

Power generation



Marine



Oil and gas



Process industries

Your advantages at a glance

Customizable to meet specific requirements

Short delivery time and high delivery reliability for a fast return on investment

Superior performance and efficiency up to 98.5 percent

Lowest noise and vibration levels

Lighter and more compact design to save space and resources

Outstanding technical reliability and product lifespan

Comprehensive program of monitoring services

Published by
Siemens AG 2018

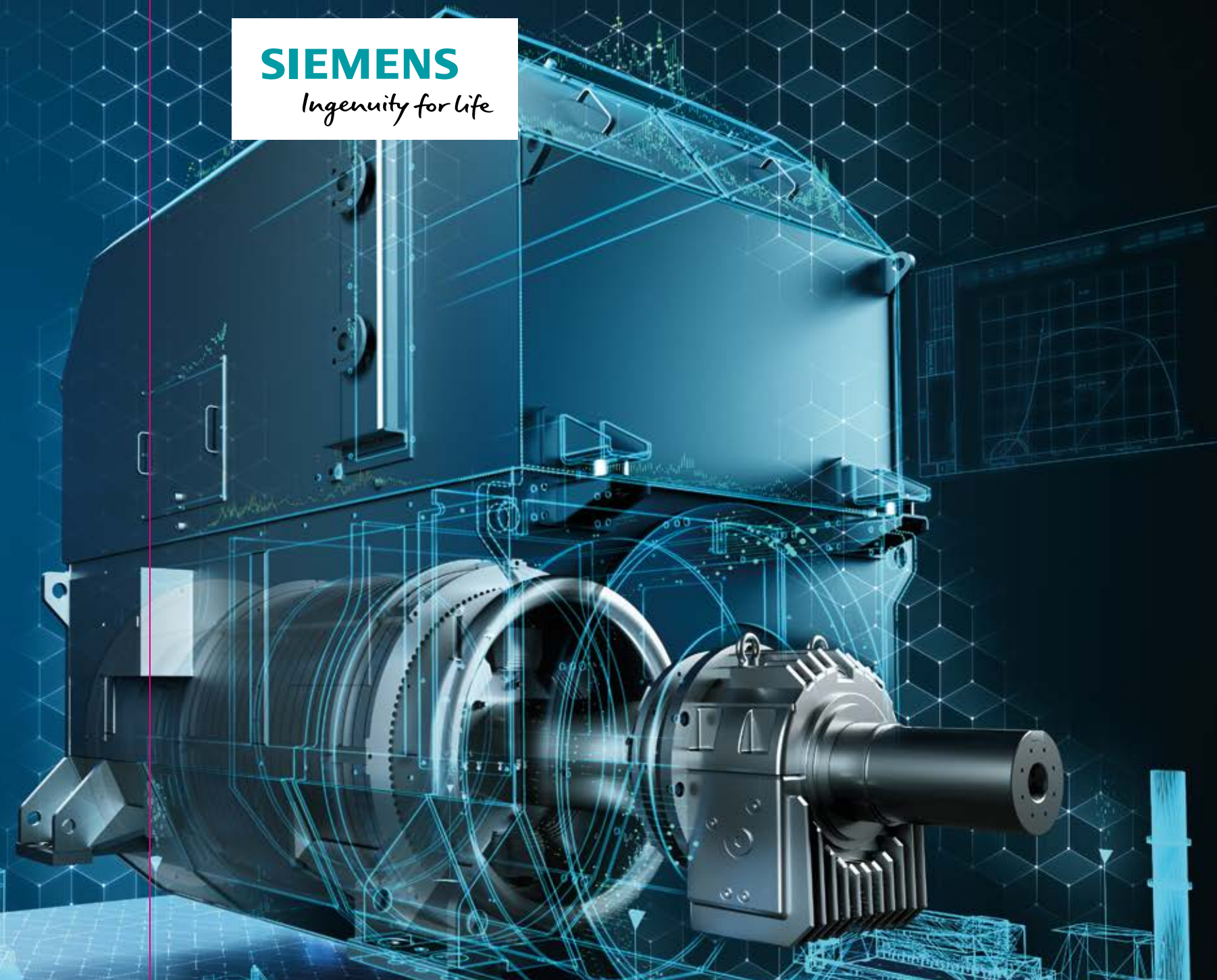
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Article No. PDL-D-B10133-00-7600
Printed in Germany
Dispo 21503
TH 455-180428 BR 07180.5

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Ingenuity for life



Swift, modular,
and reliable efficiency

SAGENTICS M generators
boost your power yield

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SAGENTICS M generators

The new benchmark for industrial generators

Faster project implementation, earlier return on investment, higher energy yield: SAGENTICS M industrial generators are the perfect solution wherever fast, reliable, and highly efficient power is required along with a positive return on your investment.

