



Attractive design with simple handling

As further development of the 1LE1 family of motors, the IE4 models offer the same advantages when it comes to installation just like all the other members. Installation, commissioning and motor replacement are speeded up as a result of the diagonally split terminal box with pre-configured terminal board. Integrated eyebolts simplify handling. Encoders, brakes and separately driven fans can also be subsequently mounted. And as a result of the low variance of parts, you simplify your stock inventory so that you can respond more quickly to address new requirements.

Outstanding quality for the perfect drive

It is good to feel secure: With our IE4 line motors, you can depend on the high quality of Siemens products, renowned worldwide. State-of-the-art development and production processes in conjunction with systematic function tests ensure a long service life and a high degree of ruggedness. Further, the IE4 models are based on motors proven millions of times over – and last but not least on the wealth of experiences that Siemens has when it comes to building electric motors, which extends back more than 125 years.

Everything from a reliable partner

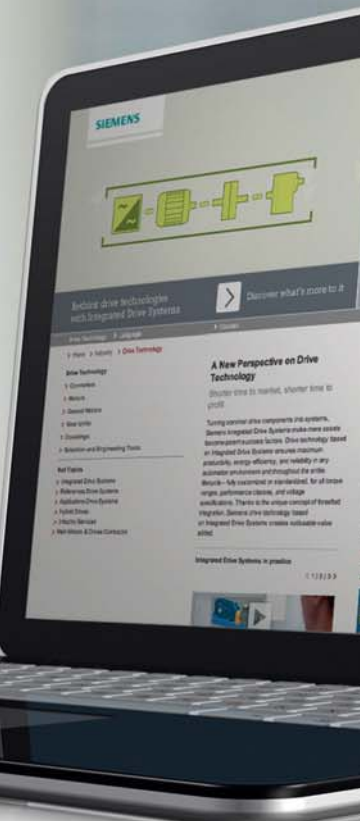
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More information on our selection and engineering tools at: siemens.com/engineering-tools

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Experience just how Integrated Drive Systems can boost the competitiveness of production plants and systems and complete companies in each and every sector.

An overview of the advantages of Integrated Drive Systems



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Start with IE4!

Innovative IE4 motors to give you a competitive lead

From very light up to very rugged – Super Premium Efficiency low-voltage motors

SIMOTICS GP and SIMOTICS SD

siemens.com/ie4-motors

SIMOTICS – Super Premium Efficiency: for your competitive edge

Higher energy savings, lower operating costs and security for the future – you can boost your competitiveness with IE4 low-voltage motors from Siemens. IE4 means up to 14% lower energy costs than IE1, for example. This certainly makes sense if you consider that for many motors, the energy costs already exceed the initial purchase costs after an operating time of just six months.

Already think about tomorrow today

Our SIMOTICS GP and SIMOTICS SD motors offer the optimum way forward if you not only want to comply with the legally stipulated IE3 minimum efficiency, but also want to secure or increase your competitiveness: Both series represent the low-voltage motors of the 1LE1 family in an IE4 version. This facilitates plants and systems with higher energy and cost efficiency.

Broad basis with security for the future

Siemens IE4 motors address a wide range of power ratings and extend from especially lightweight up to especially rugged designs. Just like the complete 1LE1 motor family, IE4 motors are available with aluminum enclosures for general purpose applications – as well as cast-iron enclosures for severe duty applications. The shaft heights are identical with the shaft heights of the IE1, IE2 and IE3 versions. This means that for retrofit projects, the existing mechanical interface to the driven machine can be kept.

Highest efficiency – no compromises

Why make compromises if there is a simple solution? In comparison to IE1, IE4 line motors provide you with an efficiency that is up to 14% higher – and up to 3% higher than IE3. Their efficiency is combined with rugged, low maintenance and cost-efficient induction motor technology. The motors have been designed and optimized to be directly connected to the line supply. However, they can also be operated with converters. This means that you remain flexible – and you do not have to keep a stock inventory of separate motors for line and converter operation.

Does it make sense to invest in a high degree of efficiency? This question is becoming increasingly more important when planning a plant or system – as well as for retrofit projects. The free-of-charge SIMOTICS EE-COMPARATOR App provides the answer.

