

Electromechanical drive systems

**Worm and wheel, helical, bevel geared motors, inline,
parallel or orthogonal output
10 to 23000 Nm**

LEROY-SOMER™

Nidec
All for dreams

Expertise and industrial reference

As part of the Nidec Group, Leroy-Somer is present on the international scene for many years, proposing motors, geared motors, brake motors and variable speed drives, to meet the expectations of its clients in various industries.

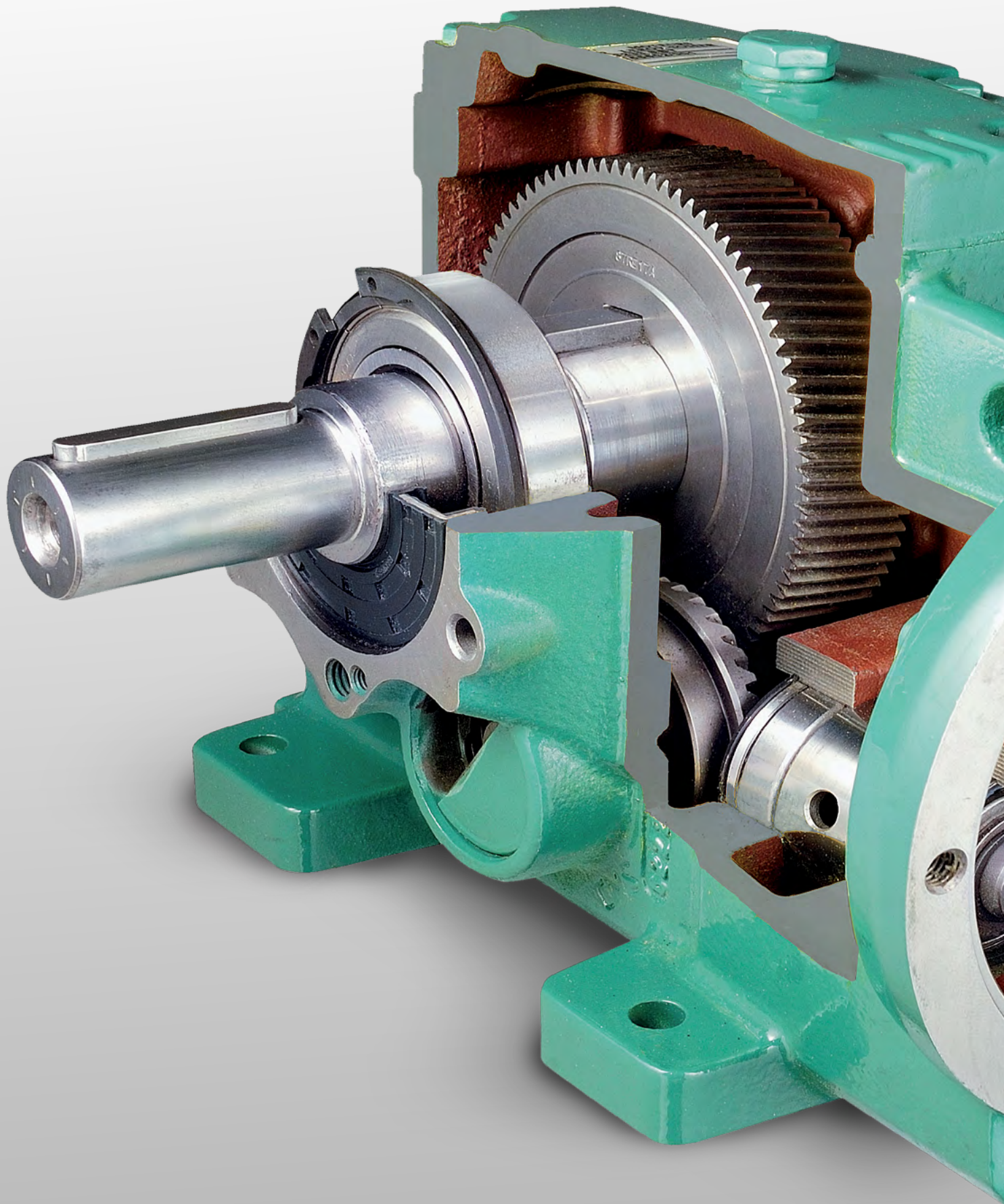
Our expertise enables us to conceive and design all our drive systems for extra performance and efficiency.

