

NEF

N60 ENT C

FOR AUTOMOTIVE APPLICATIONS

6 CYLINDERS IN LINE - DIESEL CYCLE

202 kW (275 CV) @ 2500 rpm

930 Nm @ 1250 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		F4AE0681A*C
Thermodynamic cycle		Diesel 4 stroke - C.R.
Air intake		TAA
Arrangement		6L
Bore x Stroke	mm	102 X 120
Total displacement	l	5.9
Valves per cylinder		4
Cooling		liquid
Direction of rotation (viewed facing flywheel)		CCW
Compression ratio		17.5 : 1
Rotation mass moment of inertia (without flywheel)	kgm ²	0.31
Standard flywheel inertia	kgm ²	0.98

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)	1037 (886)
Turbocharging pressure at full load/rated speed	kPa(bar)	160 (1.60)
Turbocharging air max temperature (engine inlet)	°C	50 (at 25°C amb.)
Heat rejected to intercooler at maximum power	kJ/s(kcal/h)	33 (28,400)
Intercooler system max pressure drop	kPa(bar)	12 (0.12)

Exhaust system

Max allowable backpressure	kPa(bar)	10 (0.1)
Max exhaust temperature at full load/rated speed	°C	580
Exhaust flow at max output	kg/h	1080

Lubrication system

Minimum oil pressure at idle	kPa(bar)	70 (0.7)
Max oil temperature at full load/rated speed	°C	120
Engine angularity limits continuous operation: max front up and front down	0/360	25
max left hand and right hand	0/360	25
Total system capacity including pipes, filters etc.	liters	13.1

Cooling system

Coolant capacity (engine only)	liters	10
Water pump flow at rated speed	m ³ /h	14.3
Heat to reject by heat exchanger at max power	kJ/s(kcal/h)	94 (80,840)
Thermostat (modulating range)	°C	83 to 95
Cooling liquid max temperature	°C	107
Max inner pressure in the cooling circuit	kPa (bar)	275 (2.75)
External cooling system max pressure drop	kPa (bar)	35 (0.35)

Fuel system

Injection system		Common Rail
Gas oil max intake restriction	kPa(bar)	35 (0.35)
Gas oil max intake temperature	°C	70

Electrical system

Voltage	V	24
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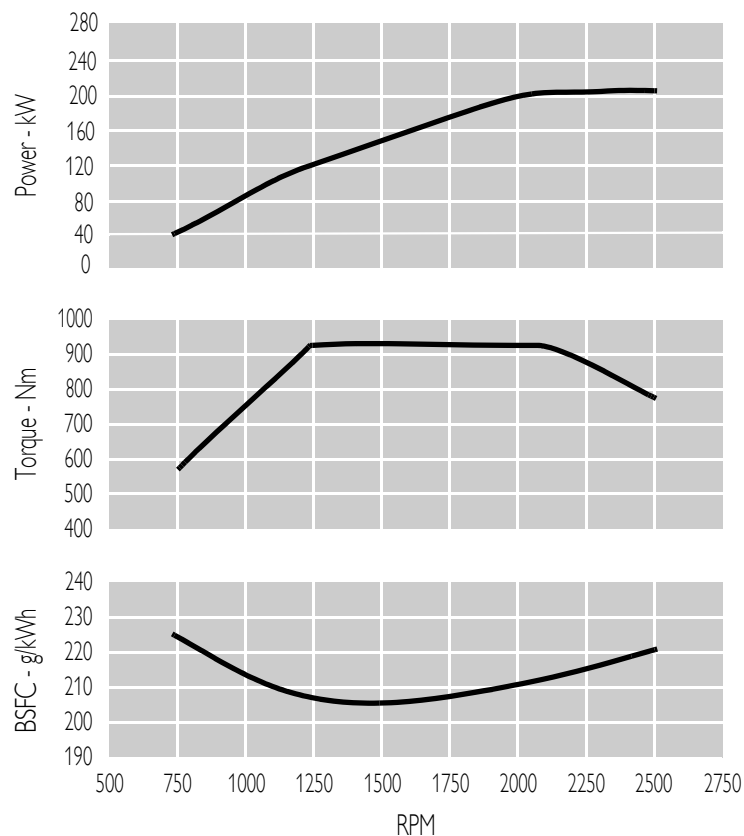
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Maximum rating *	kW(CV)	202 (275)
At speed	rpm	2500
Maximum torque	Nm (kgm)	930 (95)
At speed	rpm	1250
Maximum no load governed speed at max rating	rpm	2800
Minimum idling speed	rpm	650
Mean piston speed at rated speed	m/s	10.0
BMEP at max torque	kg/cm ²	20.2
Available certifications		2001 / 27 / EC - EURO 3
Specific fuel consumption at full load (best value)	g/kWh @ rpm	205 @ 1250/1400
Oil consumption at max rating	(% of fuel consumption)	0.07
Noise at max rating (ISO 3744)	dBA	91
Minimum starting temperature without auxiliaries	°C	-15
Oil and oil filter maintenance interval for replacement	hours	600
Dry weight (standard configuration)	kg	500

