

CURSOR

C78 ENT C

FOR AUTOMOTIVE APPLICATIONS

6 CYLINDERS IN LINE - DIESEL CYCLE

259 kW (352 CV) @ 2400 rpm

1280 Nm @ 1080 - 1930 rpm



T E C H N O L O G I C A L E X C E L L E N C E

**IVECO
MOTORS**

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Technical code		F2BE0681A*B
Thermodynamic cycle		Diesel 4 stroke - D.I.
Air intake		TAA
Arrangement		6L
Bore x Stroke	mm	115 X 125
Total displacement	l	7.8
Valves per cylinder		4
Cooling		liquid
Direction of rotation (viewed facing flywheel)		CCW
Compression ratio		16 : 1
Rotation mass moment of inertia (without flywheel)	kgm ²	0.44
Standard flywheel inertia	kgm ²	1.09

Air induction

Max suggested intake restriction with clean air filter	kPa(bar)	3.5 (0.035)
Max allowable restriction with dirty air filter	kPa(bar)	6.5 (0.065)
Air requirement for combustion at 100% load/rated speed	kg/h (m ³ /h)	1285 (1082)
Turbocharging pressure at full load/rated speed	kPa(bar)	139 (1.39)
Turbocharging air max temperature (engine inlet)	°C	45 (at 25°C amb.)
Heat rejected to intercooler at maximum power	kJ/s(kcal/h)	39.7 (34,130)
Intercooler system max pressure drop	kPa(bar)	11 (0.11)

Exhaust system

Max allowable backpressure	kPa(bar)	10 (0.1)
Max exhaust temperature at full load/rated speed	°C	530
Exhaust flow at max output	kg/h	1341

Lubrication system

Minimum oil pressure at idle	kPa(bar)	300 (3)
Max oil temperature at full load/rated speed	°C	110
Engine angularity limits continuous operation: max front up and front down	0/360	17
max left hand and right hand	0/360	17
Total system capacity including pipes, filters etc.	liters	28

Cooling system

Coolant capacity (engine only)	liters	15.5
Water pump flow at rated speed	m ³ /h	23
Heat to reject by heat exchanger at max power	kJ/s(kcal/h)	114.4 (98,340)
Thermostat (modulating range)	°C	85 to 95
Cooling liquid max temperature	°C	107

Fuel system

Injection system		Electronic Unit Injection (E.U.I.)
Gas oil max intake restriction	kPa(bar)	< 30 (0.30)
Gas oil max intake temperature	°C	< 35

Electrical system

Voltage	V	24
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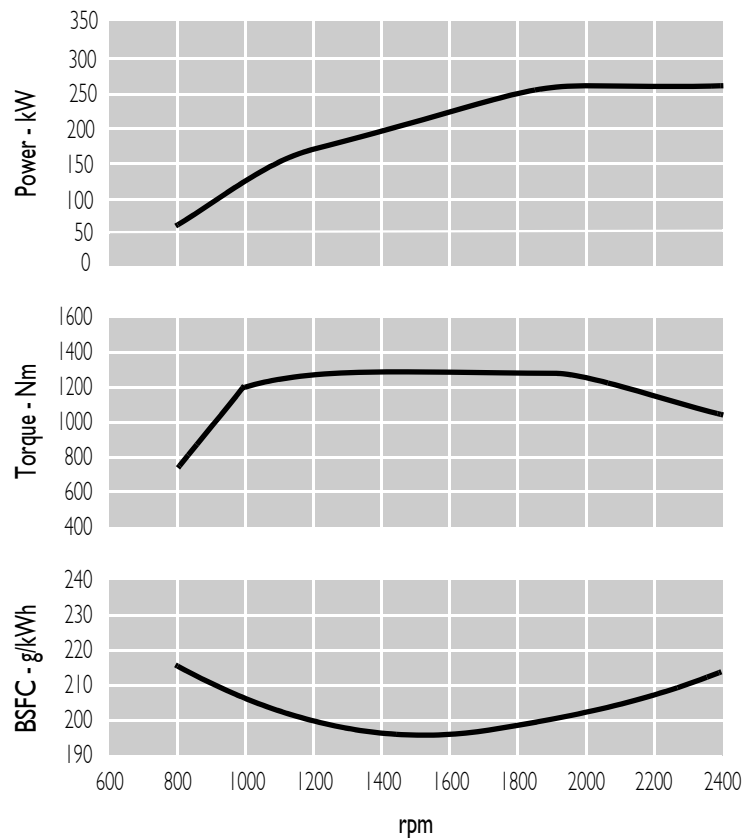
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Maximum rating *	kW(CV)	259 (352)
At speed	rpm	2400
Maximum torque	Nm (kgm)	1280 (131)
At speed	rpm	1080 - 1930
Maximum no load governed speed at max rating	rpm	2760
Minimum idling speed	rpm	550
Mean piston speed at rated speed	m/s	10
BMEP at max torque	kg/cm ²	21.0
Available certifications		2001 / 27 / EC - EURO 3
Specific fuel consumption at full load (best value)	g/kWh @ rpm	201 @ 1100/1600
Oil consumption at max rating	(% of fuel consumption)	0.09
Noise at max rating (ISO 3744)	dBA	95
Minimum starting temperature without auxiliaries	°C	-15
Oil and oil filter maintenance interval for replacement	hours	500
Dry weight (standard configuration)	kg	678

