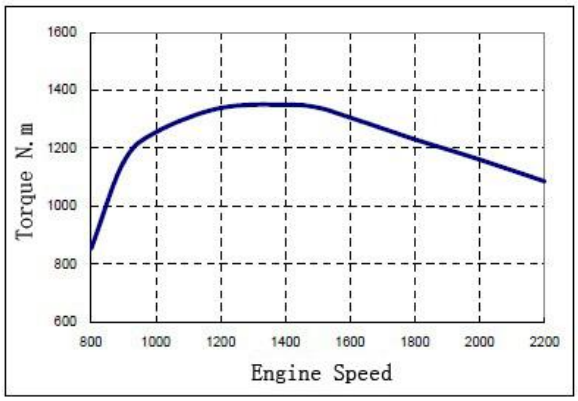
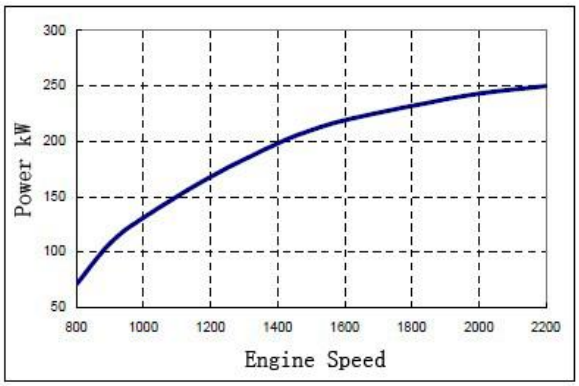
	DONGFENG CUMMINS ENGINE PERFORMANCE CURVE	Engine Model **L340**	Curve No. **FR91719**	
			CPL Code **8686**	Date

Displacement: 8.9L
Bore: 114mm
Stroke: 145mm
Fuel System: Direct Injection Pump
Cylinders: 6 Cylinders, in Line

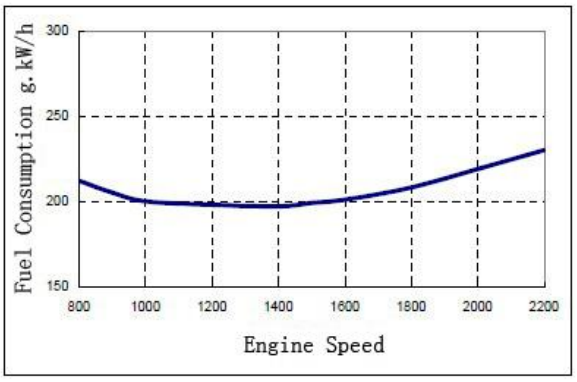
Advertised Power: 250kW@2200 rpm
340HP@2200 rpm
Peak Torque: 1350N.m@1400 rpm
Aspiration: Turbocharged & Inter-cooled
Rating Type: Continuous



Torque	
rpm	N.m
800	852
900	1150
1000	1255
1200	1339
1400	1350
1500	1340
1600	1305
1800	1230
2000	1160
2200	1085



Power	
rpm	kW
800	71
900	108
1000	131
1200	168
1400	198
1500	210
1600	219
1800	232
2000	243
2200	250



Fuel Consumption	
rpm	g/kW.h
800	212
900	205
1000	200
1200	198
1400	197
1500	199
1600	201
1800	208
2000	219
2200	230

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

Cummins Engine Co. Ltd

Diesel Engine for Vehicle Performance Data

Technical Request

Aspiration:	Turbocharged & Inter-cooled
Emission Certification	GB17691/GB14761
Net Weight(Dry)-Engine Only-Average:	650kg
Net Weight(Dry)-Engine with Heat Exchanger-Average	680kg
Compression Ratio:	16.6:1
Distance from Center of Gravity to the Front Engine Block	427mm
Distance from Center of Gravity to the Crankshaft Centerline	163mm
Maximum Bending Moment at Rear Face of Block	1356 N.m
Limit load of Thrust Bearing:	
Instantaneous maximum:	5338 N
Continuous maximum	2670 N

Performance Characteristic

Idle Speed:	700±100rpm
Maximum non-load speed:	2500rpm
Over speed performance(within 15 seconds):	3500rpm
Maximum Altitude at Continuous Operation:	2000m
The clutch torque @ 800rpm:	780N.m
When install exhaust braking:	
The limit exhaust pressure of Turbocharger export @3150 rpm	450 kPa
Maximum power of Exhaust brake	114kw

Engine Speed (RPM)	Oil Pressure (kPa)	Air Flow (m3/min)	Air Pressurized		Exhaust Flow (m3/min)	Exhaust Temperature (℃)	Fuel Consumption (l/hr)	Heat Energy Loss	
			Flow (kg/min)	Pressure kPa				Coolant (KW)	Air (KW)
2200	426	25.0	—	180	62	511	67	116	73
1400	327	16.0	—	140	38	540	46	72	33

LUBRICATION SYSTEM

Oil Sump Capacity:	
Upper Limit:	23L
Lower Limit:	19L
Capacity of the whole system:	27.6 L

AIR SYSTEM

Air intake maximum temperature rise from Outside to the Turbocharger	15℃
The allowable maximum restriction when use Dry Air Filter	
Medium: kPa (mmH2O)	2.9(300)
Heavy: kPa (mmH2O)	3.7(380)
The allowable maximum restriction when use dirty Filter Element: kPa (mmH2O)	6.2(635)

TURBOCHARGED & INTERCOOLED

Environment design parameters	Stage II	Stage III
The highest temperature of intake manifold:	55℃	50℃
Temperature after the cooling of the intercooler	25℃	20℃
The maximum allowiable cold pressure difference before and after the intercooler:	16.7(125) kPa(mmHg)	
The allowable minimum diameter of the intake manifold:	100mm	

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:	11.1 L
The range of temperature adjustment for the Thermostat:	83-93 ℃
The maximum pressure of Coolant(without pressure cap and thermostat closed)	290kPa
The highest coolant temperature (at engine exports):	100℃
Maximum degassing time	25mins
Maximum coolant flow to accessories	56 L/min
The lowest coolant temperature	70℃
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	104℃
The open temperature of louver	N/A

Cooling ability of cooling system:	Stage II	Stage III

The limit environmental temperature at rated speed	45 ℃	42 ℃
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	-10℃ @120rpm	
The lowest cold starting temperature with starting device	-25℃@ 110rpm	

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