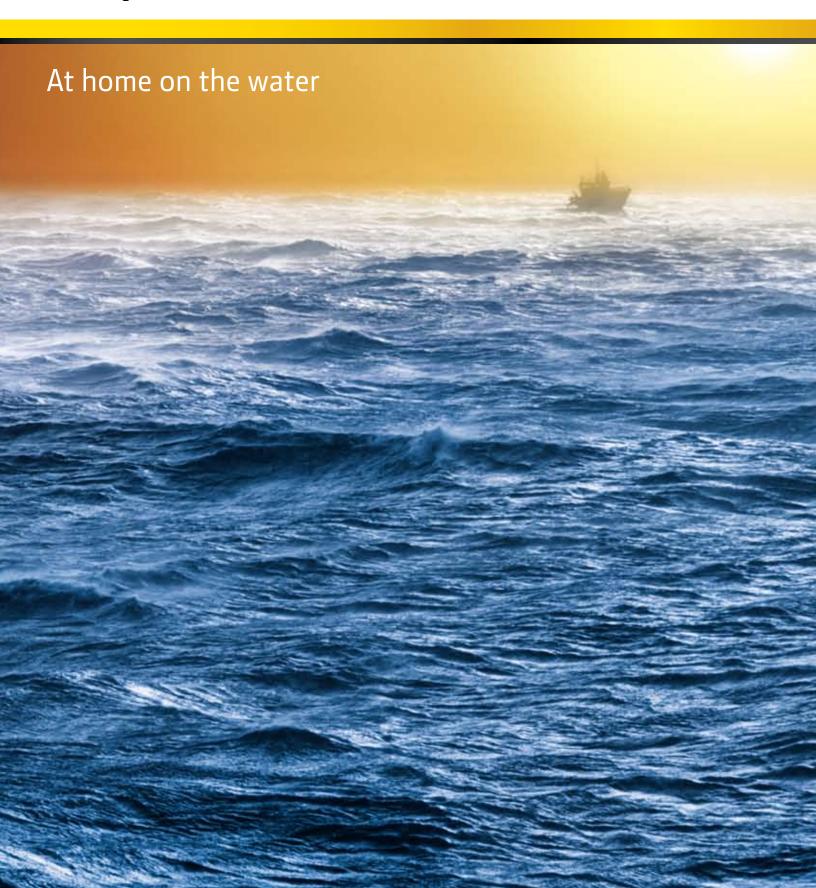
Offshore Marine Services **Burtonport Co Donegal Ireland** pauloffshore@me.com

# Marine Applications Diesel Engines













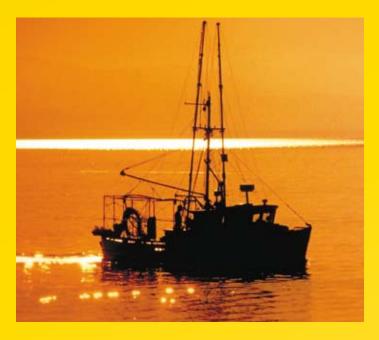






# Peace of mind

Whether you're working on the waves or relaxing on your yacht — worrying about your engine is the last thing you want to do. That's why commercial and recreational boat owners throughout the world have been relying on John Deere engines for more than 30 years. John Deere PowerTech™ engines are durable, fuel-efficient, and easy to maintain. And they are backed by a vast service and support network that can keep you operating— no matter where you go.









# Propulsion engines – more power in the water

John Deere PowerTech engines are built for long life, reliable performance, fuel efficiency, quiet operation, ease of access to main parts, and simplified integration. They give you the power you need when you're on the water. Choose reliable John Deere engines from 56 to 559 kW (75 to 750 hp). **8,1L** 175 – 280 kW 4,5L 6,8L 115 – 298 kW 56 – 112 kW 75 – 150 hp 154 - 400 hp 235 - 375 hp

# Generator drive engines — the strong silent type

For auxiliary power from 40 to 417 kW (54 to 559 hp), John Deere generator drive engines deliver quiet, smooth operation that never lets you down. You may even forget they are aboard until you turn on the lights or plug in an appliance. This quiet reliability is why John Deere has become the preferred provider of generator drive engines worldwide, producing more engines in our power range for marine generators than any other manufacturer. They are available in 1500 rpm for 50 Hz and 1800 rpm for 60 Hz configurations.