To meet the demands of industrial handling, production machinery and automation, Leroy-Somer proposes a wide range of geared motors from 10 Nm to 23,000 Nm.

Their robust, compact and modular concept guarantees speed, dynamics and precision for all movements, and easy setup.

Main advantages of our geared motor ranges:

- **Multi-technology:** worm and wheel, helical, bevel geared motors, inline or parallel
- **Monobloc cast iron housing** designed for maximum resistance to shocks and vibrations
- **Wide variety of fitting solutions:** flange, feet, or with torque arm
- Perfect association and optimisation of variable speed operation, to guarantee you **high energy performance, productivity, easy installation** and long service life
- **Modularity** of motors and brake motors: aluminium, cast-iron, IP55, IP23, ATEX, induction or permanent magnets
- **Express availability:** large variety of products and options available in short turnaround times, with high-performance industrial organisation, and unparalleled network coverage



Helical bevel geared motors

Orthogonal output

Orthobloc range



9 sizes



250 Nm▶ 23,000 Nm

Advantages

- High reliability thanks to the ribbed monobloc cast-iron housing
- Easy installation: wide range of shaft types (solid, hollow, shrink disc)
- Compact and modular assembly: wide choice of fixing forms (feet/flange/torque arm)
- Perfect association with IMfinity® motors

Industries and common applications

- Public works (construction site cranes): carriages, hoisting drums
- Cement networks, quarries: bulk conveying
- Cereals industry: bulk conveying
- Ports (port cranes): gantry, hoisting drums
- Manufacturing industry: overhead cranes, roller conveyors



Helical geared motors

Axial output

Compabloc range



90 Nm▶ 14,500 Nm

Advantages

- High reliability thanks to the ribbed monobloc cast-iron housing
- Robustness: shaft and bearings designed for high radial load
- Compact and modular assembly: wide choice of fixing forms (feet/flange)
- Perfect association with IMfinity® motors



Industries and common applications

- Automotive: brake test stands, roller conveyors
- Water treatment: agitators, aerators, screens
- Food industry: low-speed pumps
- Chemicals and pharmaceuticals: mixers, screw conveyors



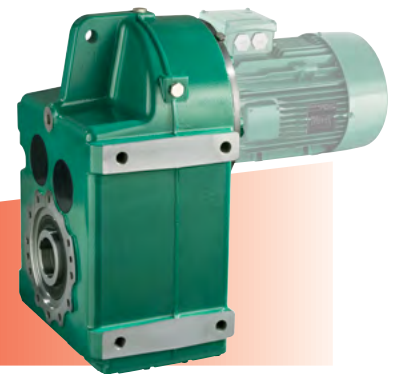
Helical geared motors

Parallel output

Manubloc range



8 sizes



250 Nm▶ 14,500 Nm

Advantages

- Ease of installation by pendular mounting
- High reliability thanks to the ribbed monobloc cast-iron housing
- Easy installation thanks to a wide range of shaft types (hollow, shrink disc)
- Perfect association with IMfinity® motors



Industries and common applications

- Ports: translation of gantry cranes
- Manufacturing industry: gantries, overhead cranes
- Rail: Maintenance equipments (lift jacks)



Helical gearboxes

Parallel output, pendular mounting

Poulibloc range



11 sizes



100 Nm

10,000 Nm

Advantages

- Ease of installation by pendular mounting
- High reliability thanks to the ribbed monobloc cast-iron housing
- Easy installation thanks to taper bush kits or keyed hollow shafts
- Perfect association with IMfinity® motors

Industries and common applications

- Cement plants, quarries: bulk conveying
- Cereals industry: bulk conveying



Worm and wheel geared motors

Orthogonal output

Multibloc



30 Nm▶ 1000 Nm

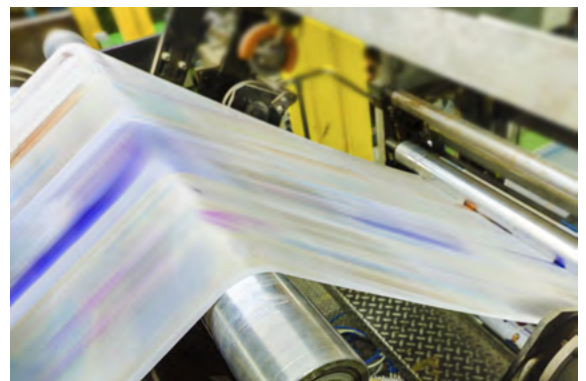
Advantages

- Maximum comfort thanks to its ultra-quiet technology
- High reliability thanks to the ribbed monobloc cast-iron housing
- Maximum adaptability thanks to its many mounting options (feet/flange/torque arm)
- Perfect association with IMfinity® motors