Scan the QR code and download the free-of-charge SIMOTICS EE-COMPARATOR App



Android



iOS

SIMOTICS GP – IE4: lightweights with the highest efficiency

Use Super Premium Efficiency motors for your general purpose applications: A wide range of SIMOTICS GP motors with aluminum enclosure is now available in an IE4 version.

IE4 motors with aluminum enclosure

IE4 motors with aluminum enclosure that are based on the innovative 1LE1 platform are now available. This means that you can set benchmarks, especially when increasing the energy efficiency in pump, fan and compressor applications. The lightweights from the SIMOTICS GP series are the first choice – not only as a result of their lightweight metal enclosure, but also as a result of their high efficiency.

From IE1 to IE4 – always the same shaft height

For standard plants and systems, you do not have to reconfigure the mechanical interfaces to your machines. And, when it comes to retrofitting plants and systems, you do not have to redesign or modify them – a potentially costly affair. This is because when developing our IE4 motors we kept the shaft height the same.

IE4 SIMOTICS GP motors – your advantages

- Up to 14% higher efficiency when compared to IE1 motors
- Up to 3% higher efficiency when compared to IE3 motors
- Low requirements on the statics as a result of the light aluminum enclosure
- Simple retrofit as IE1, IE2, IE3 and IE4 motors all have the same shaft heights
- Fit for the future through optional converter operation



Scan and find out more about SIMOTICS GP motors!



IE4 SIMOTICS SD motors – your advantages

- Up to 14% higher efficiency when compared to IE1 motors
- Up to 3% higher efficiency when compared to IE3 motors
- High degree of ruggedness for use in aggressive ambient conditions
- Simple retrofit as IE1, IE2, IE3 and IE4 motors all have the same shaft heights
- Fit for the future through optional converter operation



Scan and find out more about SIMOTICS SD motors!



SIMOTICS SD – IE4: heavyweights with new high efficiency

You can also leverage the benefits of Super Premium Efficiency with our severe duty motors: The new SIMOTICS SD motors with cast iron enclosure clearly demonstrate that IE4 is already reality even when it comes to harsh environments.

IE4 motors that can handle a lot

With our IE4 severe duty motors you can demonstrate your environmental consciousness, save energy and reduce operating costs. Whether for pump, fan, compressor or mill, mixer and conveyor applications in the process industry – in areas where conditions are tough, dusty or where aggressive atmospheres prevail.

Simply move across to the new efficiency

You can upgrade from IE3 to IE4 just as simply as from IE1 to IE4 – without having to adapt the mechanical design of the machine. This is because also for SIMOTICS SD motors with efficiency class IE4, the shaft height does not change. As a consequence, the mechanical interface to the driven machine is identical across all efficiency classes.



Pumps, fans and compressors that operate continuously are predestined for SIMOTICS GP in IE4.

SIMOTICS GP – data, facts and details on the 1LE10 series

Size	100L – 160L
Power range	2.2 kW – 18.5 kW
Type of construction	All of the usual types of construction
Efficiency class	IE4 (Super Premium Efficiency)
Pole number	2- and 4-pole (6- and 8-pole on request)
Voltages	Line operation: 230 V – 690 V Converter operation: up to 460 V
Motor materials	Enclosure and terminal box: aluminum Fan cover: plastic or sheet steel Rating plate: adhesive rating plate or aluminum (stainless steel is optional)
Certificates	CE (UL, CSA, CEL being processed)
Degree of protection	IP55 (IP65/IP56 optional)
Temperature class	155(F) according to 130(B)

SIMOTICS SD – data, facts and details on the 1LE15 and 1LE16 series

Size	100L – 315L
Power range	2.2 kW – 200 kW
Type of construction	All of the usual types of construction
Efficiency class	IE4 (Super Premium Efficiency)
Number of poles	2- and 4-pole (6- and 8-pole on request)
Voltages	Line operation: 230 V – 690 V Converter operation: SH 100 – 160 up to 460 V and SH 180 – 315 up to 500 V
Motor materials	Enclosure and terminal box: cast iron Fan cover: plastic or sheet steel Rating plate: adhesive rating plate or aluminum (stainless steel optional)
Certificates	CE (UL, CSA, CEL being processed)
Degree of protection	IP55 (IP65 / IP56 optional)
Temperature class	155(F) according to 130(B)

The rugged cast iron motors are admirably suited for dusty and harsh environments.