Generator Drive Engines 40 – 417 kW 54 – 559 hp

#### Marine generator engine ratings

The marine generator engine rating is the power available under normal varying electrical load factors for an unlimited number of hours per year in commercial applications. This rating incorporates a 10 percent overload capability, and conforms to ISO 8528 prime power. Average load over a 24-hour period shall not exceed 67 percent of the prime rating, of which no more than 2 hours are between 100 percent and 110 percent of the prime rating. The marine generator rating is restricted to generator applications only.



**9,0L** 242 - 373 kW 325 - 500 hp

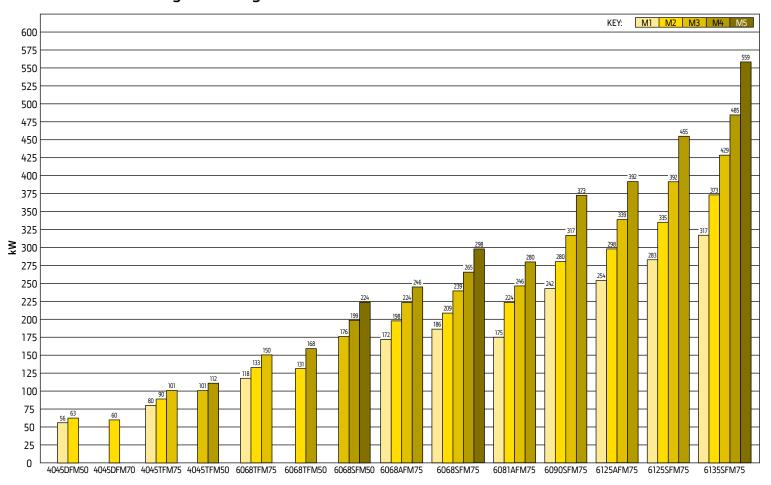


12,5L 254 – 455 kW 341 – 610 hp



13,5L 317 - 559 kW 425 - 750 hp

#### **Diesel Marine Engine Ratings**



#### Marine propulsion M ratings

|                           |                 | •                               |                                   |  |              |
|---------------------------|-----------------|---------------------------------|-----------------------------------|--|--------------|
| Marine performance rating | Load<br>factor* | Typical operation per year (hr) | Typical full-power operation (hr) | Possible a   | applications |
| M5                        | ≤ 35%           | ≤ 300                           | 0.5 of each 8                     | Recreational yachts, cruisers, sport fishing boats   |              |
| M4                        | ≤ 40%           | ≤ 800                           | 1 of each 12                      | Law enforcement, rescue<br>boats, light-duty commercial<br>and fishing boats, sport<br>fishing boats, trawler yachts |              |
| M3                        | ≤ 50%           | ≤ 2,000                         | 4 of each 12                      | Light-duty utility boats,<br>pilot boats, commercial<br>fishing boats, crew boats                                    |              |
| M2                        | ≤ 65%           | ≤ 3,000                         | 16 of each 24                     | Commercial fishing boats,<br>work boats, long-range<br>trawlers, off-shore boats                                     |              |
| M1                        | > 65%           | > 3,000                         | 24 uninterrupted                  | Tug boats, heavy-duty commercial applications  |              |

<sup>\*</sup> Load factor is the actual fuel burned over a period of time divided by the full-power fuel consumption for the same period of time. For example, if an engine burns 160 liters of fuel during an 8-hour run, and the full-power fuel consumption is 60 liters per hour, the load factor is 160 liters / (60 liters per hour x 8 hours) = 33.3%.

## Marine Engine Propulsion Power Ratings

| Engine    | Power Rating |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------|--------------|--|--|--|--|--|--|--|--|--|--|--|--|
| 6135SFM75 | 317 – 559 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6125SFM75 | 283 – 455 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6125AFM75 | 254 – 392 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6090SFM75 | 242 – 373 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6081AFM75 | 175 – 280 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6068SFM75 | 186 – 298 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6068AFM75 | 172 – 246 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6068SFM50 | 176 – 224 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6068TFM50 | 131 – 168 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 6068TFM75 | 118 – 150 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 4045TFM50 | 101 – 112 kW |  |  |  |  |  |  |  |  |  |  |  |  |
| 4045TFM75 | 80 – 101 kW  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4045DFM70 | 60 kW        |  |  |  |  |  |  |  |  |  |  |  |  |
| 4045DFM50 | 56 – 63 kW   |  |  |  |  |  |  |  |  |  |  |  |  |

