SIEMENS

AboveNEMA motors

Above average conditions require above average motors

Answers for Industry.

Large motors built to meet the most demanding standards–yours

For over 115 years, Siemens has built large motors with a single objective in mind – to meet the exacting requirements of our customers' application needs. Today, our motors have earned a reputation for high performance, low maintenance, and long service life in the world's most demanding applications. It is this focus on delivering genuine performance value to our customers, combined with unmatched service and support, that has made Siemens the leading supplier of motors around the world.

Siemens meets or exceeds industry preferred standards

Our customers rely on stringent standards to assure performance and Siemens has always been at the forefront of compliance with important industry standards.

- IEEE 841
- ANSI
- API 541, 4th Edition
- API 541, 5th Edition
- API 547, 1st Edition
- NEMA
- CSA
- CSA - US
- NEMA Premium® Efficiency

Individual challenges. Individualized solutions.

We understand that every industry has its own unique challenges. That's why we listen and learn from our customers. By sharing their challenges with us, our customers provide valuable insights that guide us as we engineer the best solutions for their specific industries.

- Petroleum
- Chemical Processing
- Mining / Minerals
- Metal Producing and Processing
- Utilities
- Power Generation
- Pulp and Paper
- Industrial Refrigeration

We understand that every industry has its own unique challenges.

Quality isn't a goal – It's an absolute requirement

In addition to providing industry-specific solutions and meeting the most rigid performance standards, Siemens bookends our commitment to delivering quality products for our customers in two additional, and significant, ways. Both are the result, in part, of our recent 35 million dollar facility upgrade that earned us Plant Engineering's "Top Plant" award in 2009.

- Before the first component is cast or the first coil is wound, our customers know that their motor is manufactured in our state-of-the-art, Global Motor Manufacturing Facility in Norwood, Ohio, USA which has been ISO 9001-certified for quality standards and ISO 4001-certified for environmental standards.
- At the opposite end of the manufacturing process, we subject all motors up to 10,000 HP to full load dynamometer testing. It is the single best assurance of superior build quality.

A systems approach to high performance, extended service life and value

Stator Systems

More Than the Sum of Its Parts

Our engineers evaluate every component that affects the performance and service life of our motors. Ongoing refinements of design and materials create variable options that are employed to meet specific application, performance, cost, and efficiency requirements for individual industries and applications. Together, these flexible sub-assemblies unite to provide a highly engineered, custom-purposed motor, built with exceptionally reliable standard components to meet exacting tolerances and specifications.

Insulation Systems

Random Wound – This stator insulation system is commonly used for general-purpose performance in frame sizes through 580 and ratings to 600 volts.

- Polyester/amide-imide enamel-insulated round wire, wound into individual coils and inserted into precision die cut semi-enclosed slots.
- After insertion into the stator frame, coils are connected and braced.
- Completed stators are over-coated with a high temperature polyester resin and high temperature baked to produce a very solid and rigid stator winding suitable for tough performance including across-the-line starting.

Form Wound – The Siemens MiCLAD™ form wound stator insulation system provides the ultimate in electrical protection, as well as mechanical and electrical strength for long service life. It features a highly engineered, sealed epoxy mica design for optimum electrical and ambient operating performance and meets or exceeds NEMA MG1-20 sealed winding standards.

Siemens' Micalastic™ form wound stator insulation system leverages a vacuum pressure impregnation technique, and provides protection for motors fed from a line-supply or an adjustable frequency drive. This system also provides high switching and reversing strength due to the high stiffness of the overhangs. The copper wire strand and turn insulation system is comprised of multiple layers of mica tape.

- For high voltage applications, supplemental mica insulation is added for extra protection.
- When ultimate protection against corona damage is required in high voltage applications, conductive armor tape is added to the slot portion of the coil.

Stator Assembly System

After insulating, coils are assembled in the stator slots with polyester film/fiber slot liners and connected together.

- Coil end surge rings, blocking, and tying are applied to the finished assembly for maximum strength.

Vacuum Pressure Impregnation (VPI)

Each stator assembly receives VPI treatment to provide outstanding protection against moisture, chemical, and electrical damage.

