



# Power at sea

### The 12-litre marine auxiliary engine

**Basic data**

The D112M EMS is a turbocharged and charge-air cooled 4-stroke diesel engine with EMS (Engine Management System) and unit injectors.

Configuration	6 in-line
Displacement	11.7 litres
Bore	127 mm
Stroke	154 mm
Weight, dry	1130 kg

**Output range for marine auxiliary engines**

50 Hz: 199–377 kW

60 Hz: 220–398 kW

**Dimensions (mm)**

H (W) L: 1038 (870) 1358

**Classifications**

Type approved in all major classification societies.

**Emissions regulations**

Engines comply with IMO and US Tier 2.

Specifications and design are subject to change without notice. Illustrated engines may have optional equipment not included in standard delivery.

### The 16-litre marine auxiliary engine

**Basic data**

The D116M EMS is a turbocharged and charge-air cooled 4-stroke diesel engine with EMS (Engine Management System) and unit injectors.

Configuration	8 in 90° V
Displacement	15.6 litres
Bore	127 mm
Stroke	154 mm
Weight, dry	1550 kg

**Output range**

50 Hz: 366–450 kW

60 Hz: 405–532 kW

**Dimensions (mm)**

H (W) L: 1198 (1172) 1358



**Our service network will keep you afloat.** With more than 1,500 service workshops in 100 countries, you can always rely on obtaining both assistance and professional attention – quickly and efficiently. The Scania network delivers parts, service and business support to keep your Scania engines running and your business going.

Many of Scania's authorised workshops offer round-the-clock service, 365 days a year, to keep your engines running for as many hours a year as possible with as high an in-service capability as possible.

As we have been providing engines to the marine world since 1902, you can definitely count on us in the future too!

Scania pursues an active policy of product development and improvement. For this reason the company reserves the right to change products, product specifications and part numbers without prior notice. Furthermore, due to national or EU legal requirements, some accessories may not be available in all local markets. For further information in these respects, please contact your local dealer or visit [www.scania.com](http://www.scania.com)



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# POWER

## Scania engines. Your business generators.

Scania's 12- and 16-litre engines are the No 1 choice for demanding marine auxiliary applications. They are specially developed and adapted for a marine environment and, like all Scania engines, deliver impressive power with unbeatable durability and reliability.

So what kind of application do you run? Cruise ships, container ships, barges, ferries, tug boats, push boats, supply and deployment vessels? Whatever your requirement may be, we have the optimum, reliable and profitable solution.

**Lightweight, powerful, mean and clean.** Scania's marine engines don't drag any dead-weight. They have a superb power-to-weight ratio and their compact design – with no unnecessary piping or hoses, makes them easy to install and adapt for auxiliary applications, and easy to maintain.

Thanks to the Scania engine's typical capability to develop real power at low revs, you can expect low fuel consumption, low exhaust emissions and low wear. Of course the engines comply with all existing and foreseeable emission standards. Also, we know that safety at sea is very important and that is why the Scania engine is type approved in all major classifications societies.

Flexibility is high on the agenda. We offer a range of optional equipment important for auxiliary applications. Scania marine engines are available for keel cooling and heat exchanger cooling systems geared to the design of the cooling system for other equipment such as main propulsion engines.

**Impressive stepload and recovery time.** Scania engines for marine power generation have been designed and developed to handle large stepload situations with short recovery times – important when an emergency or power loss occurs on board as well as for diesel electric propulsion.

High load variations are handled effectively, and despite the increase in output throughout the engine range, exhaust emissions have been kept low.

**Your business generator.** Scania is a stand-alone manufacturer of auxiliary engines. Thus, a marine auxiliary application based on a Scania marine engine is available through numerous suppliers around the world. Scania marine auxiliary engines are easy to install in auxiliary applications and therefore a product ready for your value adding activities. It is a fit for purpose product ready to generate business.

## Designed for economy and reliability.

Few customers are interested in engines whose only benefit is high power. What is important is the combination of high power output, low fuel consumption and low exhaust emissions. And an engine that is reliable, with long intervals between each service and overhaul.

That is why Scania's marine auxiliary engines have been designed to offer a combination of robust engineering that can handle tough operating conditions and electronics that can monitor and process the system for maximum performance.

### **Combustion for lower emissions and less fuel burnt.**

Scania's electronic Engine Management System (EMS), in combination with electronic unit injectors (UI), offer many concrete benefits.

Data is collated and processed every micro-second to regulate the injection timing and fuel quantity injected to ensure optimum combustion.

The high injection pressure, together with the extreme injection quantity and timing precision, results in higher power outputs, lower fuel consumption and lower emission levels.

Of course, the Scania engines comply with IMO and US Tier 2 emissions regulations.

### **Dual oil filtration system.**

Scania's unique oil filtration system is yet another important reason for the engine's renowned dependability. The combination of a full-flow paper filter, which deals with the larger particles, and a centrifugal cleaner which removes the smaller particles, provides maximum oil filtration, minimum wear and fewer filters used.

Which all adds up to lower operational costs!

### **Efficient cooling.**

The entire engine, including the charge-air cooler, is cooled by fresh water for maximum reliability and life. In addition, the water for the charge-air cooler has an extra cooling circuit to provide the coolest possible intake air.

## High up-time, low operational costs.

What Scania 12- and 16-litres engines can offer you is high up-time, high availability and an excellent overall economy due to design solutions that have been developed to match specific power generation demands.

All engines are based on a modular approach, which means that vital common components are found in several different engine models. From an availability point of view there are two main advantages: service, maintenance and repairs can be carried out faster, easier and more accurate, plus the workshop has fewer parts that need to be kept in stock.

The net result is enhanced service and increased uptime.

### **One man service concept.**

Since the engines can rarely be taken to an on-shore service workshop, all servicing must be done on the boat, preferably by one single technician. This is why all the service points are easily accessible, and why each cylinder has a separate cylinder head that is light enough to be lifted and replaced with the utmost precision by just one person.

The result is quick, simple and economical service.

### **Effective, twin-circuit cooling minimizes wear.**

Engine and charge-air cooling is handled by a twin-circuit heat exchanger. The additional separate coolant circuit helps improve the charge air cooling at full load since the cooling liquid is cooled twice.

This in turn improves performance and fuel consumption and reduces engine wear.