kW 0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600



## Marine Engine Generator Drive Power Ratings

| Engine    | Power Rating |  |  |  |  |  |  |  |  |  |  |  |
|-----------|--------------|--|--|--|--|--|--|--|--|--|--|--|
| 6135SFM75 | 366 – 458 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6125SFM75 | 338 – 400 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6125AFM75 | 330 kW       |  |  |  |  |  |  |  |  |  |  |  |
| 6090SFM75 | 244 – 306 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6081AFM75 | 178 – 214 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6068SFM75 | 160 – 191 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6068AFM75 | 153 – 183 kW |  |  |  |  |  |  |  |  |  |  |  |
| 6068TFM50 | 98 – 125 kW  |  |  |  |  |  |  |  |  |  |  |  |
| 6068TFM76 | 98 – 121 kW  |  |  |  |  |  |  |  |  |  |  |  |
| 4045TFM75 | 61 – 80 kW   |  |  |  |  |  |  |  |  |  |  |  |
| 4045TFM50 | 63 – 78 kW   |  |  |  |  |  |  |  |  |  |  |  |
| 4045DFM70 | 44 – 50 kW   |  |  |  |  |  |  |  |  |  |  |  |
| 4045DFM50 | 44 – 53 kW   |  |  |  |  |  |  |  |  |  |  |  |

kW 0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500







# Auxiliary engines — ready when you are

## **Auxiliary engines**

From 36 kW to 559 kW (48 – 750 hp) John Deere PowerTech engines can be used to run vessel auxiliaries such as pumps, winches, deck cranes, hydraulics and generators. With displacements from 2,4L up to 13,5L finding an engine that fits your application has never been easier.

We've got you covered when it comes to emissions with engine models available in every required emissions level from non-certified engines up to current tier levels.





# Effortless engine power

#### Easy to install

John Deere marine engines can be configured for propulsion, generator set, and auxiliary applications. Our full range of reliable, fuel-efficient engines have the power to meet your needs. We also offer a choice of options and accessories to fit any application.

The simple and clean design of John Deere marine engines allows direct access to connection and service points for the cooling system, fuel supply, lubrication system, and exhaust system.

- Compact design for easy installation
- Front PTO with electronic clutch to drive pumps and accessories
- SAE flywheel and housing options
- Wet or dry exhaust elbows
- Keel cooled or heat exchanger cooled

# JOHN DEERE JOHN DEERE A TO THE CONTROL OF THE CON



#### HelmView™ Display

#### Easy to operate

Prewired instrument panel provides electronic control of engine functions and instant access to engine diagnostics.

- Includes tachometer, oil pressure, voltmeter, water temperature, and hour meter gauges
- Electronic information display is bright and easy to read
- Multilanguage text display

#### Easy to maintain

- Internal coolant passages minimize leaks by eliminating hoses and fittings
- Dipstick and oil fill on either side
- Poly-vee belt drive increases durability
- Washable, dry-type air filters can be serviced quickly and easily
- Replaceable wet liners, precision-joint connecting rod/cap joint, and replaceable valve seats make rebuilding easy
- Gear timing maintenance-free during entire life of engine

# Quiet operation and low vibration

We strive to design engines that go almost unnoticed. This is why all the moving parts are dynamically balanced. The torque available at low rpms also reduces engine speed and, consequently, noise level during vessel operation.

- Water-cooled exhaust manifold for cooler, quieter performance
- Engine isolators with optional mounting supports
- All 4-cylinder models have internal balance shafts to eliminate vibration

#### Extra acceleration

When compared to similar-sized marine engines, John Deere engines generate more torque at low speeds. They develop power more quickly and are able to cruise faster at a lower rpm. This reserve power is especially handy when maneuvering in swells, tides, or currents. John Deere engines provide quick response and great flexibility at all times.

# Operate with confidence

#### Clean engines

With John Deere PowerTech engines, everything runs clean and efficiently — above and below deck. John Deere marine engines feature closed crankcase vents that eliminate undesirable gases in the engine room and keep the bilge clean.

#### Clean air

John Deere also protects the air outside your boat by meeting all international, European, and United States emissions standards for regulated vessels.