- The VPI process uses high vacuum pressure to remove air and gasses from the stator assembly and winding.

Ongoing refinements of design and materials create variable options that are employed to meet specific application, performance, cost, and efficiency requirements.

- After the vacuum is applied, a 100% solid thermosetting epoxy resin is introduced into the stator, filling voids and gaps within the windings.
- While submerged within the resin, the stator is then pressurized to several times the atmospheric pressure to maximize insulation penetration and coverage.
- After the VPI process, the stator assembly is baked at high temperature to catalyze the resin, producing an exceptionally rugged, solid, and sealed stator insulation system.

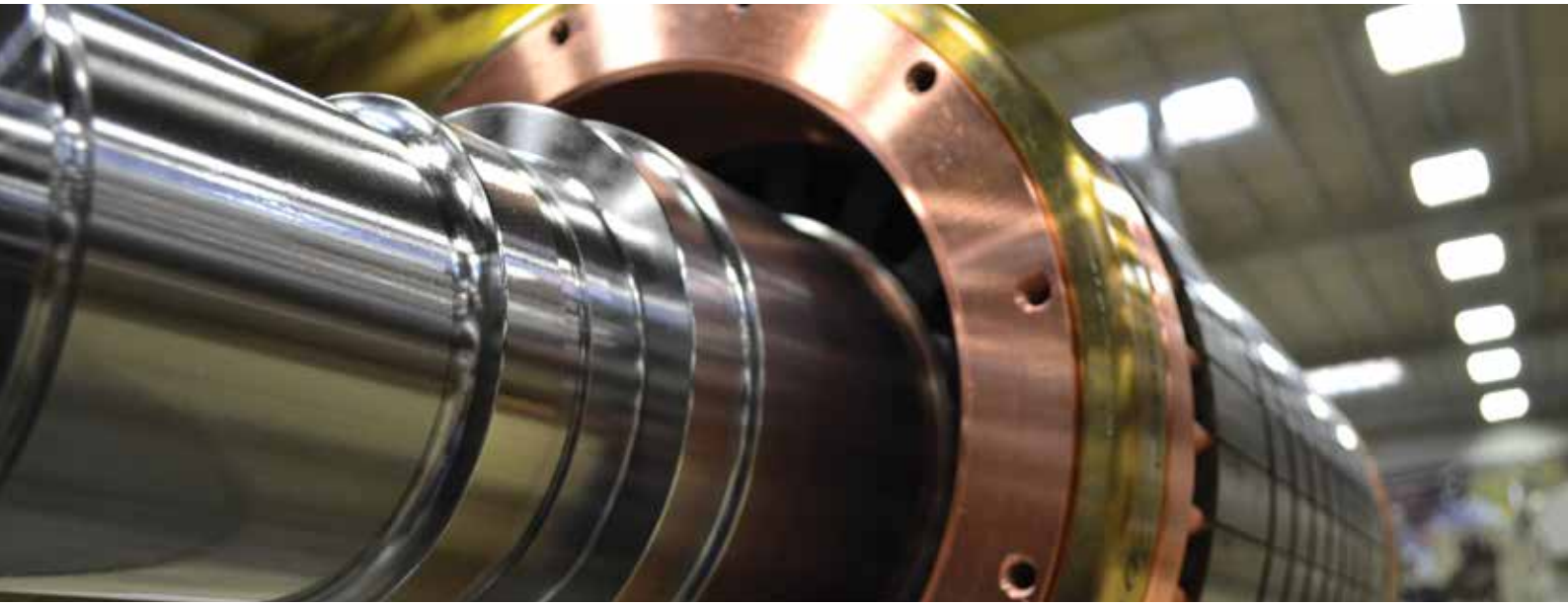
Core Systems

For optimum electrical and magnetic performance, stator cores are assembled with laminations punched from high-grade (C5 core plate) silicon steel. These laminations are stacked, keyed, compressed, and secured with heavy gauge steel rings to provide a strong, rigid assembly to minimize vibration and noise while assuring a precision air gap.

Frame System

Depending on the size of the motor or the type of enclosure, motor frames are either high-grade cast iron or fabricated steel.