Industries and common applications

- Food industry: conveyor belts, roller conveyors
- Printing: adjustment systems, cutting tools
- Packaging: stackers/unstackers, winders/unwinders, auxiliary systems
- Machine tools: swarf removers, tool changers





Modular ranges designed to work to productivity and safety

IMfinity® motor ranges

Standard motors



Aluminium housing
IP55



Steel housing
IP23

Brake motors



FMD

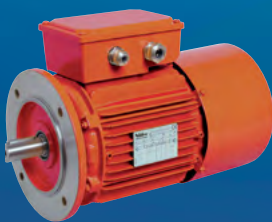


FFB



FCPL

Motors for aggressive environments



ATEX Gas



ATEX Dust



Anti-corrosion finish

Geared motor

Orthogonal



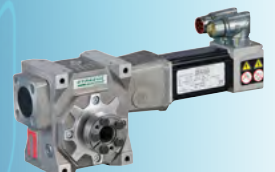
Axial



Parallel



Dedicated to



Orthogonal output

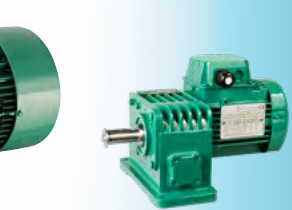
together and guarantee reliability,

Motor ranges

al output



output



l output



o automation



Inline output

Speed variation ranges



Universal drives



Controllers



Servo drives



High-power drives

Variable speed motor ranges



Integrated drives



IE5 permanent magnet synchro-reluctant motor



Synchronous servo

IMfinity® induction motors

General use and aggressive environments range

Benefits for geared motors

- High reliability
- Extended power in aluminium, IP55 and IP23
- Compliance with directive ErP: IE2, IE3
- Suited to harsh and aggressive environments: cast-iron, ATEX gas and dust version
- International compatibility: multiple-voltages and frequencies
- Variable speed adaptation: winding thermal protection, insulated bearings, winding over-insulation, forced ventilation, encoder

Industries and common applications

- Food industry: conveyors, low-speed pumps (peristaltic, volumetric)
- Public works: concrete pumps, construction site cranes
- Petrochemicals: oil drilling
- Steel industry: rolling machines, conveyors, transfer handling



Safety brake motors

General use and specific for hoisting

Benefits for geared motors

- Optimised for fixed speed and variable speed
- Maximum safety and reliability
- Failsafe brake
- Suited to harsh environments - Aluminium or cast-iron housing
- Designed for dynamic and repetitive braking
- Lever release systems (DLRA manual, DLM maintained, DMD remote)
- Brake functions supervision (lock, release and wear indicators)

Industries and common applications

- Ports: cranes and container handling
- Public works: construction site cranes
- Manufacturing industry: overhead cranes, vertical stackers, conveyors



Commander ID300 geared motors

Integrated drive range

Benefits for geared motors

- Onboard PLC for real-time task automation, to adapt the system to the applications
- Fieldbus for systems control and monitoring
- Onboard safety functions (SIL3, Ple), TÜV-certified
- Onboard 24V back-up (with fieldbus)
- Complete software suite for development, commissioning and diagnostics
- Multiple combinations for simple machine integration: motors, brakes, gearboxes, and a wide range of options
- Intuitive multifunction keypads for simple commissioning and precise diagnostics

Industries and common applications

- Water treatment: agitators, aerators
- Printing: adjustment systems, cutting tools
- Packaging: stackers/unstackers, winders/unwinders, auxiliary systems



Servo motors and geared motors

Automation-dedicated range

Benefits for geared motors

- Low inertia, ideal for applications requiring strong accelerations and decelerations
- High power-to-weight ratio
- High precision of movement with angular clearance $< 1'$
- Low noise level: worm and wheel technology
- Wide choice of gearboxes: fixing forms and gear ratios
- Strong torsional rigidity to guarantee reliability and repetitiveness