- Environmental Protection Agency (EPA) Tier 2 regulations for vessels flagged in the United States
- European Union (EU) Recreational Craft Directive (RCD) for new recreational vessels from 2.5 to 24 meters in length
- European Union (EU) Directive on IWT (2004/26/EC) whose standards are also recognized by the CCNR for sailing on the Rhine
- Emissions certified engines over 130 kW (174 hp) come with a certificate of conformity showing compliance with regulations set out in Annex VI of the International Maritime Organization (IMO) MARPOL convention
- Engine International Air Pollution Prevention (EIAPP)
   certificates issued by the U.S. EPA or ABS are available for select engine models. Visit your John Deere dealer for details.

#### Less fuel

The efficiency of John Deere marine engines makes a big difference in your fuel costs. A unique combustion chamber and electronically controlled fuel injection delivers the lowest fuel consumption levels on the market. In addition, thanks to our high torque level, our engines can be used at lower rpms. You can travel farther and get more out of every tank when you choose John Deere marine engines.















#### Best warranty on the water — by far

Whether you're going to a work site or heading out to relax — it's nice to know that you're taking the best marine engine warranty with you. The John Deere warranty has the longest, most complete coverage of the major marine engine manufacturers. While others only include major components, our warranty covers everything. Plus, you get even longer worry-free cruising with our free 5-year/2,000-hour extended warranty for non-revenue-generating applications.\* Extended warranties up to five years are also available for commercial applications worldwide.\* See your John Deere marine dealer or engine distributor for details.

\*Conditions apply. See warranty registration.

# Easy access to parts and service

With more than 4,000 John Deere service locations worldwide, you're never far from help when you need it.



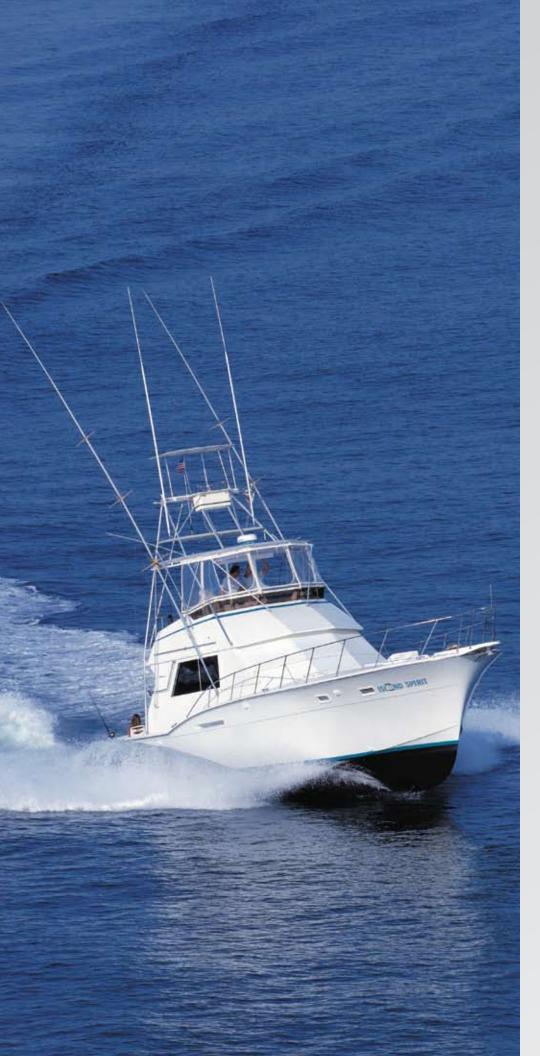
Log on to www.JohnDeere.com/ dealer to find the service dealer nearest you.

#### Nothing Runs Like A Deere™

John Deere delivers reliable power on land and in the water. We provide the qualities you want most from a marine engine — reliability, easy operation, and fuel economy. John Deere marine engines serve the unique needs of marine applications and share the same reputation for quality and performance that their agricultural and industrial counterparts have enjoyed for decades. When you choose John Deere, you get the support of one of the strongest engine and equipment companies in the world.

#### Certification

Our production sites are audited and certified by the major classification agencies. Our marine engines have type approval from the major marine classification agencies worldwide.



# Worldwide locations

#### Europe, Africa, and Middle East

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France

Phone: +33 2 38 82 61 19 Fax: +33 2 38 84 62 66

E-mail:JDMarineEngine@JohnDeere.com

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Fax: +1 319 292 5075 E-mail: jdpower@JohnDeere.com

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