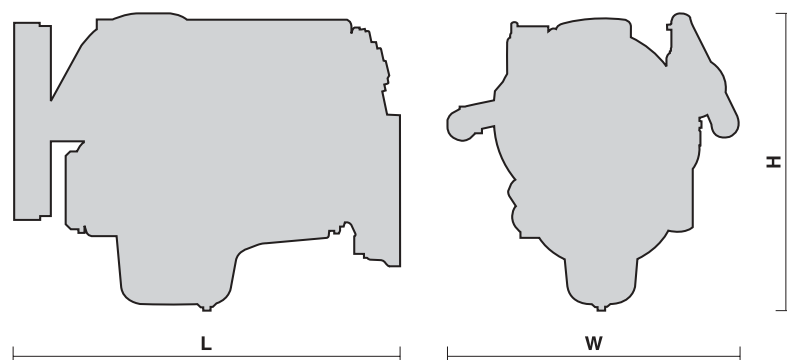
FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE IVECO MOTORS SALES NETWORK.

* **Power** at flywheel according to 97168 EC (without fan), after 50 hours running, 3% tolerance, fuel Diesel EN 590

Test conditions : ISO 304611, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity - Applicable also to DIN 6271, BS 5514, SAE J1349 Standards.



L = mm 1370
W = mm 980
H = mm 1060



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Standard configuration

Flywheel housing	SAE	l
Flywheel size	inch	l6
Intake manifold location		right side / middle position
Exhaust manifold / turbocharger location		left side / middle position
Turbocharger		VGT - Variable Geometry Turbine
Turbocharger location		left side / middle position
Fan transmission ratio		1.03 : 1
Distance between fan - crankshaft centers	mm	729
Fuel filter	n°	l - right side
Fuel prefilter		optional
Fuel pump		included
Oil filter	n°	l - right side
Oil sump		sheet steel / front well
Oil vapours blow-by circuit		recircled into engine
Oil heat exchanger		built in the crankcase
Oil filler		onto the valve cover
Exhaust counter flange		included
Starting motor		24 V - 4.5 kW
Alternator		24 V - 90 A
Engine stop device		electronic fuel shut down
Wiring harness		interface wiring loom with accessories
Power take off (PTO)		optional
PTO transmission ratio		1.14 : 1
PTO maximum available torque		600 Nm
Painting	colour	grey Cursor

Not included in the standard configuration

Battery - minimum capacity recommended	2 x 12 V	143 Ah
Battery - minimum cold cranking capacity recommended		800 A

IVECO MOTORS OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE IVECO MOTORS SALES NETWORK.

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