- Precision-machined end shields and frame ends provide close tolerance mating – helping assure precise rotor and stator alignment, regardless of high shaft loads, for long bearing life as well as low vibration and harmonics.
- Precision-machined mounting feet surfaces assure long-term, accurate alignment with driven equipment to extend bearing life and minimize vibration.



Rotor System

The rotor is the workhorse of any motor. It must endure and transmit heavy loads, aid in the cooling of the motor and provide electrical performance. Our engineers have designed the rotor system to provide optimal performance for various applications through the use of thoughtful design and high-grade materials.

High strength shafts
Siemens uses generously sized medium carbon steel bar stock for shafts to provide maximum strength. They are precision ground to assure reduced operating stresses.

Innovative cooling system
All rotors feature cooling passageways and vents in the rotor core. The axial vents that are parallel to the shaft, carry cooling air to radial vents in the rotor core that expel heat away from the rotor.

Precision balanced
Most completed rotors are dynamically balanced at full operating speed to ensure long bearing life and minimal noise and vibration.

Two Rotor Choices to Meet Your Needs

Siemens offers both aluminum die cast and fabricated copper rotors.

Aluminum die cast rotors
These rotors are ideal for general-purpose applications.

- They are constructed of stacked steel laminations which are compressed and then molten aluminum cast into a solid rotor core. This construction casts bars and end rings into one rugged, solid piece to eliminate the possibility of bond faults or flexing failures at the joints

Fabricated copper bar rotors
These rotors are ideal for high performance applications and provide exceptional energy efficiency.

- They are fabricated from stacked steel laminations that are compressed and then shrink fit onto a keyed shaft. Heavy steel end heads with tooth supports are added to prevent flaring at the ends.
- Copper or copper alloy bars are press fit into rotor slots that are lined with steel shims to assure a tight fit. Large copper end connections are added and joined with silver braze for maximum strength and electrical conductivity.

From design through production, our motors are engineered for peak performance even in the harshest conditions.

Bearing Systems

To meet the specific application requirements our clients need, we offer customers two varying types of bearing systems. Each of the bearing systems are designed to precisely match the diverse frame sizes we offer customers.

Sleeve bearings
Split sleeve bearings are optional on any motor below 680 frame, and standard on 680 frame and larger motors.

- Tin-based babbitt liners are bonded to bearing bushing shells.
- A large lubricant reservoir provides self-cooling of the lubricant for some motors.
- Dual one-piece rings deliver the lubricant from the reservoir to channeled grooves where it is delivered to the bearing.
- For convenient and easy inspection, the top half of the horizontally split bearing housing can be removed without disturbing the bearing or its alignment. A viewing port is included in the housing to examine the bearing condition.
- Flood lubrication is available.
- Both sides of these bearings have labyrinth seals and are vented to the atmosphere to prevent lubricant migration.
- Sight gauges are available to monitor lubricant levels and constant level oilers are available.
- When required, bearings are insulated from the housing to prevent damaging shaft currents.

Anti-friction bearings
These bearings are standard on 500 and 580 frame motors, as well as 8-pole and slower speed motors.

- The design incorporates single-row, open construction, regreasable ball bearings.
- New grease is added through external fittings and expelled grease is relieved through drain ports.
- A large grease reservoir protects the bearings from contaminants while a stationary metal end cap protects the stator end turns from excessive grease.
- Bearings are interference-fit on the shaft and slip-fit between the bearing and the housing to allow for thermal expansion.

