

SERVICE NOTE

e-Motion Center

Madrid



For more than 50 years, the ABB e-Motion Center In Madrid has had the best equipment and capacities for the diagnosis, maintenance and repair of rotating electrical machines. The wide experience and training of our team of engineers and technicians allows us to respond to our customers' most demanding requirements.

Beyond maintenance

The ABB e-Motion Center In Madrid has facilities covering more than 3,000 m², equipped with the most cutting-edge technologies.

Our activity is based on the over 100 years of experience that ABB has in the design, building and maintenance of rotating electrical machines.

Furthermore, our professionals are in permanent contact with the ABB Service Centres of Excellence throughout the world, which allows us to have privileged access to the most specialised and pioneering knowledge in existence, and cutting-edge technologies that are used in the advanced services.

Scope of the works

In our ABB facilities, maintenance, diagnosis and repair tasks are performed for all types of motors and generators (Alternating Current [AC] or Direct Current [DC] machines; large synchronous motors and generators, permanent magnets machines, among others). Furthermore, our tasks include large repairs that may involve the complete reconstruction of the equipment or the application of reverse engineering techniques.

Therefore, whatever the industry in which your machine operates, we have the necessary experience and certification in our ABB e-Motion centre in Madrid to work with the most demanding sectors and environments.

Facilities and equipment

Our facilities include:

- 10 bridge cranes (machines of up to 50 tons)
- VPI impregnation stand (2000 x 3500)
- Balancing machine (up to 2 tons)
- 2 drying ovens (5000x3600x7200) and (2000 x 1000 x 2500)
- Painting area
- Pressure washing cabin
- Ultrasonic washing machine
- Coil manufacturing machines
- TIG, electrical and induction welding
- Rectifying machinery (lathes, drilling machine)

Testing area facilities

Our facilities include:

- Dielectric testing (Rigidity testing up to 40kV, Surge Test up to 15kV)
- No-load test (13 kV in AC and 1.5 kV in DC)
- Load tests
- Short-circuit test (up to 800A)
- IR Thermography spectrum
- Vibration spectrum analysis



- Insulation tests (polarisation and depolarisation, delta tangent and partial discharges)

Remote viewing system

ABB offers services that allow our customers to know more, do more and do it better, together.

Thus, with the aim of bringing closer and facilitating part of the works and tests that we perform for our customers, we have developed a new remote viewing system in the ABB e-Motion Center in Madrid.

For this purpose, we have installed a next-generation system that has high-quality cameras, which allows us to record the works and tests to broadcast them live: obtaining an instantaneous and transparent communication with our customers without the need to travel.

Certificates and approvals

We have the main certifications that allow us to work with any customer requirements:

- ISO9001
- ISO14001
- ISO45001
- ISO50001
- Certification to work with ATEX motors
- GES approval according to UNE73401 to work with Nuclear Power Plants

Cutting-edge technologies

Our commitment to customers makes us go one step further when incorporating new technologies that allow a better service to be provided. Therefore, we have a wireless scanner in our ABB e-Motion Center in Madrid that offers incorporated automatic 3D processing.

This scanner easily captures images, similar to recording a video, to reconstruct a 3D model from the images taken. Thanks to its 0.1 mm precision and an 80 CPS reconstruction rate, its application provides optimised reverse engineering solutions, generating 3D documentation and better control, both dimensional and quality, of coils and spares.

For more information, please contact your local ABB representative or visit:

<https://new.abb.com/motors-generators/es/servicios-del-motor/e-motion-center/>

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