

N67 Tier4b / StageIV

## Engine Performance Data Sheet



Industrial Market

Number Cylinders: 6  
Displacement: 6.7 L

Aspiration: Turbocharged Charge Air Cooled  
Fuel System: Bosch HPCR

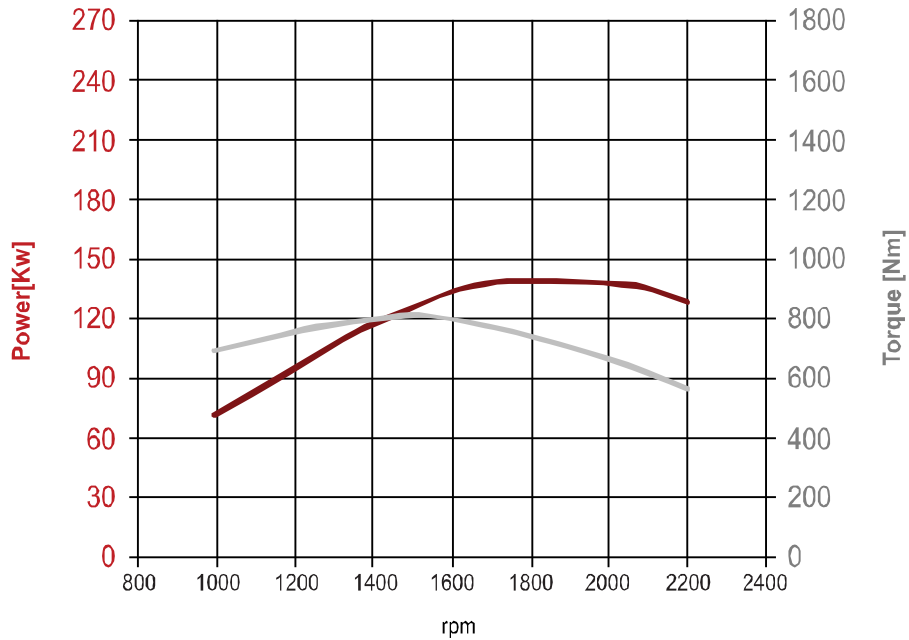
Revision: 39  
Data : 30/09/2014

Power : 129 kW @ 2200 rpm

Torque : 805 Nm @ 1500 rpm

Status for curves and data: Approved

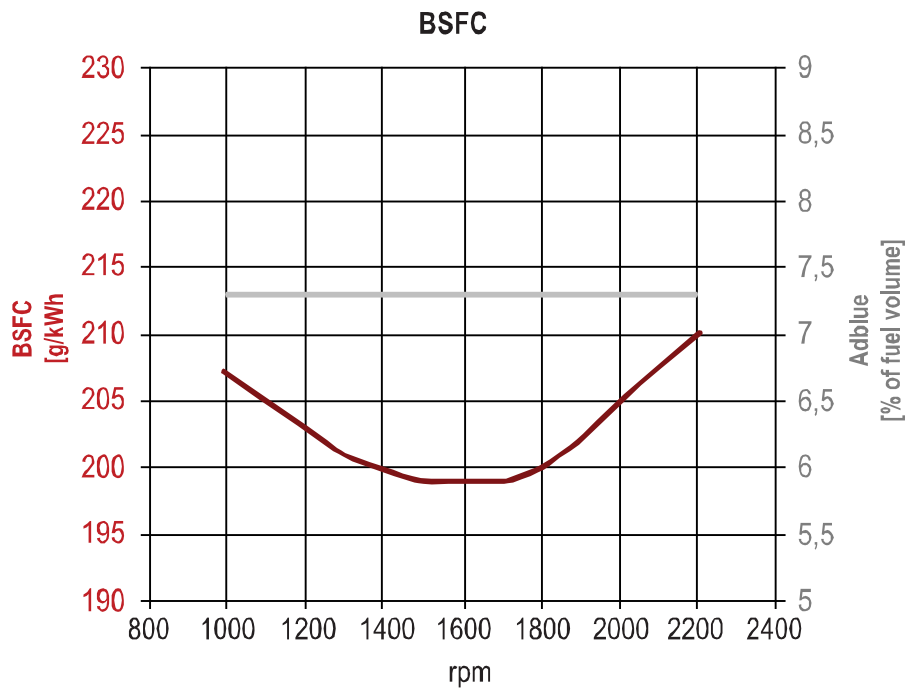
Tolerance on values: ± 5% (N/A for Alpha/Beta/Preliminary Engines)



rpm	Power Output (kW)	Torque Output (Nm)
1000	72	690
1100	83	724
1200	95	752
1300	106	779
1400	116	795
1500	126	805
1600	133	796
1700	138	774
1800	140	741
1900	139	701
2000	138	660
2100	135	613
2200	129	559