Open Motors

Construction Features		
Enclosure	ODP / WPI (IC01)	WPII (IC01)
Degree of Protection	IP23	IP24
HP Range	200 - 9,000 HP	200 - 18,000 HP
Frame Size / Shaft Height	500, 580, 680 & 800	500, 580, 680, 800, SH630 & SH710
Voltage	380 - 13,200 V (460 - 690 V to 800 HP only)	380 - 13,200 V (380 - 690 V to 800 HP only)
Service Factor	1.0, 1.15 (optional)	1.0, 1.15 (optional)
Warranty	24 months from date of manufacture Deferred and / or Extended Warranty (optional)	24 months from date of manufacture Deferred and / or Extended Warranty (optional)
Construction Materials		
Frame	Cast Iron	Cast Iron - 500 - 800 frames Fabricated Steel - SH630 / SH710
Bearing Housings*	Cast Iron	Cast Iron - 500 - 800 frames Fabricated Steel - SH630 / SH710
Main Terminal Box	Cast Iron Fabricated Steel (optional)	Cast Iron - 500 - 800 frames Fabricated Steel (optional) Fabricated Steel - SH630 / SH710
Auxiliary Boxes	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)
Shaft	2 Pole - AISI 4140 4 Pole and Slower AISI 1045 AISI 4140 (optional)	2 Pole - AISI 4140 4 Pole and Slower AISI 1045 AISI 4140 (optional)
Rotor	Aluminum Die-cast - 500 / 580 frames** Induction-Brazed Copper Bar - 680 / 800 frames	Aluminum Die Cast - 500 / 580 frames** Induction-Brazed Copper Bar - 680-SH710
Lamination Material	C5 Core Plate	C5 Core Plate
External Cooling Fan	N/A	N/A
Fan Cover	N/A	N/A
Top Cover / Heat Exchanger / Tube Material	N/A - 500 frames Fabricated Steel - 580 - 800 frames / N/A / N/A	Fabricated Steel - Provisions for Filters / N/A / N/A
Insulation	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI
Hardware	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)
General Information		
Noise Level	90 dB(A) Typical (lower on 4 pole & slower) (<85 dB(A) low noise optional on most ratings)	90 dB(A) Typical (lower on 4 pole & slower) (<85 dB(A) low noise optional on most ratings)
Vertical Mounting	All Frames	All Frames
Inverter Operation	VFD Duty - Consult Siemens for Specifics	VFD Duty - Consult Siemens for Specifics
Paint	Two-part Epoxy, Special Paint (optional)	Two-part Epoxy, Special Paint (optional)
Paint Color	Siemens Motor Blue (other colors optional)	Siemens Motor Blue (other colors optional)
Bearing Type	Anti-friction - 500 / 580 frames Sleeve bearings (optional) Sleeve bearings - 680 / 800 frames (Anti-friction available on some ratings)	Anti-friction - 500 / 580 frames Sleeve bearings - 680 / 800 frames 2 & 4 Pole Sleeve bearings - SH630 / SH710 6 Pole and Slower Anti-friction - SH630 / SH710 Sleeve bearings (optional)
Vibration	0.12 IPS or as defined by NEMA (Special balance if required)	0.12 IPS or as defined by NEMA (Special balance if required)
Hazardous Area	N/A	Class 1, Division 2 (optional)

Consult Siemens for a complete list of clarifications, exceptions and bills of material that may apply.
* The bearing housings are one-piece with ball bearings and two-piece with sleeve bearings.
** Some larger 580 frames are provided with fabricated copper bar rotors. Copper bar rotors are optional for 500 and 580 frames.

