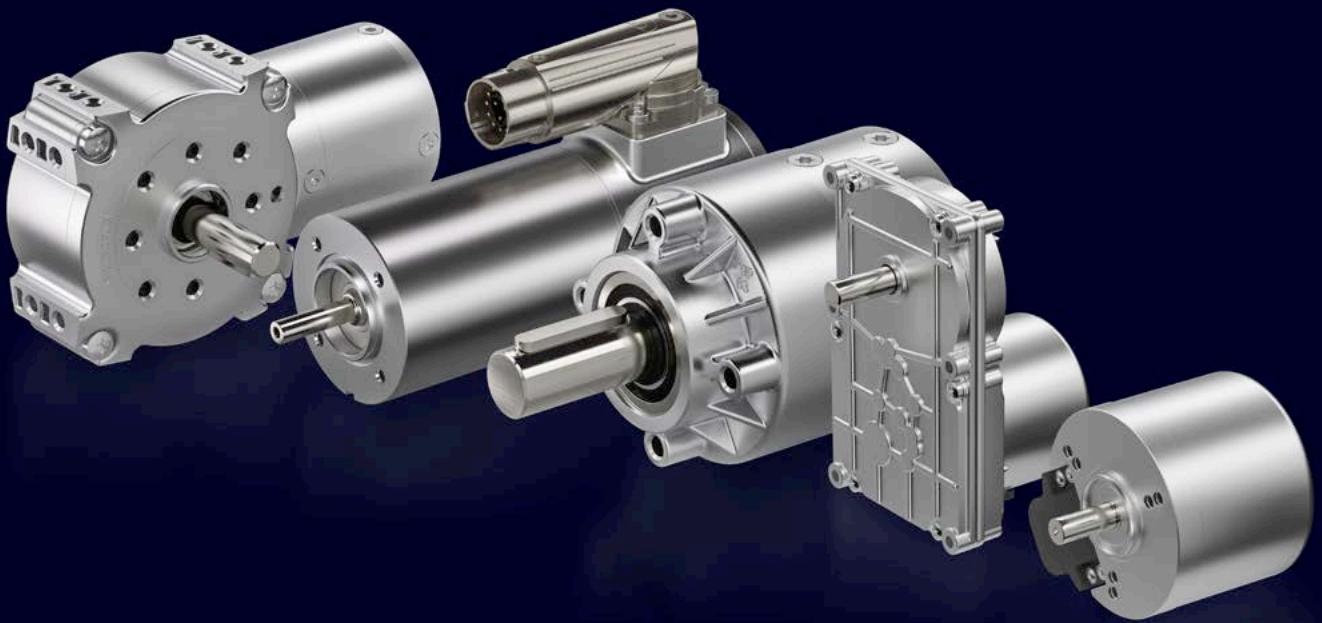


SIEMENS



SIMOTICS E motors and drive systems

Leading the way with SIMOTICS E

The SIMOTICS E motor series is a strategic addition to our Siemens portfolio and strengthens our position as a leading technology company in factory automation and digitalization. They are ideal for intelligent, battery-powered mechatronic systems in intralogistics and industrial manufacturing.

They boost flexibility and productivity in mobile robots, automated guided vehicles, and the automation of auxiliary processes like the retooling of modern production machines.