### Engine Performance data

Rated Power (*)	kW (CV)	129
Rated speed	rpm	2200
Specific Power (rated)	kW/l	19.2
Max Power (peak)	kW (CV)	140
Power speed (peak)	rpm	1800
Specific Power (peak)	kW/l	20.8
BMEP @max Power	bar	11.4
Mean Piston Speed	m/s	9.68
Max Torque	Nm	805
Max Torque speed	rpm	1500
Specific Torque	Nm/l	119.7
BMEP @ max Torque	bar	15.1
Torque rise	%	32
Torque @ 1000 rpm	Nm	690
Max no load governor speed	rpm	2375±50
Nominal idling speed	rpm	750±100
Best Point BSFC	g/kWh	199
Oil consumption @ rated speed	g/kWh	0.15
Engine brake power @ rated speed	kW	28
Engine brake power in over speed	kW	56



### Lubrication System

Min oil pressure @ low idle (engine oil temp at 120°C)	kPa (bar)	60
Min oil pressure @ rated speed (engine oil temp at 120°C)	kPa (bar)	200
Max oil pressure @ rated speed (engine oil temp at 120°C)	kPa (bar)	350

### Cooling System

Maximum coolant temperature (engine out) with 100 kPa pressure cap	°C	106
Engine out coolant to ambient @ rated speed	delta °C	na
Engine out coolant to ambient @ torque speed	delta °C	na
Charge air cooler outlet to ambient @ max rpm - CAC dT	delta °C	25
Maximum Air intake Manifold Temperature	°C	75-90

### Engine Noise

Full load @ Rated Speed (top rating)	dBA	91.7
No load @ Low Idle	dBA	88.6

**Maximum Rating Performance Data (\*)**

		<b>Rated speed</b>	<b>Max power</b>	<b>Peak Torque</b>
Power output	kW	129	140	126
Torque	Nm	559	741	805
Speed	rpm	2200	1800	1500
Ambient Temperature	°C	25	25	25
EGR Rate	%	na	na	na
Frictional torque	Nm	121	106	95
Fuel Flow	g/s	8	8.8	7.9
Fuel consumption (BSFC)	g/kWh	210	200	199
AdBlue consumption	% fuel Volume	7.3	7.3	7.3
Charge Air Flow	g/s	252	227	176
Exhaust Gas Flow	g/s	259	235	183
EGR flow	g/s	na	na	na
EGR Pressure	kPa	na	na	na
Boost Pressure (compressor outlet)	kPa	127	135	110
Temperature after HP-Compressor	°C	na	na	na
Boost Temperature (includes EGR effect)	°C	128	130	110
Exhaust Gas Temp between HP-TC	°C	na	na	na
Exhaust Gas Temp (after TC)	°C	390	420	450
Power engine coolant without EGR & CAC	kW	na	na	na
Power high Temperature EGR Cooler (engine water)	kW	na	na	na
Power LP-CAC (engine water)	kW	na	na	na
Total Water cooling power of engine	kW	64	65	60
Total Pump water flow	l/s	3.7	3.0	2.5
Radiator Coolant Flow (**)	l/min	na	na	na
EGR Cooler water flow (for $\Delta T=6^{\circ}C$ )	l/s	na	na	na
LP-CAC water flow (for $\Delta T=6^{\circ}C$ )	l/s	na	na	na
Power of HP CAC	kW	na	na	na
Total CAC power (air to air)	kW	22	20	14

(\*) Power at flywheel according dir. 97/68 EC (w/o fan), after 50 hours of run-in, tolerance  $\pm 3\%$ , fuel EN 590; Test according ISO 3046/1, turbo air inlet temperature  $25^{\circ}C$ , atmospheric pressure 100 kPa, humidity 30 % - According also to DIN 6271, BS 5514, SAE J1349. 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. Accessory loads assumed at 20 N-m across from idle to rated rpm. Fan duty cycle must be lower than 20% Radiator Coolant Flow is approximately 5% less with a continuously deaerating system. Coolant: 50/50 - Ethylene Glycol/Water by volume.

(\*\*) Radiator Coolant Flow is approximately 5% less with a continuously deaerating system. Coolant: 50/50 - Ethylene Glycol/Water by volume.

All data is subject to change without notice

Revision	Description	Date
33	First document release	31/01/2014
34		28/02/2014
35		31/03/2014
37		30/04/2014
38		30/06/2014
38.1		31/07/2014
39		30/09/2014