Enclosed Motors

Construction Features			
Enclosure	TEWAC (ICW81)	TEFC (IC411)	TEAAC (IC611 or IC616)
Degree of Protection	IP54 / IP55 (SH630 / SH710)	IP54 / IP55 (SH400-SH560)	IP54 / IP55 (SH630 / SH710)
HP Range	200 - 18,000 HP	200 - 3,000 HP	200 - 14,000 HP
Frame Size / Shaft Height	580, 680, 800, SH630 & SH710	500, 580, SH400, SH450, 880 & SH560	580, 680, 800, SH630 & SH710
Voltage	380 - 13,200 V (380 - 690 V to 800 HP only)	380 - 11,000 V (380 - 690 V to 800 HP only)	380 - 13,200 V (380 - 690 V to 800 HP only)
Service Factor	1.0, 1.15 (optional)	1.0, 1.15 (optional)	1.0, 1.15 (optional)
Warranty	24 months from date of manufacture Deferred and / or Extended Warranty (optional)	24 months from date of manufacture Deferred and / or Extended Warranty (optional)	24 months from date of manufacture Deferred and / or Extended Warranty (optional)
Construction Materials			
Frame	Cast Iron - 580 - 800 frames Fabricated Steel - SH630 / SH710	Cast Iron	Cast Iron - 580 - 800 frames Fabricated Steel - SH630 / SH710
Bearing Housings*	Cast Iron - 580 - 800 frames Fabricated Steel - SH630 / SH710	Cast Iron - 500 - 880 frames Fabricated Steel - SH400 / SH560	Cast Iron - 580 - 800 frames Fabricated Steel - SH630 / SH710
Main Terminal Box	Cast Iron - 580 - 800 frames Fabricated Steel (optional) Fabricated Steel - SH630 / SH710	Cast Iron Fabricated Steel (optional)	Cast Iron - 580 - 800 frames Fabricated Steel (optional) Fabricated Steel - SH630 / SH710
Auxiliary Boxes	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)
Shaft	2 Pole - AISI 4140 4 Pole and Slower AISI 1045 AISI 4140 (optional)	2 Pole - AISI 4140 4 Pole and Slower AISI 1045 AISI 4140 (optional)	2 Pole - AISI 4140 4 Pole and Slower AISI 1045 AISI 4140 (optional)
Rotor	Aluminum Die Cast - 580 frame** Induction-Brazed Copper Bar - 680 - SH710	Aluminum Die Cast - 500 / 580 frames** Induction-Brazed Copper Bar - SH400 - SH560	Aluminum Die Cast - 580 frames** Induction-Brazed Copper Bar - 680 - SH710
Lamination Material	C5 Core Plate	C5 Core Plate	C5 Core Plate
External Cooling Fan	N/A	Aluminum - 500 / 580 (other materials available), 2 Pole plastic fan with steel hub - SH400 - SH560 4 Pole and slower: plastic - SH400 / SH450, Steel - 880 / SH560	Aluminum - 580 - 800 Steel - SH630 / SH710 (other materials available)
Fan Cover	N/A	Cast Iron - 500 / 580 frames Steel - SH400-SH560	Fabricated Steel
Top Cover / Heat Exchanger / Tube Material	Fabricated Steel / Single-tube, Double-tube (optional) / Cu/Nim, Stainless Steel (optional)	N/A	Fabricated Steel / N/A / Aluminum, Stainless Steel (optional)
Insulation	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI
Hardware	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)
General Information			
Noise Level	85 dB(A) Typical (on most ratings) (<85 dB(A) low noise optional on most ratings)	90 dB(A) Typical (lower on 4 pole & slower) (<85 dB(A) low noise optional on most ratings)	90 dB(A) Typical (lower on 4 pole & slower) (<85 dB(A) low noise optional on most ratings)
Vertical Mounting	No	500 / 580 only	All Frames
Inverter Operation	VFD Duty - Consult Siemens for Specifics	VFD Duty - Consult Siemens for Specifics	VFD Duty - Consult Siemens for Specifics
Paint	Two-part Epoxy, Special Paint (optional)	Two-part Epoxy, Special Paint (optional)	Two-part Epoxy, Special Paint (optional)
Paint Color	Siemens Motor Blue (other colors optional)	Siemens Motor Blue (other colors optional)	Siemens Motor Blue (other colors optional)
Bearing Type	Anti-friction - 580 frame Sleeve bearings - 680 / 800 frames 2 & 4 Pole Sleeve bearings SH630 / SH710 6 Pole and Slower Anti-friction - SH630 / SH710 Sleeve bearings (optional)	Anti-friction - 500 / 580 frame Sleeve bearings (optional) 2 Pole Sleeve bearings - SH400 - SH560 4 Pole and Slower Anti-friction - SH400 - SH560 Sleeve bearings (optional)	Anti-friction - 580 frame Sleeve bearings (optional) Sleeve bearings - 680 / 800 frames 2 & 4 Pole Sleeve bearings SH630 / SH710 6 Pole and Slower Anti-friction - SH630 / SH710 Sleeve bearings (optional)
Vibration	0.12 IPS or as defined by NEMA (Special balance if required)	0.12 IPS or as defined by NEMA (Special balance if required)	0.12 IPS or as defined by NEMA (Special balance if required)
Hazardous Area	Class 1, Division 2 (optional)	Class 1, Division 2 (optional)	Class 1, Division 2 (optional)

Consult Siemens for a complete list of clarifications, exceptions and bills of material that may apply.
* The bearing housings are one-piece with ball bearings and two-piece with sleeve bearings.
** Some larger 580 frames are provided with fabricated copper bar rotors. Copper bar rotors are optional for 500 and 580 frames.

