

Committed to keeping our customers' systems online and operating.

ASIRobicon's service and support network is never more than a phone call away. Our call centers provide 24 hour 7 day a week support and, if further assistance is needed, our technician can be on site within 24 hours in Europe, the U.S., Canada and Mexico, and 72 hours anywhere else in the world. We're rapidly expanding our network of authorized service centers locally to serve you better. ASIRobicon also offers original manufacturer renewal parts, preventive maintenance and training programs for site technicians.

Contact us for service center nearest to you.



A moving force

What sets us apart from other manufacturers are our Customer driven design capabilities. Whether it's pumps, turbines, compressors, alternators, ships, rolling mills, paper mills, movers, fans or special applications our motors and generators are specifically designed to meet our client's particular needs. All of our motors and generators are designed based on a flexible modular structure developed using modern computer aided engineering methods. This permits our engineering staff to efficiently configure the right machine for our Customer's application.

ASIRobicon's machines offer

- Aluminum or Copper bar Rotor
- Micasystem VPI insulation system
- Custom tailored to meet your specific needs

We are specialists in:

High speed designs, stiff shaft designs, hazardous area machines including explosion proof enclosures, vertical machines up to 10,000 kW (13400 HP) and special applications.



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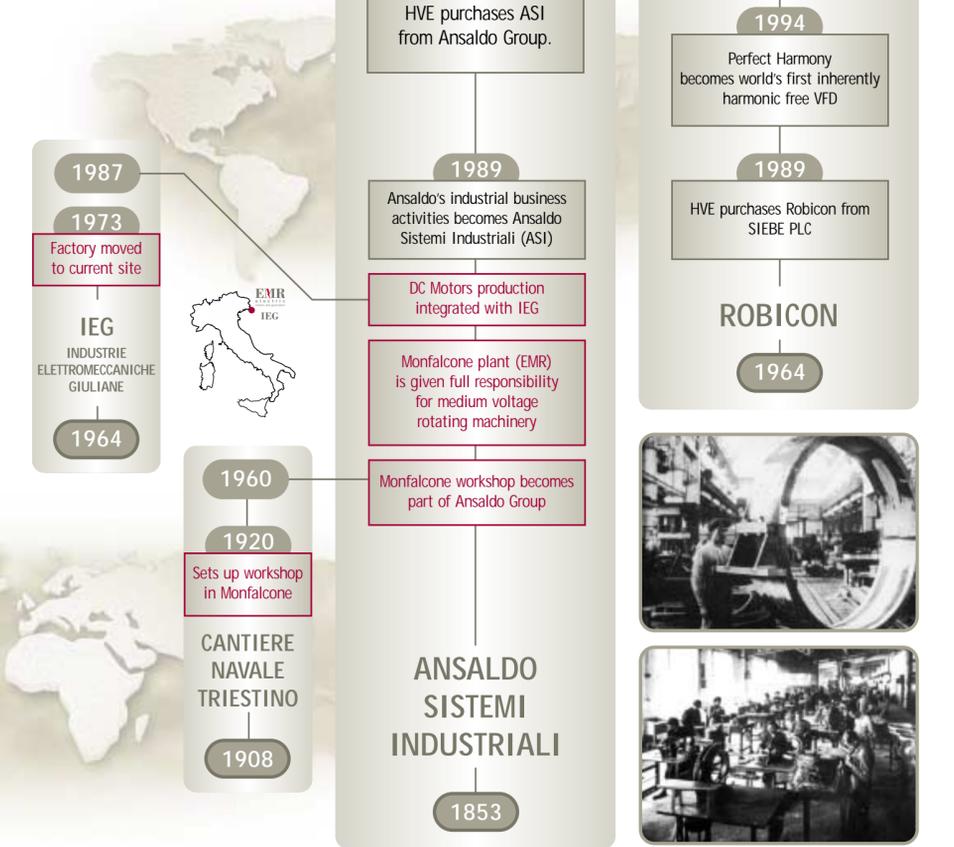
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ELECTRIC MOTORS AND GENERATORS FOR INDUSTRIAL APPLICATIONS



The strength of proven Experience

Nearly a century of excellence in motor and generator manufacturing



"Over the past 25 years we have installed more than 50,000 machines in 100 countries."



Our motors and generators are a moving force in the following industries:

- Energy
- Chemical & Petrochemical
- Oil & Gas
- Metals
- Environment
- Marine
- Paper
- Cement



Standard induction machines

EMR Series CT/CR/CB/W/N/ET/CAD/CA

General

Our standard induction machines are built with an aluminum squirrel cage rotor. Rotor packs are made from single punch laminations up to size 1000. Larger packs are made using lamination segments. End rings are made of a special aluminum alloy which is welded to the cage using state of the art techniques. Stators are built as self contained units which are mounted into the frame after the coils have been inserted and the whole unit has undergone our MICASYSTEM® VPI process.

Micasystem®

Our Micasystem® VPI insulation system is one of the best on the market. This system is based on a special mica tape and a blend of solventless epoxy resins. Due to its outstanding dielectric and mechanical properties this class F insulation system is qualified for use in nuclear power stations and highly aggressive environments.



Synchronous machines

EMR Series MS/GS

General

As a standard our synchronous machines are built with either salient pole or cylindrical rotors, depending on the speed and size of the machine. EMR has consolidated experience in generators coupled to diesel engines and turbines of all types. These generators are specifically designed with all the construction features to withstand the pulsating torque generated by a diesel engine to ensure smooth parallel operation. The construction features on our synchronous machines are basically the same as those on our induction motors for similar applications.



Variable frequency machines

EMR High speed motors Series HS / Series SM / Low speed motors

General

Our company is one of the world leaders in variable frequency drive applications so it should come as no surprise that all of our series can be used for variable frequency applications. These three series however, were specially developed for integrated variable speed applications:

High speed motors, low speed motors for cycloconverter applications and series SM.