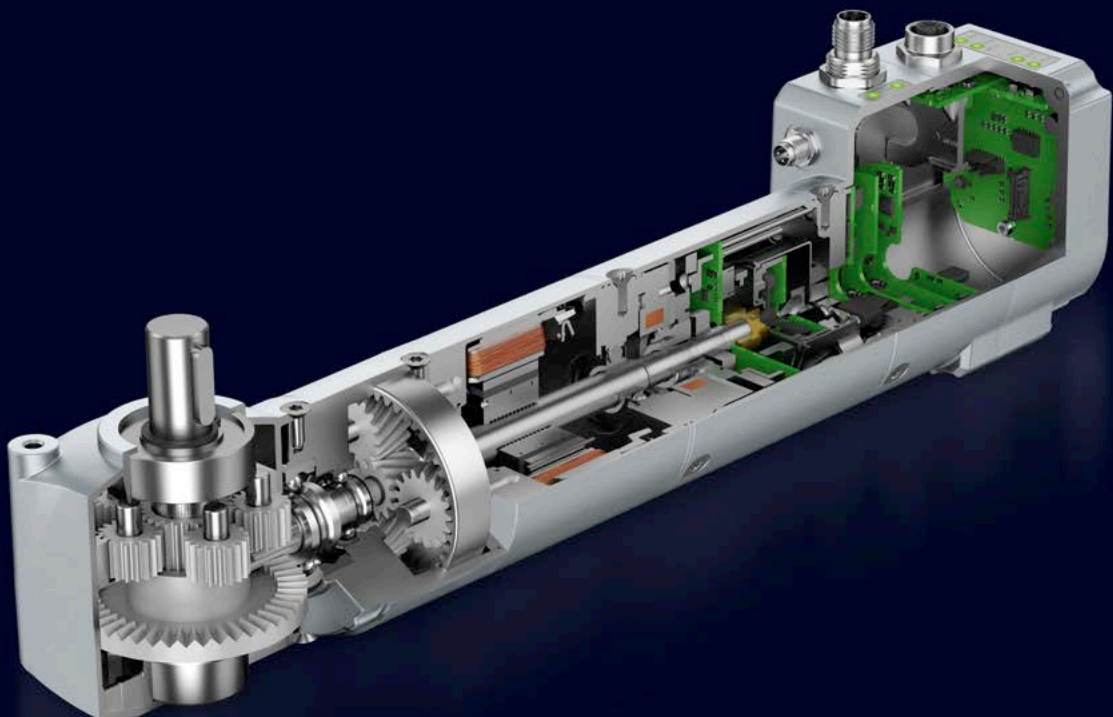
[siemens.com/simotics-e](https://www.siemens.com/simotics-e)

Extra low-voltage motors and drives

With the SIMOTICS E motors and drive systems, Siemens offers special drive solutions for all tasks in industrial drive engineering in the field of extra low-voltage applications. They excel both as an outstanding system solution from the modular toolkit and as a customized drive system, seamlessly integrating with various gearbox technologies.

Modular drive system

Motors with integrated logic and power electronics, optionally with gearbox, encoder and brake.



Find more information at
[siemens.com/simotics-e](https://www.siemens.com/simotics-e)

SIMOTICS E-1EE1

brushless internal rotor motors

Electronically commutated SIMOTICS E-1EE1 internal rotor motors have a high power density, along with outstanding dynamic performance and efficiency, making them perfect for addressing precise motion control requirements in industrial automation and other applications where space is at a premium. Their power range up to 750 watts, high overload capability, long service life and exceptionally smooth operation make them a compelling choice. Teamed up with our custom planetary or angled gearboxes, they can fully unleash their potential and make a real impact in applications.

Typical applications

Automation technology

SIMOTICS E-1EE1 motors are ideally suited for fast and accurate motion sequences thanks to their high dynamic performance and precision. This makes them particularly suitable for handling systems and industrial robots used in production and assembly line automation.

Intralogistics

Thanks to their compact design and high performance at low voltages, SIMOTICS E-1EE1 motors are the preferred choice for use in conveyor, storage and sorting systems, such as in high-bay warehouses or automated guided vehicle systems – particularly for battery-powered applications.

Medical technology

The combination of high power at low voltages in a compact design makes SIMOTICS E-1EE1 motors particularly attractive for use in mobile medical equipment, such as portable X-ray units or for adjusting surgical operating tables.