	IEEE 841	API
Construction Features		
Enclosure	IEEE 841	API 541 5th edition** / API 547
Degree of Protection	IP55	All
HP Range	200 - 500 HP	250 - 18,000 HP
Frame Size / Shaft Height	500 & 580	All
Voltage	460 - 4,000 V	2,300 - 13,200 V
Service Factor	1.0	1.0, 1.5 (optional)
Warranty	24 months from date of manufacture Deferred and / or Extended Warranty (optional)	24 months from date of manufacture Deferred and / or Extended Warranty (optional)
Construction Materials		
Frame	Cast Iron	Cast Iron - 500-SH560 Fabricated Steel - SH630 / SH710
Bearing Housings*	Cast Iron	Cast Iron - 500-580 frames Fabricated Steel - SH630 / SH710
Main Terminal Box	Cast Iron (ANSI Type II with standoff Insulators and oversized to NEMA MG1 optional)	Cast Iron or Fabricated Steel
Auxiliary Boxes	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)	Cast Iron - NEMA 4X Stainless Steel - NEMA 4X (optional)
Shaft	2 Pole - AISI 4140 4 pole and Slower - AISI 1045 AISI 4140 (optional)	2 Pole - AISI 4140 4 Pole and Slower - AISI 1045 AISI 4140 (optional)
Rotor	Die Cast Aluminum	API 541 4th ed: Induction-brazed Copper Bar API 547: Aluminum die cast ≤1,000 HP otherwise Induction-brazed Copper Bar (Induction-brazed Copper Bar option available for ≤1,000 HP)
Lamination Material	C5 Core Plate	C5 Core Plate
External Cooling Fan	Bronze Alloy	Aluminum if applicable (other materials optional)
Fan Cover	Cast Iron	Fabricated Steel or Cast Iron
Top Cover / Heat Exchanger / Tube Material	N/A	Fabricated Steel / Double-tube / Cu/Ni (TEWAC) Fabricated Steel / N/A / Aluminum (TEAAC)
Insulation	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI	<600 V = Random-wound, Class F ≥600 V = Form-wound, Class F-VPI
Hardware	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)	≤M12 - 300 Series Stainless Steel >M12 - Zinc Plated Carbon Steel (per API)
General Information		
Noise Level	90 dB(A) Typical (lower on 4 pole & slower) (<85 dB(A) low noise optional on most ratings)	(≤85 dB(A) available on most ratings)
Vertical Mounting	N/A	Available
Inverter Operation	VFD Duty - Consult Siemens for Specifics	VFD Duty - Consult Siemens for Specifics
Paint	Two-part Epoxy, Special Paint (optional)	Two-part Epoxy, Special Paint (optional)
Paint Color	Siemens Motor Blue (other colors optional)	Siemens Motor Blue (other colors optional)
Bearing Type	Anti-friction bearings	Sleeve bearings
Vibration	0.08 IPS (except 2 pole motors = 0.10 IPS)	0.10 IPS on HSG / 1.5 mils on shaft
Hazardous Area	Class 1, Division 2 (optional)	Class 1, Division 2 (optional)

Consult Siemens for a complete list of clarifications, exceptions and bills of material that may apply.
* The bearing housings are one-piece with ball bearings and two-piece with sleeve bearings.
** Motors built to API 541 3rd and 4th Edition are still available. Preassembled stator core, unitized construction, assembled as interference fit to yoke.

Engineered to Your Application

Designing one of our motors to fit perfectly into your application is the job of the Siemens large motor engineering team. Our staff of highly trained and experienced motor engineers can help solve the toughest application problems with intelligent solutions.

