



N67 MNA M15 FOR MARINE APPLICATIONS

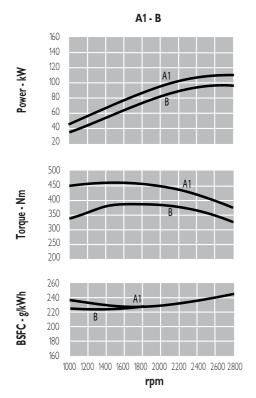
| Standard configuration | Thermodynamic cycle | | Diesel 4 stroke | | |
|--|--|--------|----------------------------|--|--|
| Bore x Stroke mm 104 X 132 Total displacement liters 6.7 Valves per cylinder 2.2 Cooling liquid Direction of rotation (viewed facing flywheel) CCW Engine management mechanical linjection system mechanical pump Electrical system Voltage V 12 Standard configuration Flywheel housing type SAE 3 Flywheel diameter inch 11 ½ Air filter left side Turbocharger Heat exchanger tube type Exhaust cooled elbow Water charge tank included Fuel filter n° 1 Fuel prefiter included Fuel filter n° 1 Fuel prefiter included Oil stape slow-by circuit on valve cover Oil sump Oil sump Oil sump Oil sump Oil sape show-by circuit Oil sump Oil heat exchanger Doil refer not valve cover Starter motor Alternator Engine shut-off E | Aspiration | | NA | | |
| Total displacement liters 6.7 Valves per cylinder 2 Cooling liquid Direction of rotation (viewed facing flywheel) CCW Engine management mechanical pump Electrical system Voltage V 12 Standard configuration Flywheel housing type SAE 3 Flywheel dameter inch 11 /2 Air filter left side Turbocharger — Left side Flushast cooled elbow — 2 Water drange tank included Fluel filter n° 1 Fuel prefilter included (loose) Fluel pump included Oil filter n° 1 Oil sump sheet steel Oil vapors blow-by circuit on valve cover Starter motor 12 V - 3 kW Alternator Digmess Painting Valve of the standard configuration Battery - minimum capacity recommended | Arrangement | | 6L | | |
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| Standard configuration | | | mechanical | | |
| V 12 | Injection system | | mechanical pump | | |
| V 12 | Electrical system | | | | |
| Flywheel housing type SAE 3 Flywheel diameter inch 11 ½ Air filter left side Turbocharger Heat exchanger tube type Exhaust cooled elbow Water charge tank included Fluel filter included (loose) Fuel prefilter included (loose) Fuel prefilter included (loose) Fuel pump included Oil filter n° 1 Oil sump sheet steel Oil vapors blow-by circuit on valve cover Oil heat exchanger built in the crankcase Oil filler on valve cover Starter motor 12 V - 3 kW Alternator 12 V - 90 A with W contact Engine shut-off electrical excitation Wiring harness engine wiring Painting colour white "ICE" | Voltage | V | 12 | | |
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| Oil vapors blow-by circuit Oil heat exchanger Dil filler On valve cover Starter motor | Oil filter | n° | 1 | | |
| Oil heat exchanger Oil filler on valve cover Starter motor Alternator Engine shut-off Wiring harness Painting Not included in the standard configuration Battery - minimum capacity recommended built in the crankcase on valve cover 12 V - 3 kW 12 V - 90 A with W contact electrical excitation electrical excitation engine wiring volume | Oil sump | | sheet steel | | |
| Oil filler Starter motor 12 V - 3 kW Alternator 12 V - 90 A with W contact Engine shut-off electrical excitation Wiring harness Painting colour white "ICE" Not included in the standard configuration Battery - minimum capacity recommended non valve cover 12 V - 3 kW electrical excitation electrical excitation engine wiring colour white "ICE" | Oil vapors blow-by circuit | | on valve cover | | |
| Starter motor Alternator 12 V - 3 kW Alternator 12 V - 90 A with W contact Engine shut-off electrical excitation Wiring harness engine wiring Painting colour white "ICE" Not included in the standard configuration Battery - minimum capacity recommended 180 Ah | Oil heat exchanger | | built in the crankcase | | |
| Alternator Engine shut-off Viring harness Painting Colour Not included in the standard configuration Battery - minimum capacity recommended 12 V - 90 A with W contact electrical excitation engine wiring colour white "ICE" 180 Ah | Oil filler | | on valve cover | | |
| Engine shut-off Wiring harness engine wiring Painting colour white "ICE" Not included in the standard configuration Battery - minimum capacity recommended electrical excitation engine wiring colour white "ICE" | Starter motor | | 12 V - 3 kW | | |
| Wiring harness Painting colour white "ICE" Not included in the standard configuration Battery - minimum capacity recommended 180 Ah | Alternator | | 12 V - 90 A with W contact | | |
| Painting colour white "ICE" Not included in the standard configuration Battery - minimum capacity recommended 180 Ah | Engine shut-off | | electrical excitation | | |
| Not included in the standard configuration Battery - minimum capacity recommended 180 Ah | Wiring harness | | engine wiring | | |
| Battery - minimum capacity recommended 180 Ah | Painting | colour | white "ICE" | | |
| Battery - minimum capacity recommended 180 Ah | Not included in the standard configuration | | | | |
| | • | | 180 Ah | | |
| | Battery - minimum cold cranking capacity recommended | | 800 CCA | | |

