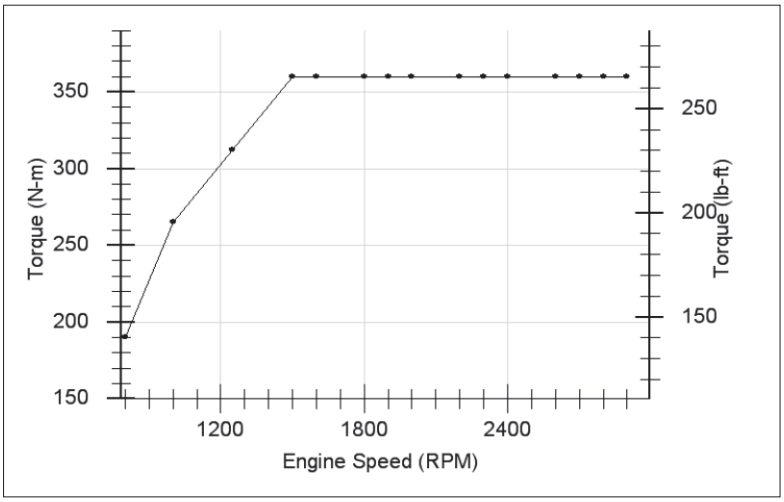
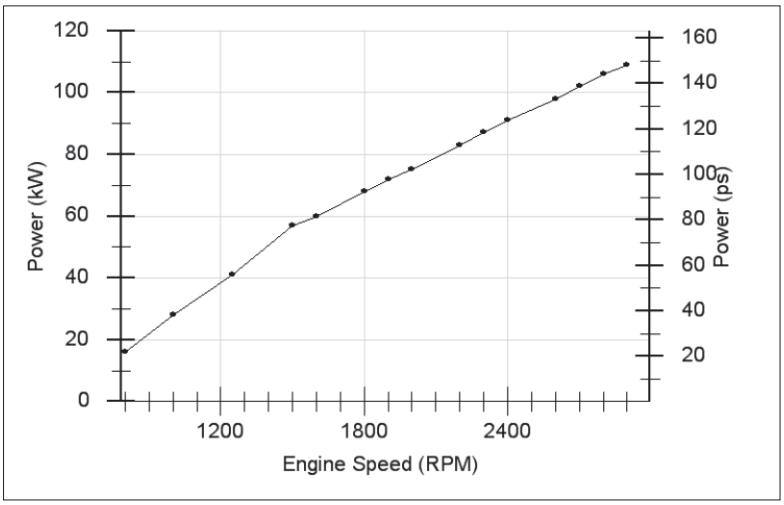
Engine Performance Curve	ISF2.8s5148T	110KW@2900RPM 360Nm@1500RPM			Automotive Pg. No.
Cummins Inc Columbus, Indiana 47202-3005 http://www.cummins.com		Curve Number **FR93218**	CPL Code **43467**	Date **27-Jul-2010**	**1**

Compression Ratio:	**16.9:1**	Engine Configuration:	**D0E3002BX03**
Fuel System:	**Bosch Electronic**	Emission Certification:	**Euro 5**
Cylinders:	**4**	Aspiration:	**Turbocharged and Charge Air Cooled**
Bore:	**94 mm (3.7 in)**	Displacement:	**2.8 L (171 in3)**
Stroke:	**100 mm (3.94 in)**		



Torque Output

RPM	N-m	lb-ft
800	186	137
1,000	265	195
1,250	312	230
1,500	360	266
1,600	360	266
1,800	360	266
1,900	360	266
2,000	360	266
2,200	360	266
2,300	360	266
2,400	360	266
2,600	360	266
2,700	360	266
2,800	360	266
2,900	360	266



Power Output

RPM	kW	ps
800	16	21
1,000	28	38
1,250	41	56
1,500	57	78
1,600	60	82
1,800	68	92
1,900	72	98
2,000	75	102
2,200	83	113
2,300	87	118
2,400	91	124
2,600	98	133
2,700	102	139
2,800	106	144
2,900	109	148

Performance data shown is nominal and is to 80/1269/EEC (as amended) conditions of 990 mbar barometric pressure and 25 deg C air intake temperature. All data is based on the engine operating with fuel system, water pump, lubricating oil pump with inlet and exhaust restriction at or below Datasheet limits. Not include are air compressor, fan and alternator.

Certified within 5%

Preliminary-(Estimated data)

Compression Ratio:	**16.9:1**	Engine Configuration:	**D0F3002BX03**
Fuel System:	**Bosch Electronic**	Emission Certification:	**Euro 5**
Cylinders:	**4**	Aspiration:	**Turbocharged and Charge Air Cooled**
Bore:	**94 mm**	Displacement:	**2.8 L**
Stroke:	**100 mm**		

General Performance Data

Maximum low idle speed	**800** RPM
Minimum low idle speed	**700** RPM
Nominal no load governed speed	3,**200** RPM
Maximum overspeed capability	4,**800** RPM
Clutch engagement torque at 800 rpm	180 N-m
Maximum altitude for continuous operation without derate	TBD

Air Induction System

Maximum temperature rise between ambient air and engine air inlet	**15** delta deg C

Exhaust System

Maximum back pressure imposed by complete exhaust system	**20** kPa

Cooling System

Maximum coolant temperature - engine out(Intermittent)	**110** deg C
Charge air cooler outlet to ambient @ 2900 rpm - CAC dT	30 delta deg C
Maximum coolant pressure (exclusive of pressure cap; closed thermostat at maximum no load speed)	215 kPa
Maximum allowable pressure drop across charge air cooler and OEM CAC piping (CACDP)	**13.5** kPa
Maximum coolant temperature for engine protection controls	**114** deg C
Maximum coolant flow to accessories	**23** L/min
Refer to AEB21.52 for territory related cooling standard	

Maximum Rating Performance Data

	Maximum Power	Peak Torque
Engine Speed	**2,900** RPM	1,**500** RPM
Output Power	110 kW	56 kW
Torque	**360** N-m	360 N-m
Inlet Air Flow	438 m3/hr	216 m3/hr
Charge Air Flow	512 kg/hr	252 kg/hr
Exhaust Gas Flow	536 Kg/hr	263 Kg/hr
Exhaust Gas Temperature	**556** deg C	440 deg C
Heat Rejection to Coolant	46 kW	32 kW
Radiator Coolant Flow *	203 L/min	119 L/min
Heat rejection to charge air cooler **	19 kW	8 kW
Turbo Comp. Outlet Pressure	**141** kPa	1**08** kPa
Turbo Comp. Outlet Temperature	**157** deg C	126.8 deg C
Fuel Consumption	2**3.57** kg/hr	11.39 kg/hr
Brake Mean Effective Pressure	**16.04 bar**	16.3 bar

* - Radiator Coolant Flow is approximately 5% less with a continuously deaerating system.
Coolant: 50/50 - Ethylene Glycol/Water by volume. Values are within +/- 5%.
**- Heat rejection to charge air cooler value is at standard engine test conditions of 25 deg C turbo air inlet temperature

End of Report

Bold entries revised after 1-May-2010