- Severe operating conditions and loads.
- Variable frequency drive solutions.
- Lower motor acquisition and operating costs.
- High efficiencies.
- Extended maintenance intervals.
- Increased service life expectancy.

To meet your exact requirements, Siemens offers a wide variety of application and performance-matched modifications.

Bearing Protection

Resistance Temperature Detectors (RTDs)
Bearing RTDs are placed under the bearing babbitt and monitor any change in bearing bushing resistance to produce a direct temperature reading. Bearing RTDs are platinum with a nominal 100 Ω resistance.

Thermocouples
These temperature detectors are available as chromel-constantan (type E).

Thermometers
Direct reading dial thermometers detect bearing temperatures and are normally mounted on the motor frame.

Vibration Detectors
Vibration detectors provide optimum bearing protection since excessive vibration in the bearings is detected before excessive heat can occur. Detectors are mounted near antifriction bearings and are available with switches and / or 4-20 mA outputs.

Proximity Probes
Non-contact vibration amplitude sensing proximity probes are made for sleeve bearing motors. They are eddy current devices that measure distance and change in distance to forewarn of impending bearing problems.

Stator Protection

Resistance Temperature Detectors (RTDs)
Stator RTDs can be embedded into stator slots for a direct temperature reading of the hottest area of the motor's windings. Stator RTDs with 100 Ω resistance are standard.

Thermistors
Thermistors provide a large resistance change in relation to a small temperature change and provide a warning from a potential overload.

Surge Protection
Capacitors are placed in each phase of the stator with built-in discharge resistors and connected to cabinet-mounted, three station class arrestors to prevent surges.

Differential Protection
Six extra-long leads for connecting to current transformers are included in an oversized terminal box for differential protection.

Space Heaters
These heaters are energized when the motor is at rest in damp or high humidity environments to reduce internal condensation build-up.

Special Modifications

These modifications are examples of the many that are available to meet specific requirements.

- Extra quiet enclosures.
- Precision balancing beyond NEMA standards.
- High inertia drives.
- Reduced voltage starting.

Comprehensive Testing

All Siemens motors are tested in accordance to applicable NEMA, ANSI and IEEE standards and results from these tests accompany each motor we ship. In addition to these tests, the following performance tests are also available.

- Complete testing to IEEE 112 in Methods E, E1, F or F1.
- Sound pressure testing to IEEE 85 and NEMA MG1 20 standards.
- Bearing temperature testing.
- Speed versus torque / current testing.
- Polarization index testing per IEEE 45 standards.

Quality Manufacturing

From design to materials to workmanship, quality is built into every Siemens motor, the result of more than 100 years of experience capped with today's advanced quality control procedures used in our Certified Quality Performance Program.

Comprehensive Service and Support

Siemens warranty, parts and service request call center is available 24/7, providing customers a single point of contact with efficient service and fast response times. Siemens service technicians take pride in finding the right solution, the first time, every time.

Contact Siemens Services

Telephone: 800-333-7421 (Toll Free)
423-262-5710 (Outside U.S.)
Online: www.siemens.com/automation/support-request

Siemens Motors and Drives – Performance-Matched Systems

Performance-matched variable-speed motors and drives from Siemens make perfect sense. They are designed to work in harmony for ease of selection and start up, as well as long-term reliability and exceptional performance. Whether your application requires variable torque or constant torque capability in general purpose or severe duty environments, there is a Siemens motor / drive system ready to go to work for you.

Siemens IEC Motors – Worldwide Production for Global Applications

Siemens produces a complete line of IEC motors built in our European factories. The H-compact line of motors utilizes torsionally rigid, robust frame design, manufactured from cast iron with external and internal cooling ribs. The H-compact line has output up to 3,000 kW.

The H-compact PLUS is available in shaft heights 450mm, 500mm, 560mm, 630mm and 710mm. It utilizes a modular cooling concept and is built using a cast iron frame with fabricated steel heat-exchangers. The H-compact Plus is available with outputs up to 13,000 kW.

The H-modyn, built in Berlin, Germany, features a high-density and compact design that provides a smaller overall package with an optimized cooling design for exceptional efficiencies. It is available as induction and synchronous and has an output capability beyond 50,000 kW.

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