Industries and common applications

- Textile: winding/unwinding, adjustment, cutting
- Machine tools: shaft motorisation, tool changers, indexers
- Special machines: hoisting, translation, rotation, indexing, transfer, adjustment



Industrial and commercial organisation

Local, permanent and personalised assistance



A world map in blue with green lines connecting various countries to labels. Factory icons are placed next to labels for the United Kingdom, France, and Brazil. The countries labeled are: USA, Mexico, Guatemala, Costa Rica, Colombia, Ecuador, Peru, Chile, Argentina, Uruguay, Venezuela, Brazil, Morocco, Algeria, Mauritania, Mali, Senegal, Burkina Faso, Guinea, Ivory Coast, Cameroon, Gabon, DR Congo, Angola, United Kingdom, Ireland, Germany, France, Portugal, Spain, Netherlands, Belgium, and Switzerland.

- Audit and advice
- Installed facilities audit by an industry leader
- Optimisation of energy savings and return on investment
- Systems adaptation and upgrade
- Installation and commissioning
- Comprehensive training
- Maintenance
- Installations and resources the world over

Extensive worldwide presence for the benefit of all our customers

Through our integrated organisation and our 7300 employees, our global presence is assured. Our technical assistance services and local services comprise:



27 industrial sites

Producing complete ranges of high quality products, optimised for the requirements of specific industries.



40 centres of expertise

Offering an excellent customer assistance service for any product, any automation solution or any request for service.



