINE PERFORMANCE CURVE

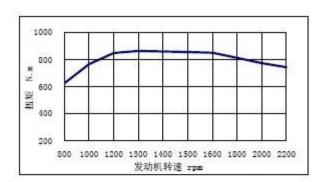
Engine Model C230 20	Curve No. FR91304	
	CPL Code	Date
	0311	13-June

Displacement: 8.3L Advertised Power: 170kW@2200 rpm
Bore: 114mm 230HP@2200 rpm

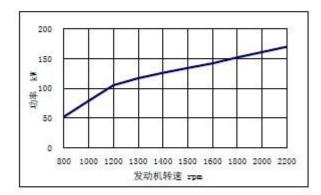
230HP@2200 rpm
Peak Torque: 861N.m@1300 rpm

Fuel System: PW2000/RQV-K Aspiration: Turbocharged & Air-Air intercooler

Cylinders: 6 Cylinders, in Line Rating Type: Continuous



±	租矩
rpm	N. m
800	622
1000	763
1200	845
1300	861
1400	857
1500	853
1600	848
1800	809
2000	770
2200	740



3	力率
rpm	kW
800	52
1000	79
1200	105
1300	117
1400	126
1500	134
1600	142
1800	152
2000	161
2200	170

225		10	b 10	0 0		/
型 200		_		-		0
175	0 1000	1200 1	300 1400	1500 160	0 1800 20	00 22

H	耗		
rpm	g/kW.h		
800	222		
1000	213		
1200	203		
1300	201		
1400	201		
1500	201		
1600	204		
1800	215		
2000	223		
2200	237		

Performance data obtain under normal conditions, according to GB/T18297-2001 test conditions

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Diesel Engine for Vehicle Performance Data

Technical Request

Aspiration: Turbocharged & Air to air intercooled

Emission Certification

Net Weight(Dry)-Engine Only-Average:

Net Weight(Dry)-Engine with Heat Exchanger-Average

604kg

Net Weight(Dry)-Engine with Heat Exchanger-Average

636kg

Compression Ratio:

18:1

Distance from Center of Gravity to the Front Engine Block

Distance from Center of Gravity to the Crankshaft Centerline

Maximum Bending Moment at Rear Face of Block

1356 N.m

Limit load of Thrust Bearing:

Instantaneous maximum:3558 NContinuous maximum2670NInstantaneous inertia at Rotating: (without Flywheel)kg.m2

Performance Characteristic

Idle Speed:750rpmMaximum non-load speed:2500rpmOver speed performance(within 15 seconds):3500rpmMaximum Altitude at Continuous Operation:3000mThe clutch torque @ 800rpm:600N.m

When install exhaust braking:

The limit exhaust pressure of Turbocharger export @3150 rpm 450 kPa
Maximum power of Exhaust brake 162kw

Engine	Oil	Air	Exhaust	Fuel	Coolant	Radiation	Wear
Speed	Pressure	Flow	Temperature	Consumption	Flow	Loss	Power
(RPM)	(kPa)		(℃)	(l/hr)	(l/m)	(kw)	(kw)
2200	458	429	550	40.4	276	111	42
1400	295	211	526	23.5	168	68	20

Engine Model C230 20: Curve No.: FR91304 All values within $\pm 5\%$.

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Diesel Engine for Vehicle Performance Data

LUBRICATION SYSTEM			
Oil Sump Capacity:			
Upper Limit:	_	.0L	
Lower Limit:	15.2L		
Capacity of the whole system:	23.6	L	
AIR SYSTEM			
Air intake maximum temperature rise from Outside to the Turbocharger	15°C	\mathbb{C}	
The allowable maximum restriction when use Dry Air Filter			
Medium: kPa (mmH2O)	2.9(3	00)	
Heavy: kPa (mmH2O)	3.7(3	380)	
The allowable maximum restriction when use dirty Filter Element: kPa (mmH2O)	6.2(6	535)	
EXHAUST SYSTEM			
The maximum exhaust resistance with exhaust manifold and muffler: kPa(mmHg)	10.0(75)		
The allowable minimum diameter of the exhaust manifold:	75mm		
FUEL SYSTEM			
The maximum resistance of Fuel Pump when use clean filter	150mmHg		
Maximum fuel return oil resistance:	520mmHg		
COOLING SYSTEM			
Engine Coolant Capacity:	12.3	3 L	
The range of temperature adjustment for the Thermostat:	83-95	∵ ℃	
The maximum pressure of Coolant(without pressure cap and thermostat closed)	280kPa		
The highest coolant temperature (at engine exports):	100°C		
Maximum degassing time	25mins		
Maximum coolant flow to accessories	56 L/min		
The lowest coolant temperature	70°C		
Minimum speed of water-filling	19 l/min		
Minimum coolant expansion volume relative to the system capacity	6 %		
Water tank capacity without water expansion	6 L		
Minimum allows pressure of pressure cap:	50 kPa		
The alarm temperature of the coolant	100℃		
The open temperature of louver	N/A	A	
Cooling ability of cooling system:	Stage II	Stage III	
The limit environmental temperature at rated speed	45 ℃	42 °C	
The limit environmental temperature at peak torque	40℃	37℃	

24V ELECTRICAL SYSTEM

Maximum resistance of starting circuit 0.002Ω The cold start current when engine and the clutch separate: CCA 510

COLD STARTING SYSTEM

The lowest cold starting temperature without auxiliary starting device -12°C @120rpm The lowest cold starting temperature with starting device -25°C @ 110rpm

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All data is subject to change without notice- contact Cummins for most recent data.