GANZ

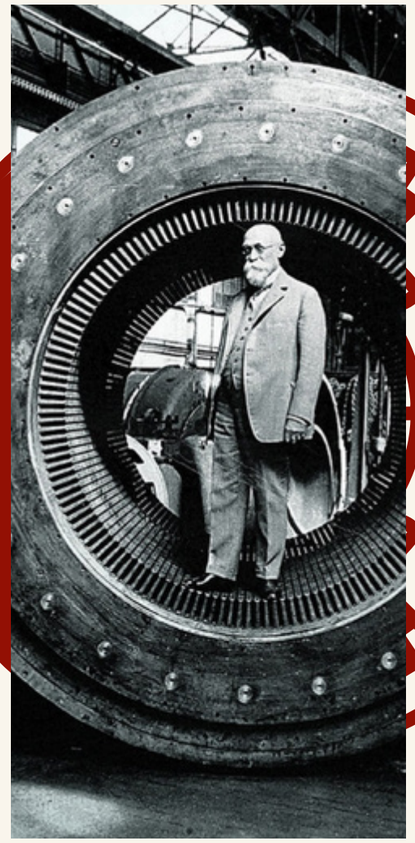
Ganz Transformers and Electric Rotating Machines Ltd.

ganzelectric.com

GANZ TRANSFORMERS SINCE 1878

GANZ ROTATING MACHINES SINCE 1878

GANZ SERVICE SINCE 1878



ROTATING MACHINES

Ganz manufactures a wide range of medium and high voltage motors and synchronous generators. The scope of electric rotating machines' supply covers the full sphere of design & engineering as per the customer request, up to the local installation and commissioning supervision.

The company is specializing in the design, manufacture and testing of MV & HV asynchronous motors from 500 kW to 20 MW and synchronous generators from 1000 kVA to 70 MVA.
The electric motor range includes safe and hazardous area motors, energy efficient motors as well as motors for special applications.
2-pole synchronous generators for steam or gas turbines of power stations can be supplied from 20 MVA to 60 MVA for 50 Hz and from 23 MVA to 65 MVA for 60 Hz networks.

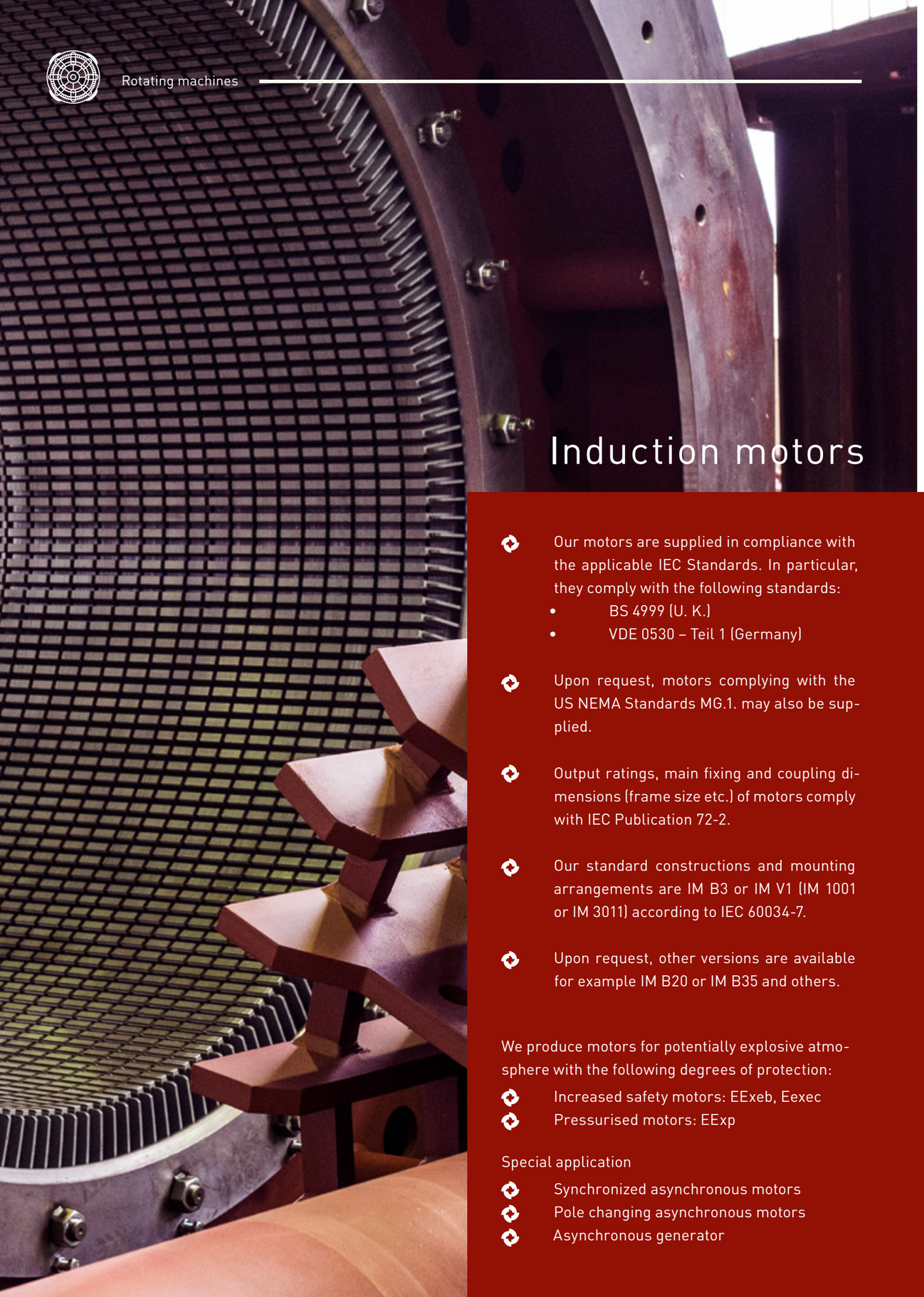
Ganz four- and higher pole synchronous generators operate at diesel- and hydro power stations, transformer test rooms.

