



SIEMENS

Ingenuity for life



Motors beyond standards

Performance redefined
SIMOTICS Severe Duty Motors

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SIMOTICS SD next generation

Performance meets digitalization

Reliable and powerful performance, even under toughest environmental conditions: This is where our rugged Severe Duty Motors excel. With the SIMOTICS SD next generation and a whole package of convincing advantages, we take these cast-iron motors to an even higher level – motors beyond standards.

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Benefits for today, ready for tomorrow

One of the key assets of the new SIMOTICS SD motor series is its digitalization-readiness. This means that you can connect this motor with your digital enterprise and optimize your processes.

The compact and future-proof design is the next remarkable benefit. Until now, added power density meant added space requirements. Thanks to its smaller cover size, this is a thing of the past.

Another important feature is the future-oriented energy efficiency concept of the new motor generation. Because it fulfills IE3 and even IE4 efficiency classes, the SIMOTICS SD motors will literally boost your competitiveness due to their significant advances in energy savings.

For high demands and tough challenges

Whether it's dust loading, shock loads, or in the aggressive environments of the petrochemical and process industries – when the going gets tough, the rugged SIMOTICS SD Severe Duty motors get going.

Technical data and details

Size	SH 315–355
Power output	2-pole: 250–500 kW, 4-pole: 250–500 kW, 6-pole: 200–400 kW
Type of construction	B3, V5, V6, B5, V1, V3, B35, B6, B7, B8
Efficiency class	IE3, IE4
	System efficiency class IES2 with SINAMICS converter
Number of poles	2-pole, 4-pole, 6-pole

Voltages	Line operation: 380–690 V Converter operation: 380–480 V
Certificates	CE / in preparation: CEL, TR CU, Marine (ABS, BV, DNV-GL, KR, LRS, RINA, RS)
Degree of protection	Standard IP55, optional: IP56 and IP65
Temperature class	155(F) according to 130(B)
Cooling method	IC411, IC416, IC418
Main applications	Pumps, compressors, fans, cranes and hoists



Chemicals



Cement



Fiber



HVAC



Marine



Metals



Mining



Oil and gas



W & WW

Your benefits at a glance

Optimization through digitalization:
Increase transparency and optimize serviceability with our digital pioneer.