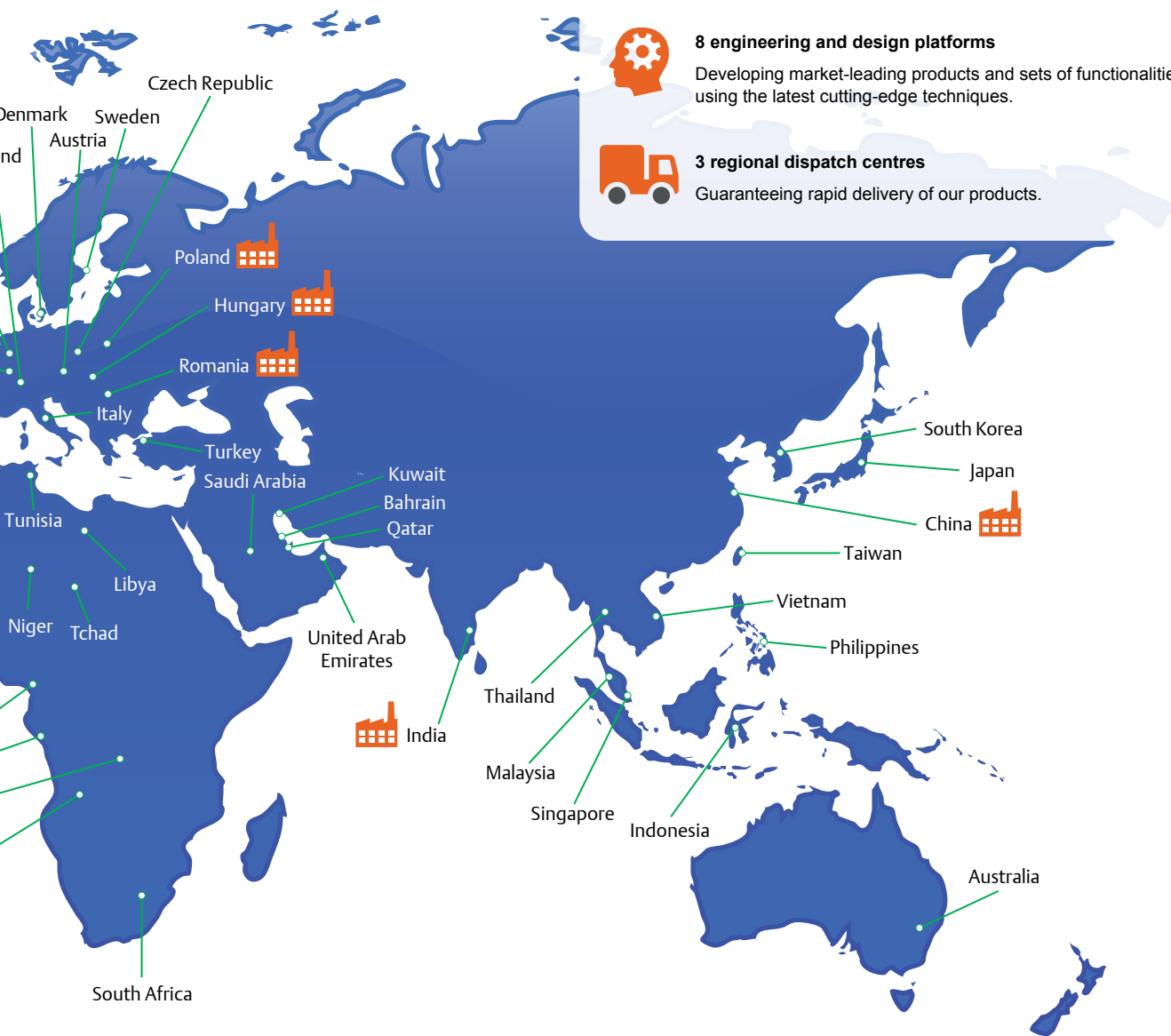
8 engineering and design platforms

Developing market-leading products and sets of functionalities using the latest cutting-edge techniques.



3 regional dispatch centres

Guaranteeing rapid delivery of our products.



Express availability

Boost and secure productivity

All our ranges of geared motors benefit from our international supply chain organisation, guaranteeing very short lead times for many combinations. *Express* availability offers fast reaction times to customer needs, thus enabling customers to improve and guarantee their own productivity:

- by benefiting quickly from energy savings
- by helping to ensure continuity of production
- by minimising the stock of spare parts on-site

Most of our products are:

- ready to dispatch in 1 to 10 working days
- motors, servo motors, geared motors, drives, options and accessories
- limited in quantity according to product and option
- access to list of products eligible for *Express* availability, and the corresponding conditions, directly on our website



<http://lrsm.co/dispofr>



Express availability - Geared motors

IMfinity® IE3 Class helical geared motors
COMPABLOC, MANUBLOC, ORTHOBLOC
Standard environment – Fixed speed

- Integrated mounting **MI**
- Universal mounting **MU**
- Primary shaft mounting **AP**

EX-WORKS AVAILABILITY LEAD TIMES, IN NORMAL WORKING DAYS

Orders received in the factory on the day before 12 noon, CET, within the maximum quantity limit, according to availability times stated below.

For product orders with options, the availability time is the longest time for the product or its options.

If the order is received after 12 noon, the availability time is extended by one day.

The maximum quantity is defined for an order line. Beyond the maximum quantity, please consult your sales office.

D	D+1	D+2	D+5	D+10	Please consult
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IMfinity® IE3 Class motors, 4p associated (except motors in italics not concerned by IE)

Type	IE	Mounting	Rated power P_n kW	400 V	IE3 Class													
					Cb 15-	Cb 30-	Cb 31- Ot 31- Mub 31-	Cb 32- Ot 32- 33- Mub 32-	Cb 33- Ot 34- Mub 33-	Cb 34- Ot 35- Mub 34-	Cb 35- Ot 36- Mub 35-	Cb 36- Ot 36- Mub 36-*	Cb 37- Ot 37- 38- Mub 37-*	Cb 38- Ot 38- Mub 38-*	Ot 39-			
LS 56 M	NC	<i>MI or MU</i>	0.06	Y	5	5												
LS 56 M	NC	<i>MI or MU</i>	0.09	Y	5	5												
LS 63 M	NC	<i>MI or MU</i>	0.12	Y	5	5												
LS 63 M	NC	<i>MI or MU</i>	0.18	Y	5	5												
LS 71 L	NC	<i>MI or MU</i>	0.25	Y	5	5	5	5	5									
LS 71 L	NC	<i>MI or MU</i>	0.37	Y	5	5	5	5	5									
LS 71 L	NC	<i>MI or MU</i>	0.55	Y	5	5	5	5	5									
LSES 80 LG	IE3	MI or MU	0.75	Y	5	5	5	5	5	5								
LSES 80 LG	IE3	MI or MU	0.9	Y	5	5	5	5	5	5								
LSES 90 SL	IE3	MI or MU	1.1	Y	5	5	5	5	5	5	2	2						
LSES 90 LU	IE3	MI or MU	1.5	Y	5	5	5	5	5	5	2	2						
LSES 100 L	IE3	MI or MU	1.8	Y	5	5	5	5	5	5	2	2						
LSES 100 LR	IE3	MI or MU	2.2	Y	5	5	5	5	5	5	2	2						
LSES 100 LG	IE3	MI or MU	3	Y	5	5	5	5	5	5	2	2						
LSES 112 MU	IE3	MI or MU	4	Y	5	5	5	5	5	5	2	2						
LSES 132 SM	IE3	MI or MU	5.5	Y			5	5	5	5	2	2						
LSES 132 MU	IE3	MI or MU	7.5	A				5	5	5	2	2						
LSES 160 MR	IE3	MI or MU	9	A					5	5	2	2						
LSES 160 M	IE3	MI or MU	11	A						2	2	2						
LSES 160 LUR	IE3	MI or MU	15	A						2	2	2						
LSES 180 M	IE3	MI or MU	18.5	A							1	1						
LSES 180 LUR	IE3	MI or MU	22	A							1	1						
LSES 200 LU	IE3	MI or MU	30	A							1	1						
LSES 225 SR	IE3	MI or MU	37	A							1	1						
LSES 225 MG	IE3	MU	45	A								1						

