

# **On-site Commissioning**

**Product Description** 

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Advance, complex machines and plants must be put into operation on-site by qualified personnel. Due to strict technical requirements it is often difficult to find qualified service providers for these services and the training of in-house employees means high costs.

Commissioning engineers from Siemens Electric Machines s. r. o. in Drásov provide round-the-clock, worldwide optimum service to the customers, based on extensive know-how.

Commissioning is a complex process requiring specialized know-how of the machine and on-site experience, including tuning of the whole system. When carefully performed according to correct procedures, commissioning is an investment in availability and reliability over the entire lifetime of the equipment.

#### **Benefits**

- Full manufacturer support
- Fully updated documentation
- Comprehensive commissioning report
- Maximized availability and reliability
- Extended equipment lifetime

#### **Risks**

- Unprofessional commissioning can lead to the loss of warranty
- Unprofessional commissioning can mean extra costs for more frequent maintenance and shorter operating life
- When performing unprofessional commissioning there is a risk of irreversible damage of parts including machine winding with high repair costs

## **Commissioning in Steps**

- visual inspection of the main cable terminals
- check of cooling and lubricating systems
- electrical measurement and check of all machine wiring
- testing and calibrating set-up parameters
- protection testing
- excitation system and Automatic Voltage Regulation (AVR) setting
- check of the idle running, load running and connection of generator phases to the grid
- check of operating parameters load sharing, checking operating temperatures and vibrations





### **Basic data**

Machine type:	Synchronous generator 0,5 up to 25 MVA Synchronous and asynchronous motors 0,5 up to 20 MW
Frame sizes:	400 mm – 1340 mm
Speed:	500 r.p.m. – 1 800 r.p.m.
Frequency:	50 Hz – 60 Hz
Voltage:	380 V – 13,8 kV
Type of cooling system:	IC01, IC31, IC81W and others
Mounting form:	Horizontal feet mounted, Flanged bearing shield or shaft end, Vertical flange mounted
Degree of protection:	IP 23, IP 44, IP 54 and others
Standards:	IEC, EN, DIN, VDE and others Marine certification (DNV-GL, ABS, BV, LRS, CSS, RINA, RMRS and others)
Explosion protection:	Ex p/Ex n
Machine weight:	5 through 40 tons

#### **Other Customer Service products:**

- Spare part management
- Generator and motor retrofits
- Preventive maintenance and field service
- Repairs in the production plant or through a network of SIEMENS repair shops
- Vibration diagnostics and machine diagnostics (with a possible online monitoring)
- Service contracts
- Trainings

#### Contact

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