High speed motors. EMR has over 10 years of experience in the manufacture of High Speed motors. Reaching over 20,000 r/min these hi tech machines are the epitome of our superb engineering capabilities. Generally used in pump and compressor applications, these motors offer energy efficiency and low maintenance advantages over traditional motors with gear box.

Low speed motors for cycloconverter applications. These low speed, high power machines are used on LCI systems for special applications. These motors are designed to withstand the fatigue stresses caused by extreme variable load and speed variations/reversals to ensure high reliability performance to the end user. (photo at top)

Series SM. Our series SM motors were designed to support large overloads and low speed/high torque applications They provide outstanding performance coupled with PWM type converter systems. This motor was developed to replace DC motors on most conventional applications.



DC machines

EMR and IEG Series GH / Series DH / Series MD 800-MDL 800

General

Our DC motors and generators come in 22 different shaft heights and nearly 100 different frame sizes to cover all applicable industry applications. All DC machines are laminated frame design and can be supplied by any DC converter system.

Our DC series offers outstanding performance features:

- high dynamic response
- wide speed range
- high maximum speeds
- high efficiency
- high commutating capacity during current transients



Series CT

Power rating:
150 - 25,000 kW
200 - 33,500 HP

Voltage:
up to 15 kV

Mass:
1,500 - 120,000 Kg

Number of poles:
2 - 36

Frame size:
315 mm through
1120, 10, 11, 12, 13



Type of cooling: IC 611

Series CR



Type of cooling: IC 81 W

Series W/N/CB



Type of cooling: IC 01 CB and N not shown

Series MS

Power rating:
1000 - 30,000 kW
1340 - 40,200 HP

Voltage:
up to 15 kV

Mass:
3,500 - 250,000 kg

Number of poles:
4 - 36

Type of cooling:
IC 01, IC 81W,
IC 611, IC 31

Frame size: 315 mm
through 1000,10,11, 12, 13



Series GS

Power rating:
1000 - 40,000 kVA

Voltage:
up to 15 kV

Mass:
3,500 - 250,000 kg

Number of poles:
4 - 36

Type of cooling:
IC 01, IC 81W,
IC 611, IC 31

Frame size: 315 mm
through 1000,10,11, 12, 13



Series HS/HSMS

Power rating:
500-20,000 kW
670 - 26,800 HP

Voltage:
up to 15 kV

Mass:
4000-40,000 kg

Speed range:
70% - 105%

Top speed:
20,000 r/min

Type of cooling:
IC 86 W, IC 37,
IC 616, IC 06



Power rating:
5000-35,000 kW
6700 - 46,900 HP

Voltage:
up to 15 kV

Mass:
10,000-60,000 kg

Speed range:
70% - 105%

Top speed:
8,000 r/min

Type of cooling:
IC 86 W, IC 37,
IC 616, IC 06



Series GH/DH

Power rating:
2 - 6,000 kW (at 150 r/min in tandem)

Voltage:
up to 1,000 V

Mass:
100 - 110,000 kg

Frame size:
80 - 1120 mm

Type of cooling:
IC 06, IC 00, IC 666,
IC 86 W, IC 37, IC 17



Horizontal and vertical mountings available

Insulating systems on DC line are class H; large frames (above 225) always provided with compensating windings.

Hazardous area machines - Series ET/CAD



Power rating:
150 - 4,500 kW
200 - 6,030 HP

Voltage:
up to 15,000 V

Mass:
1,500 - 25,000 kg

Number of poles:
2 - 12

Frame size:
355 - 800 mm

Type of cooling:
IC 511, IC 411



Our standard explosion proof protection is:
Ex d IIB T3/T4

Sleeve or antifriction bearings available.
Ex d IIB H₂ upon request

Series CA



Power rating:
140 - 2,000 kW
188 - 2680 HP

Voltage:
up to 6,600 V

Mass:
1,400 - 8,000 kg

Number of poles:
2 - 12

Frame size:
355 - 560 mm

Type of cooling:
IC 411

Excitation System

As a standard our synchronous machines are supplied with a brushless excitation system. Our brushless excitation system was specially designed to resist even the heaviest industrial application.

On our standard induction machines it's the type of cooling method used which determines the series.



Series SM/SN

Power rating:
15 - 700 kW

Voltage:
up to 660 V

Mass:
135 - 1,800 Kg

Frame size:
132 - 315 mm

Number of poles:
4

Type of cooling:
IC 06, IC 86W, IC 37, IC 17



System testing

Our test room is one of the best equipped in Europe. In addition to routine and type tests we can perform full load testing up to 4 MW @ 1,500 r/min (1,200 r/min on Vertical machines) as well as complete system testing (drive + motor). For orders of two or more similar machines we can perform a full load test in a coupled back to back configuration at the machine's nominal operating speed. Our data acquisition system, complete with six operating stations, records test data and automatically calculates performance results.

Put our experience to work.

With over 100 years of combined experience in motor and generator manufacturing, EMR and IEG are experts in special application machines.

Special designs in the GH/DH series include:

- Totally enclosed non ventilated motors for outdoor applications (with IP55 type protection) These machines are particularly adapt for heavy duty handling and lifting systems.
- Motors and Generators for marine applications: propulsion, thruster, auxiliary services. These machines have been installed effectively in low noise vessels, providing optimum performance.

Series MD 800-MDL 800

Comply with AISE (Association of Iron and Steel Engineers - Usa) n. 1 Std

Power rating:
up to 500 kW

Voltage:
up to 500 V

Mass:
400 - 9000 Kg

Frame size:
804 - 824 (split frame)
810 - 816 (laminated frame)