The design and manufacturing range begins at frame 500 mm and goes up to 800 mm of series motors and generators, 900–1250 mm for high output standard rotating equipment, and even bigger frames' design and manufacturing can happen at tailor-made outputs or frame sizes.

The manufacturing area extends over 12 500 m^2 with a maximum crane capacity of 100 T. Special, bigger size of manufacturing tools as 50 t dynamic balance machine, VPI tank and furnace, cutting machines, presses are available, which make our company able to design and manufacture the bigger size of electric equipment. Factory annual capacity is 400 MW.

All rotating equipment are individually routine tested. Type and special tests are also performed as per the manufacturing schedule.

Ganz manufactures according to ISO 9001, ISO 14001 and ISO 45001.



Induction motors

- Our motors are supplied in compliance with the applicable IEC Standards. In particular, they comply with the following standards:
  - BS 4999 (U. K.)
  - VDE 0530 – Teil 1 (Germany)
- Upon request, motors complying with the US NEMA Standards MG.1. may also be supplied.
- Output ratings, main fixing and coupling dimensions (frame size etc.) of motors comply with IEC Publication 72-2.
- Our standard constructions and mounting arrangements are IM B3 or IM V1 (IM 1001 or IM 3011) according to IEC 60034-7.
- Upon request, other versions are available for example IM B20 or IM B35 and others.

We produce motors for potentially explosive atmosphere with the following degrees of protection:

- Increased safety motors: EExeb, Eexec
- Pressurised motors: EExp

Special application

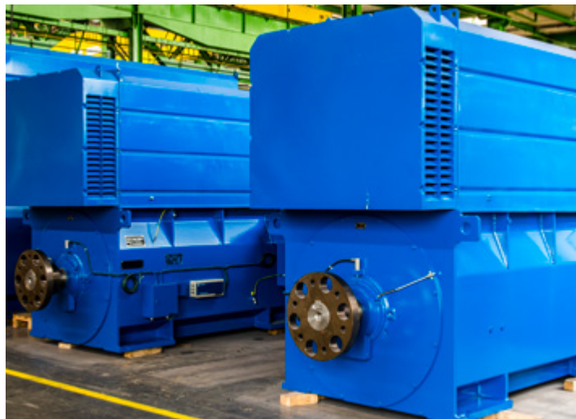
- Synchronized asynchronous motors
- Pole changing asynchronous motors
- Asynchronous generator

Synchronous Generators

The Synchronous Generator designs are created using latest technology and optimized using FEM/Flux plotting techniques to deliver the highest level of performance.

Our generators are self-excited and self-regulating. Brushless or static type excitation power is provided by a stationary-field exciter whose rotor is mounted on the generator shaft. The excitation unit with the automatic voltage regulation system is accommodated either in the generator itself or in a separate panel.

Generator output and speed are matched to the requirements of the prime movers. The generators are designed for a power factor of 0.8 lagging as standard, which are mechanically adequate for the active-power component of their kVA rating. The operational safety and strength of the generators is verified at works by a two-minute over speed test at 1,2 times the rated speed.

The generators are available for 50 Hz or 60 Hz for rated voltage between 400 V and 15 000 V. Using a reference value setter, the generator voltage can be adjusted within a range of +/- 5% of the rated voltage. This set value is maintained by the AVR. Other frequencies & voltage adjustment ranges are available on request.

Ganz's horizontal – or vertical outline synchronous generators operate at diesel- and hydro power stations, GTG two pole turbo generator series operate at steam- and gas turbine of power stations.