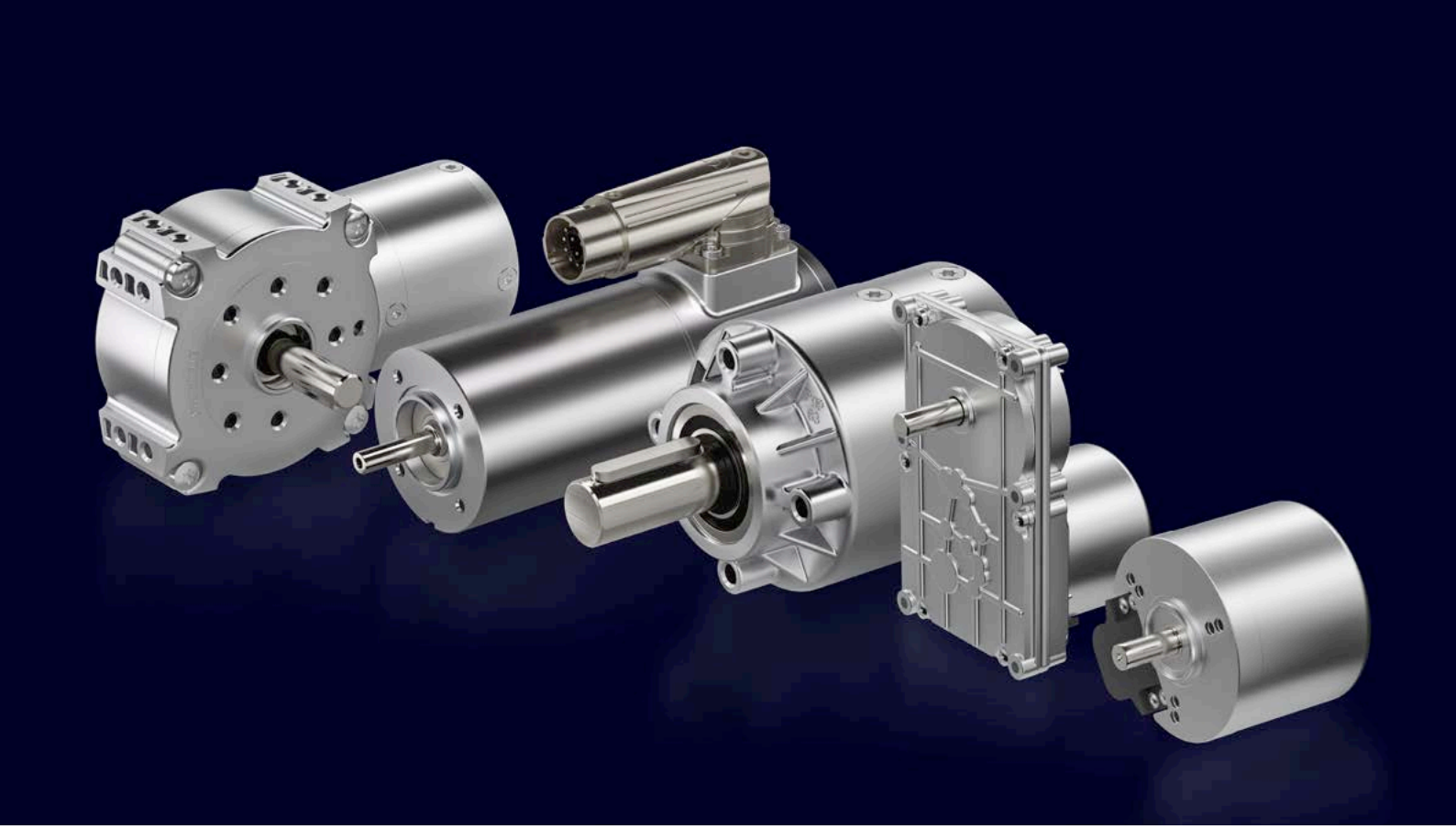


SIMOTICS E
motors and drive systems

SIMOTICS E: The key to new markets

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 open up valuable business and customer potential in the growth market for intelligent, battery-powered drive solutions through new applications in manufacturing, mobile robotics, and driverless transport systems. Their use in the automation of auxiliary processes, such as the retooling of modern production machines, also increases both the flexibility and productivity of our customers.

The portfolio

With the expansion of our portfolio for extra low-voltage applications, we are now offering our customers high-performance, reliable, and energy-efficient motor solutions in this power range. These solutions feature advanced integration into digital automation systems, embodying the qualities associated with the SIMOTICS name.