This new series is characterized by an extraordinarily high energy yield thanks to an efficiency rate of up to 98.5 percent, a lifespan of over 30 years, and smooth operation under extreme conditions. SAGENTICS industrial generators were also developed to save time and enable faster project execution – from initial planning to plant integration. The well-designed and extremely rugged frame offers standardization advantages and adds to the machine's superior performance, defining a new benchmark for industrial generators.

Higher yield – achieved faster

The SAGENTICS M series of high-performance synchronous alternators is based on a tried and tested design proven in countless applications worldwide. With our one-and-a-half centuries of experience in building rotating electric machines, you benefit from our leadership in energy efficiency and operational reliability. Our goals:

- Improve your competitiveness and enable you to focus on your core competencies
- Speed up your project execution with higher energy output and improved sustainability
- Provide you with top-of-the-range efficiency up to 98.5 percent
- Address your challenging applications with our new modular frame that offers a wide variety of options

Faster planning, delivery, and integration

The SAGENTICS M's every feature is focused on shortening time to market. Their extremely flexible electrical parameters, for example, help you discover innovative solutions, but not at the cost of standardization. The new modular frame provides a variety of cooling options in a compact design. This drastically simplifies your engineering effort and also shortens project realization and delivery time. And last but not least, the SAGENTICS M series is designed for reliability.

Technical data and details

Rated voltage	0.4/0.45/0.69/3.3/4.16/6.3/6.6/11/13.8/15 kV
Power rating	Up to 29 MVA
Rated frequency	50/60 Hz
Number of poles	4/6/8/10/12/14
Speed	429 – 1,800 rpm
Shaft height	560 mm/630 mm/710 mm/800 mm/900 mm
Type of construction	IM 1001/IM 1101/IM 1005/IM 1105
Excitation system (brushless)	Auxiliary winding, PMG (permanent magnet)
Bearings	Antifriction, sleeve
Insulation/utilization system	F/F, F/B (for low-voltage H/F, H/B, H/H)
Inclinations	Up to 25°
Degree of protection	IP23/IP44/IP54/IP55
Modular cooling design	IC 01/IC 81 W/IC 611/IC 616
Standards	IEC60034/NEMA MG 1

SIGENTICS M

Reliable power for all applications

Whether it's on board a ship or oil platform, in an industrial plant, or for an emergency power system, or a hydroelectric, diesel, gas, or steam power plant: From 1 MVA up to 29 MVA, SIGENTICS M industrial generators are the perfect choice for fast, reliable, and highly efficient and sustainable power generation. With their exceptional reliability and an efficiency rate up to 98.5 percent, SIGENTICS M can be installed wherever you need them: indoors or outdoors where they're subject to tropical heat, arctic cold, extreme humidity, salt-laden sea air, and even heavy seas.