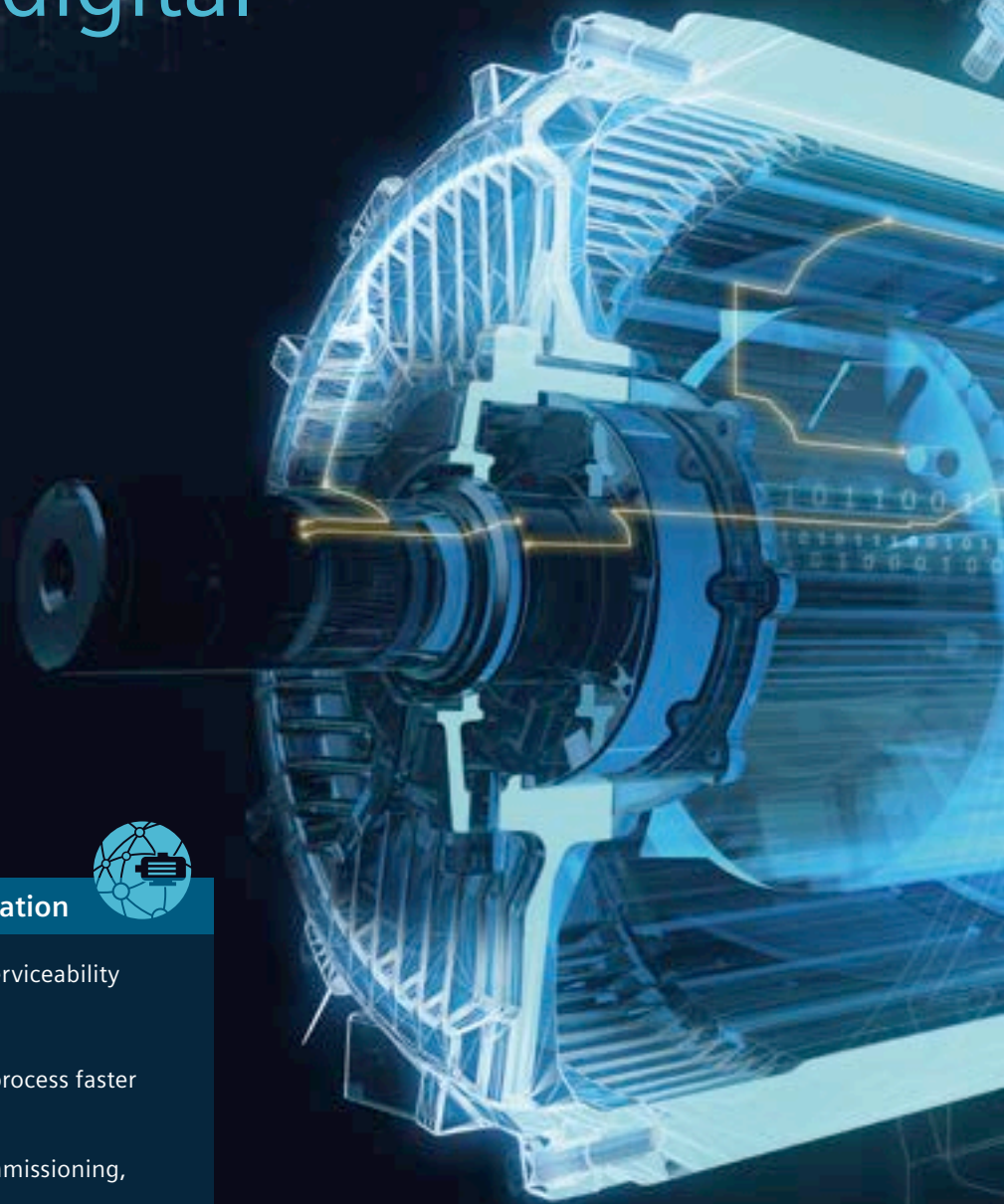
Best-in-class design:
Gain more efficiency and flexibility in assembly.

Future-oriented energy efficiency concepts:
Boost your competitiveness thanks to energy savings.

Easy business, fast delivery:
Take your own performance to the next level along the entire value chain.

SIMOTICS SD next generation

Motors go digital



Optimization through digitalization



Increase transparency and optimize serviceability with our digital pioneer.

- **Digital Twin:**
Make your design and engineering process faster and more flexible.
- **Data Matrix Code App:**
Increase transparency, facilitate commissioning, order spare motors and parts easily.
- **Smart Motor Concept:**
Increase uptime, improve performance, and optimize serviceability through data analysis via cloud connection to MindSphere. Coming soon!



Best-in-class design

Gain more efficiency and flexibility in assembly.

- **Compact and future-proofed design:**
For higher power density at comparable power output.
- **Smaller cover size:**
For easy replacement and less space required.
- **New terminal box concept:**
For higher flexibility in assembly.



Future-oriented energy efficiency concepts

Boost your competitiveness thanks to energy savings.

- **Fulfillment of efficiency classes IE3 and IE4:**
Realize maximum energy savings and a significant reduction in total cost of ownership.
- **Compliance with IES2 acc. to EN 50598 for Siemens drive systems:**
Gain knowledge of exact system losses concerning SIMOTICS SD motor and SINAMICS converter.



Easy business, fast delivery

Take your own performance to the next level along the entire value chain.

- **Delivery time only 15–20 days:**
Gain time and flexibility in your planning process.
- **More configuration possibilities:**
Employ a wider range of standardized options, resulting in faster quotations and shorter response times.

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