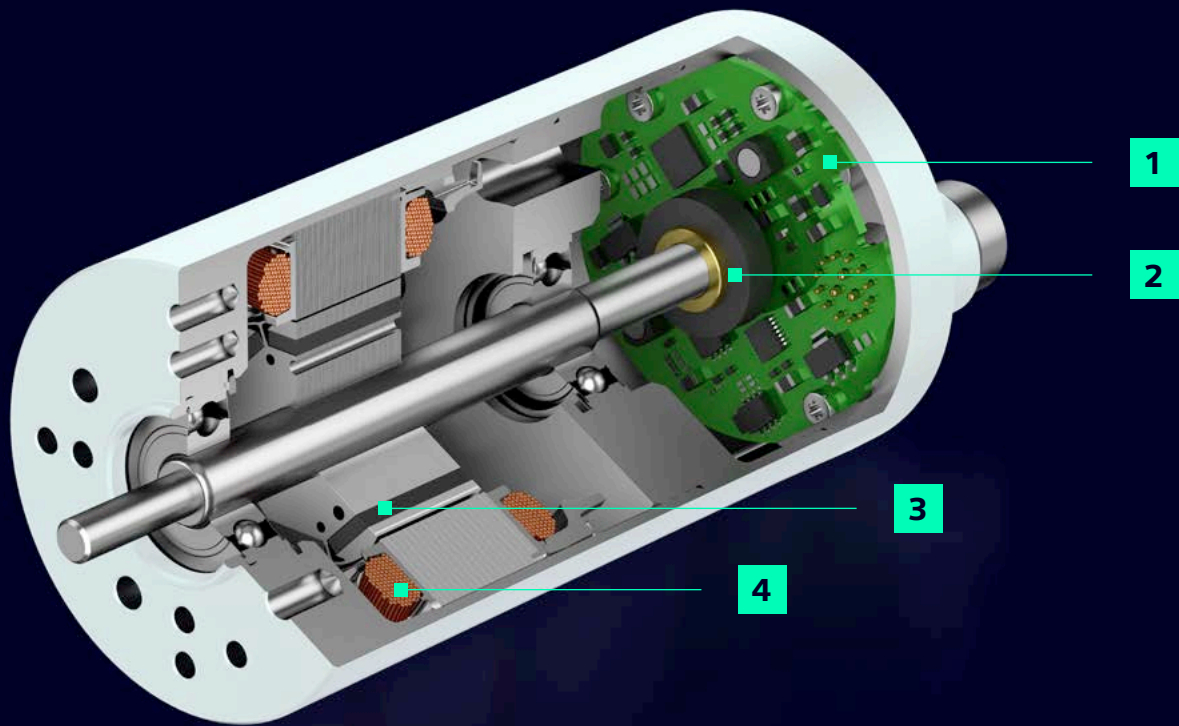
Robotics

Their brushless design reduces mechanical wear and production downtime. Combined with low energy consumption, high dynamic performance and excellent efficiency, these are the optimal properties for robotic applications requiring fast and precise movements.

Battery-powered vehicles

High load capacity and robustness, as well as energy efficiency and performance at low voltages in a compact design, make SIMOTICS E-1EE1 motors ideal for use in battery-powered vehicles, including driverless transport systems.





SIMOTICS E-1EE1

Brushless internal rotor motors – all-in-one solution

Special features

- 3-phase, electronically commutated internal rotor motor with high-performance magnets
- Power range up to 750 W
- High power density with extremely compact dimensions
- High overload capacity
- Long service life
- Extremely smooth operation
- Rotor position detection using Hall sensors
- Winding insulation in accordance with insulation class E
- Degree of protection up to IP 54, in accordance with EN 60 034-5
- Various motor types can be combined with planetary and angled gearboxes
- Optional integrated control electronics
- Optional encoder and brake attachment

1 Logic and power electronics

2 Sensor magnet

3 Main magnet

4 Winding



Configure now

[siemens.com/product-configurator](https://www.siemens.com/product-configurator)

SIMOTICS E-1EV1

brushless external rotor motors

With power ratings up to 135 watts, three-phase electronically commutated SIMOTICS E-1EV1 external rotor motors set themselves apart with their long service life, excellent control characteristics and superior synchronization properties across the complete speed range. Their high power density, stiff speed-torque characteristic and wide speed control range make them the ideal choice for a wide range of applications, including industrial automation. Combined with our perfectly matched planetary, angled or spur gearboxes, these motors deliver their full potential to achieve optimum performance.

Typical applications

Automation technology

The compact design of the SIMOTICS E-1EV1 motors and their high power density are ideal for space-saving integration and reliable, precise control in automation and mechanical engineering – with minimal maintenance requirements.