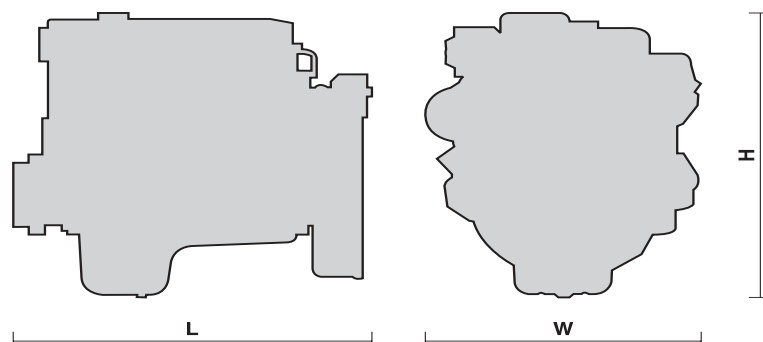
FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE IVECO MOTORS SALES NETWORK.

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

Test conditions : ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity - Applicable also to DIN 6271, BS 5514, SAE J1349 Standards.



L = mm 1091
W = mm 697
H = mm 872



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Standard configuration

Flywheel housing	SAE	1
Flywheel size	inch	15 or 16
Intake manifold location		left side
Exhaust manifold / turbocharger location		right side
Turbocharger		waste gate controlled
Turbocharger location		right side
Fan transmission ratio		1 : 1 on crankshaft
Distance between fan - crankshaft centers	mm	0
Fuel filter	n°	1 - left side
Fuel prefilter		included
Fuel pump		included
Oil filter	n°	1 - right side
Oil sump		sheet steel / front well
Oil vapours blow-by circuit		on flywheel housing
Oil heat exchanger		built in the crankcase
Oil filler		onto the valve cover
Exhaust counter flange		included
Starting motor		24 V - 4 kW
Alternator		24 V - 70 or 90 A
Engine stop device		function incorporated into E.C.U.
Wiring harness		interface wiring loom with accessories
Power take off (PTO)		in front of crankshaft by pulley
PTO transmission ratio		1 : 1
PTO maximum available torque		150 Nm
Painting	colour	grey

Not included in the standard configuration

Battery - minimum capacity recommended	2 x 12 V	130Ah
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.

HEAD OFFICE AND BRANCHES

<p>IVECO S.p.A. Iveco Motors Lungo Stura Lazio, 49 - 10156 Torino Tel. +39 (011) 0076245 - Fax +39 (011) 0076275 www.ivecomotors.com</p>	<p>Italy</p>	<p>IVECO S.p.A. Iveco Motors Viale dell'Industria, 15/17 - 20010 Pregnana Milanese - Milano Tel. +39 (02) 935101 - Fax +39 (02) 93590029</p>	<p>Italy</p>
<p>IVECO FRANCE S.A. Iveco Motors 50 Rue Ampère - B.P. 103 - 69685 Chassieu Cedex Tel. +33 (04) 72472222 - Fax +33 (04) 78905990</p>	<p>France</p>	<p>IVECO N.V. Iveco Motors - Liaison office-India 52 Okhla - Industrial Estate Phase III 110020 New Delhi Tel. +91 98 10403881/82 - Fax +91 11 51613573</p>	<p>India</p>
<p>IVECO MAGIRUS A.G. Iveco Motors Heiner Fleischmann-Strasse, 9 - 74172 Neckarsulm Tel. +49 (07132) 97690 - Fax +49 (07132) 976935</p>	<p>Germany</p>	<p>IVECO FIAT Representative Office in P.R. China 10/F Jinling Hotel World Trade Center 2 Hanzhong Road - 210005 Nanjing Tel. +86 25 4710981 - Fax +86 25 4701105</p>	<p>China</p>
<p>IVECO U.K. Ltd Iveco Motors Road One - Industrial Estate CW7 3QP Winsford Tel. +44 (01606) 541027 - Fax +44 (01606) 541124</p>	<p>Great Britain</p>	<p>IVECO L.A. Iveco Motors Rua Alameda da Serra, 222 Vale do Sereno - Brazil 34000 - 000 Nova Lima (MG) Tel. +55 31 3286 3732/33/34 - Fax +55 31 3286 3735</p>	<p>Brazil</p>
<p>IVECO SWEDEN A.B. Iveco Motors Lergöskgatan, 12 - 42150 Västra Frölunda Tel. +46 (31) 492450 - Fax +46 (31) 492457</p>	<p>Sweden</p>	<p>IVECO Motors of N.A. 245 E. North Avenue Carol Stream, IL 60188 - 2021 USA Tel. +1 630 260 4226 - Fax +1 630 260 4267</p>	<p>North America</p>

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