A complete service package

To provide our customers with an enhanced service that's perfectly in tune with their expanding productivity, performance and process safety needs – this is our goal.

Intelligence, simplicity, proximity and responsiveness are the key values of our service strategy at Leroy-Somer, a subsidiary of the global industrial group, Nidec.

Our ambition: to become a key market player. With our manufacturing vision, our expertise and the logistical and human resources we have available, we can support from the upstream assessment to the predictive and remedial maintenance of your equipment.

Our aim: to manage the entire life cycle of your products. To provide you with user safety and complete peace of mind, our solution has been created to support your equipment and infrastructure, from the initial project to the recycling stages.

Our mission: to innovate to make a lasting impression. Ambassadors of environmental protection, our R&D division works daily to design new solutions that are ever more efficient, consume less energy and that reduce CO2 emissions.

Our approach: closer and closer to you. As well as spanning the entire French territory, our service network is active worldwide to guarantee us exceptional intervention speed. This 'close to customer' set up also means we can provide an on-demand service depending on your specific needs and the specific characteristics of your installed system.

Audit & advice



- Facilities audit
- Energy optimisation
- Modernisations
- Management of installed resources

Installation & commissioning



- Installation
- Commissioning
- Extended warranty
- Training

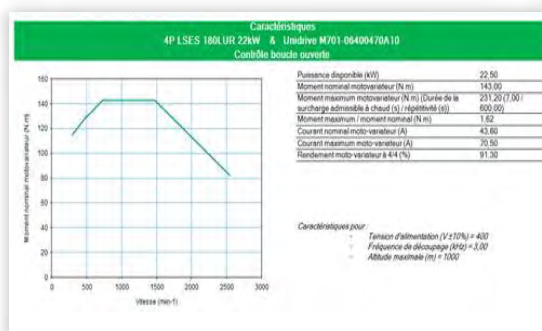
Optimise and make your choice

Configurator

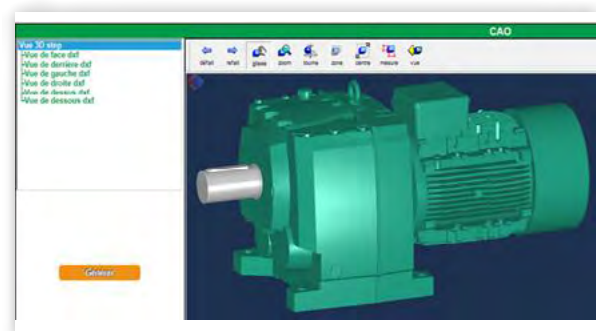
- An online tool to assist you in the selection of motors, break motors or geared motors combined with variable speed drives.
- All standard products are 100%-characterised, with the technical specifications available in 15 languages.
- Product dimensions supplied in 3D
- Real-time information on the eligibility of the product for the *Express* availability offering

Motor selection

Gearbox selection



Characteristics of geared motor + drive assemblies



CAD files of geared motors (2D, 3D)

LEROY-SOMER[™]

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youtube.com/user/LeroySomerOfficiel

linkedin.com/company/44575



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All for dreams

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