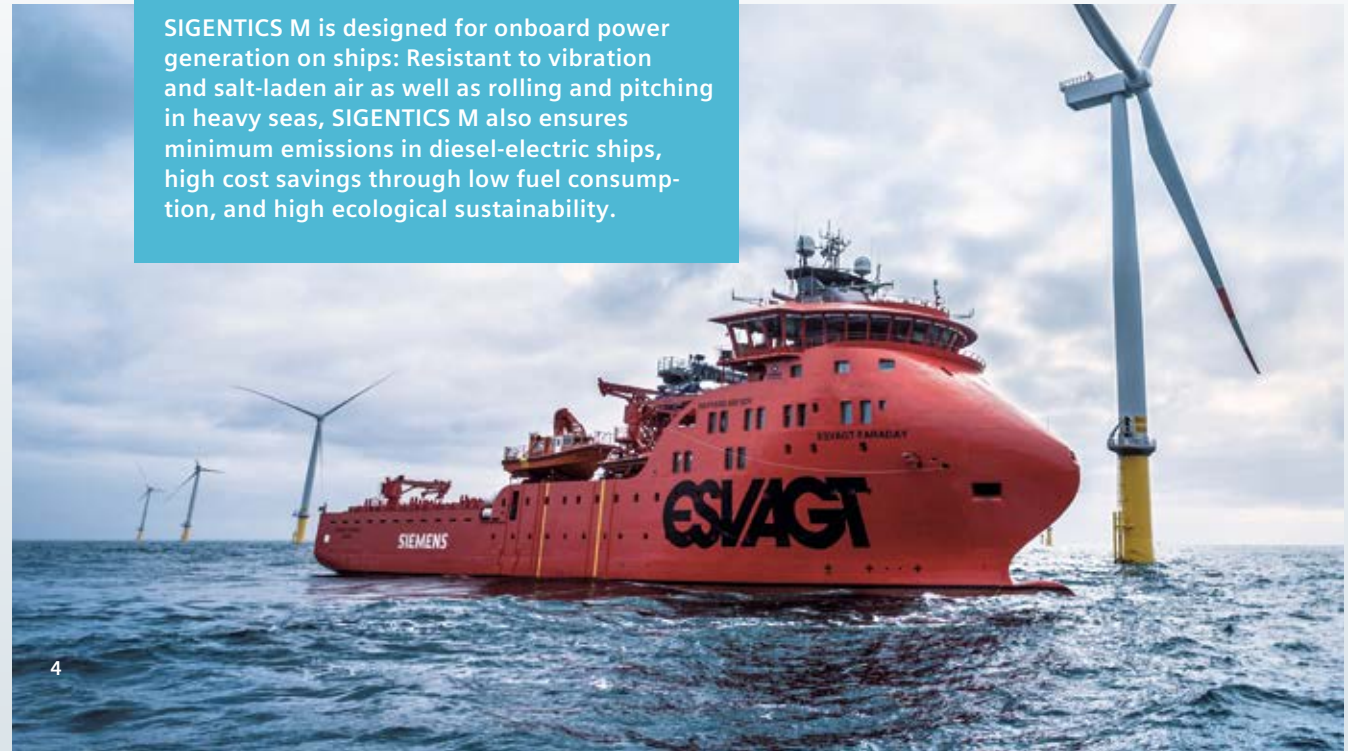


Power generation

SIGENTICS M is tailored to meet the demands of small turbine-based power plants, small hydroelectric power plants, diesel generator sets: for example, for decentralized power generation or emergency power in airports, hospitals, and other infrastructure.

Marine

SIGENTICS M is designed for onboard power generation on ships: Resistant to vibration and salt-laden air as well as rolling and pitching in heavy seas, SIGENTICS M also ensures minimum emissions in diesel-electric ships, high cost savings through low fuel consumption, and high ecological sustainability.