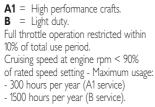
FPT OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE FPT SALES NETWORK.

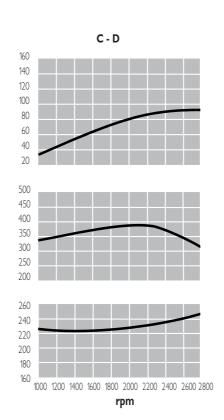
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| Rating type | | A1 | В | C | D |
|---|-----------------------------|-----------|------------|----------|----------|
| Maximum power * | kW(HP) | 110 (148) | 99.5 (133) | 92 (123) | 92 (123) |
| At speed | rpm | 2800 | 2800 | 2800 | 2800 |
| Maximum no load governed speed | rpm | 3100 | 3100 | 3100 | 3100 |
| Minimum idle speed | rpm | 650 | 650 | 650 | 650 |
| Mean piston speed at rated rpm | m/s | 12.3 | 12.3 | 12.3 | 12.3 |
| BMEP at max torque | kg/cm² | 8.6 | 7.3 | 7.3 | 7.3 |
| BSFC | g/kWh @ rpm | | 230 @ 1800 | | |
| Oil consumption at max rating | (% of fuel consumption) 0.1 | | | | |
| Minimum starting temperature without aids | °C | °C -10 | | | |
| Oil and oil filter maintenance interval for replacement | hours | hours 600 | | | |

^{*} **Net Power** at flywheel according to ISO 3046/1, after 50 hours running, fuel Diesel EN 590. Power tolerance 5%. **Test conditions**: ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30% relative humidity.



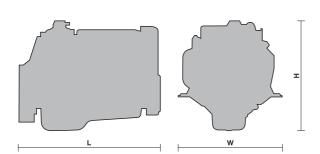




C = Medium duty.
 Full throttle operation < 25% of useperiod.
 Cruising speed at engine rpm < 90% of rated speed setting - Maximum usage 3000 hours per year.
 D = Heavy duty.

D = Heavy duty.

Maximum rating utilisation up to 100% of use period, for unlimited hours per year.



L = 1071 mm

W = 780 mm

H = 869 mm

Dry weight (without marine gear) = 530 kg

ENGINE BENEFITS

- **PERFORMANCE:** Ratings, consumption and emissions optimisation due to modern mechanical injection systems; high torque at low rpms.
- SERVICEABILITY: Widespread and quick service.
- RELIABILITY: Functional design; long engine life.
- **COST EFFECTIVENESS:** Fuel consumption reduction; maintenance and overhaul intervals extension.
- ENVIRONMENTALLY FRIENDLY: Noise, gaseous emissions and vibrations reduction.
- **CUSTOMER ORIENTATION:** Wideness of uses, propulsion certifications and emissions; availability of accessories range.

FIAT POWERTRAIN TECHNOLOGIES Via Puglia, 15 - 10156 Torino

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LOCAL DISTRIBUTOR