SIMOTICS E motors now provide two distinct motor technologies for customized drive solutions:

- SIMOTICS E-1EE1 brushless internal rotor motors
- SIMOTICS E-1EV1 brushless external rotor motors

In conjunction with the motor portfolio, we also offer drive solutions with planetary, spur or angled gearboxes.

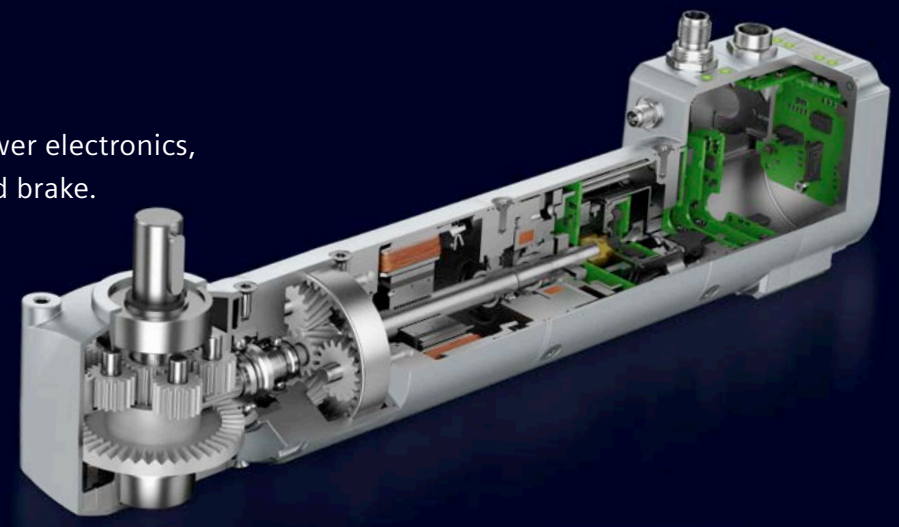
siemens.com/simotics-e

SIEMENS

Outstanding system solutions from the modular system

The most important components of a drive solution are the motor, control electronics and gearbox. Anyone who needs a special drive for their application normally has to find the right design and a suitable supplier for each of these components and then bring everything together themselves. This involves a lot of development work and high costs, which our customers can save with our flexible solutions from the modular system and with dedicated special developments for their requirements.

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



SIMOTICS E-1EE1 brushless internal rotor motors
With their high power density and dynamic performance, they are ideal for precise motion in industrial automation and applications with limited space. In the power range up to 750 watts, they are impressive with their high overload capacity, long service life and smooth operation.

SIMOTICS E-1EV1 brushless external rotor motors
Their long service life, excellent control characteristics and smooth operation across the entire speed range at a power output of up to 135 watts, as well as their high power density and stiff speed-torque characteristic, make them the first choice for a wide range of applications in industrial automation.

Find more information at
siemens.com/simotics-e

SIMOTICS E-1EE1 brushless internal rotor motors

		1EE112	1EE114	1EE132	1EE134	1EE136	1EE142	1EE144	1EE146
Shaft height	–	20R	20R	30R	30R	30R	40R	40R	40R
U	V DC	24/48	24/48	24/48	24/48	24/48	24/48	24/48	48
M_N	mNm	110	220	360	670	880	700	1,200	1,800
P_N	W	46	92	150	280	370	293	503	754
n_N	r/min	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Ø	mm	42	42	63	63	63	80	80	80
Available as									
Standalone motor		✓	✓	✓	✓	✓	✓	✓	✓
IO-controlled (speed, torque control and positioning)				✓	✓	✓*			
CANopen				✓	✓	✓*			
EtherCAT		✓	✓	✓	✓	✓	✓	✓	✓

* 48 V only

SIMOTICS E-1EV1 brushless external rotor motors

		1EV1422	1EV1444
Shaft height	–	30R	30R
U	V DC	24	48
M_N	mNm	235	245
P_N	W	110	135
n_N	r/min	4,500	5,300
Ø	mm	63	63
Available as			
Standalone motor		✓	✓
IO-controlled (speed)		✓	✓
IO-controlled (speed, torque control and positioning)		✓	✓

Configure now
siemens.com/product-configurator

Gearbox solutions
for your perfect system

Our gearbox solutions are only available for SIMOTICS E motors, which they ideally supplement. 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.

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