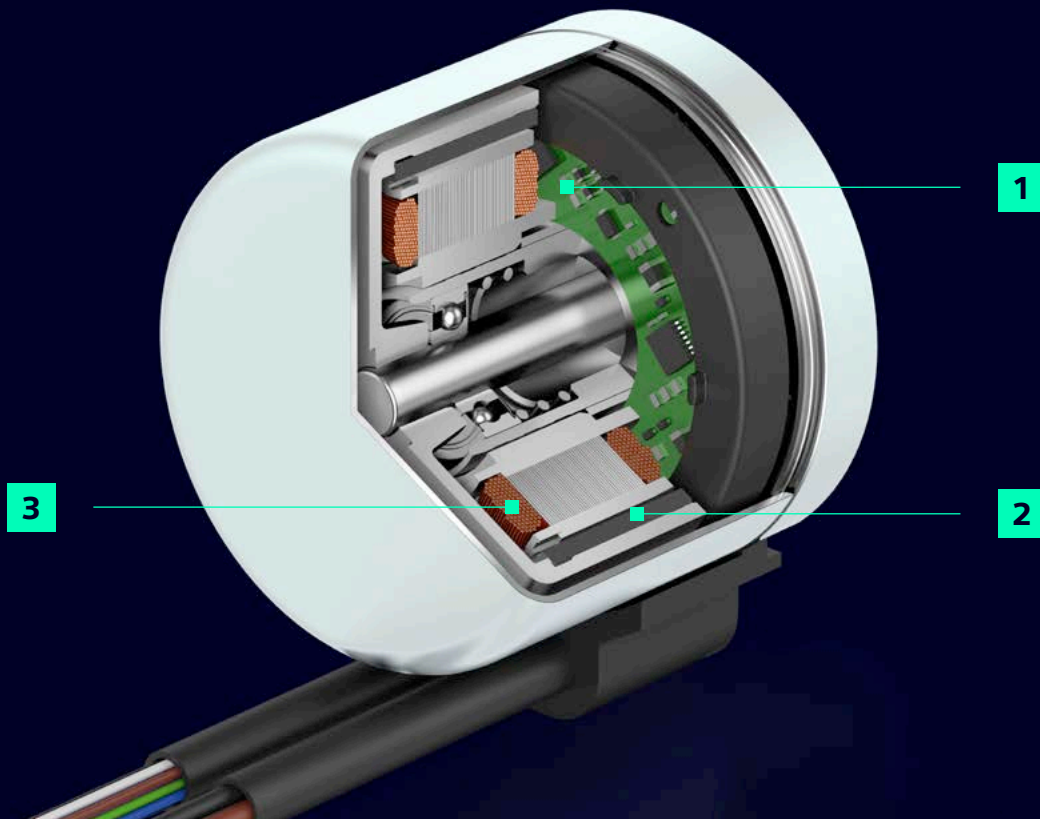
Medical technology

Wherever high operational reliability, precise control of medical equipment and quiet operation are required, SIMOTICS E-1EV1 motors provide the basis for hygienic solutions with low vibration levels and precise controllability. They are also chosen for mobile medical equipment that requires reliable and precise drives because they are very light, compact and energy efficient.

Intralogistics

High efficiency, compact and lightweight design, long service life – the perfect prerequisites for using SIMOTICS E-1EV1 motors in intralogistics: with improved range and energy efficiency, robust continuous operation, and minimal maintenance requirements.





SIMOTICS E-1EV1

Brushless external rotor motors with built-in features

Special features

- 3-phase, electronically commutated external rotor motor
- Power range up to 135 W
- High power density with extremely compact dimensions
- Excellent synchronization characteristics over the entire speed range
- High overload capacity
- Very high power density
- Steady speed/torque curve
- Extremely broad speed control range
- Robust housing and bearing system
- Degree of protection up to IP 54, in accordance with EN 60 034-5
- Different motor types can be combined with planetary, angled and spur gears

1 Logic and power electronics

2 Main magnet

3 Winding



Configure now
[siemens.com/product-configurator](https://www.siemens.com/product-configurator)

Gearbox solutions for your perfect system

Our gearbox solutions are only available for SIMOTICS E motors, which they supplement perfectly. Both are configured together to create a perfectly harmonized drive system.



Planetary gearboxes

Whenever high power densities are specified, our extensive range of planetary gearboxes provide the optimal solution. All three robust series deliver exceptional smoothness, thanks to their extremely rugged planetary gears manufactured from high-strength plastic or steel, featuring both straight and spur teeth.

Angled gearboxes

Our angled gearboxes stand out with their innovative crown gear technology, facilitating robust, compact and highly efficient solutions with an outstanding price-performance ratio. Their output shafts, crafted from ground, case-hardened steel, offer exceptional durability. Torque is transmitted as standard using a feather key. These angled gearboxes set themselves apart from their peers as they have no self-locking, ensuring smooth and reliable operation.

Spur gearboxes

Our spur gearboxes stand out because of their compact design and exceptional smoothness. Available in two high-performance series – FL and CL – they offer an impressive price-performance ratio. With their simple yet effective design, these gearboxes are fully compatible with SIMOTICS E-1EV1 motors, providing versatile and efficient solutions for your applications.

**Published by
Siemens AG**

Digital Industries
Motion Control
P.O. Box 31 80
91050 Erlangen, Germany

For the U.S. published by

Siemens Industries Inc.
100 Technology Drive
Alpharetta, GA 30005
United States

Article No. DIMC-B10145-00-7600

TH S43-250098 DA 0625

© Siemens 2025

Subject to changes and errors.

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products.

The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or product names of Siemens AG or other companies whose use by third parties for their own purposes could violate the rights of the owners.