SIGENTICS M generators

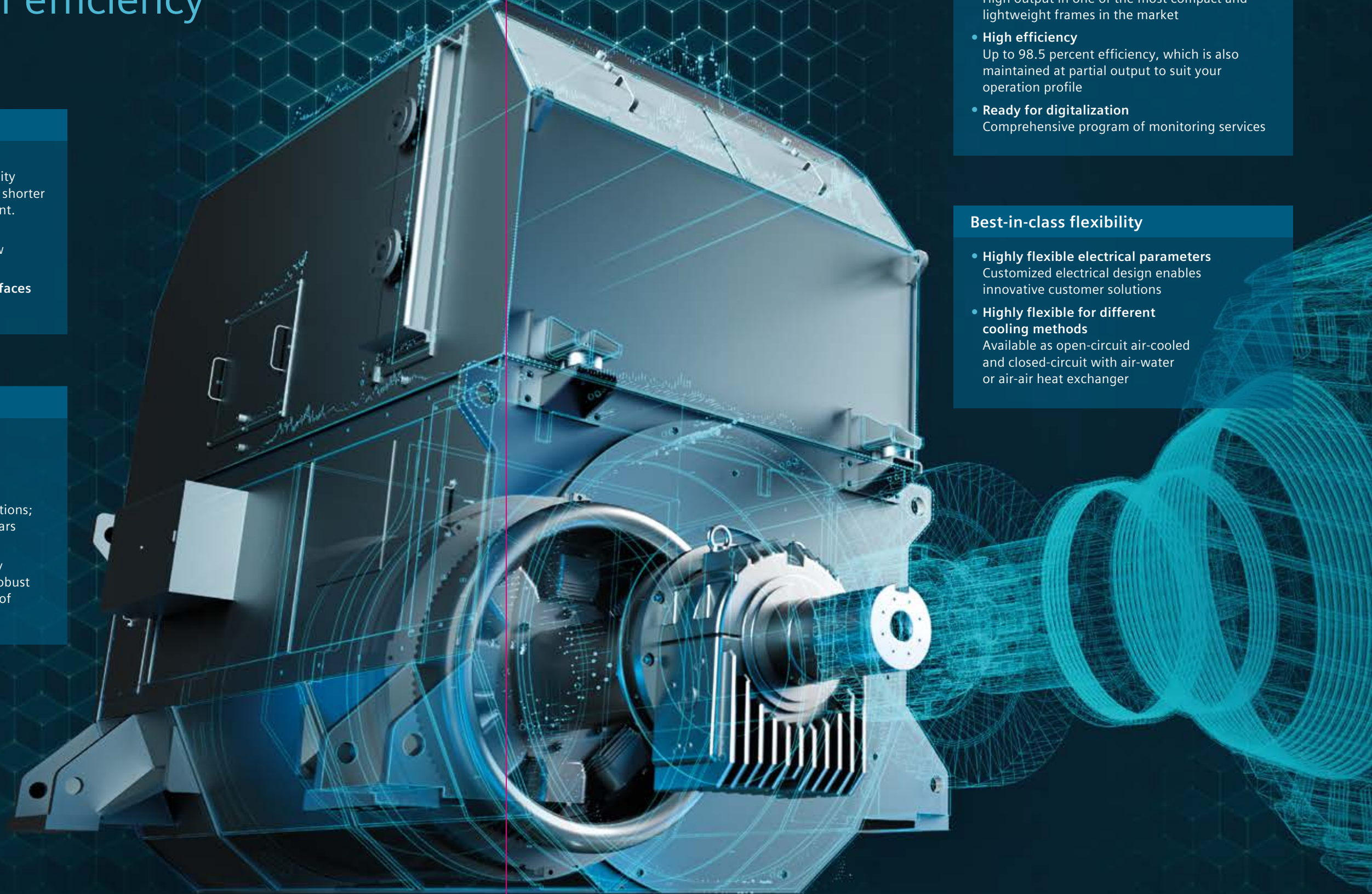
The next level of efficiency

Easy business, fast delivery

- **Short lead time**
Short delivery times and high delivery reliability accelerate the entire project. This results in a shorter time to market and a fast return on investment.
- **Cost savings**
The generator design results in extremely low inspection and maintenance costs
- **Simplified engineering, standardized interfaces**
Fast and easy plant integration

Outstanding design characteristics

- **Modular foot design**
Welded modular feet enable a wide range of customized foot layout
- **Outstanding technical reliability**
Smooth operation even under extreme conditions; designed for a product lifespan of over 30 years
- **Lowest noise and vibration levels**
The high manufacturing precision and quality ensure very low levels of vibration, and the robust frame is designed to withstand the vibration of diesel engines.



Future-proof concept

- **High power density**
High output in one of the most compact and lightweight frames in the market
- **High efficiency**
Up to 98.5 percent efficiency, which is also maintained at partial output to suit your operation profile
- **Ready for digitalization**
Comprehensive program of monitoring services

Best-in-class flexibility

- **Highly flexible electrical parameters**
Customized electrical design enables innovative customer solutions
- **Highly flexible for different cooling methods**
Available as open-circuit air-cooled and closed-circuit with air-water or air-air heat exchanger



Oil and gas

The rugged SIGENTICS M generators offer a high degree of protection and run smoothly even under the extreme conditions on an oil rig. Their high reliability and system availability address all types of offshore power generation applications.



Process industries

SIGENTICS M is especially suited for power generation applications in plants and systems in the chemical and petrochemical, pulp and paper, sugar, and ethanol industries.