



# ORANGE1 HOLDING

# Textile Machine Motors Technology

## ***Motors production, maintenance and repair***





Elettromeccanica Leone Donazzan was established on 1971 in Bassano del Grappa. In 1983 the company turned into Eld Spa. In 1998 Armando Donazzan took over the running of the company; thanks to his determination and intuition he applied new financial and commercial policies which increased the level of reliability and visibility. In March 2006 the company changed its name to EME Spa and finally became Orange1 Electric Motors in 2018. The aim of O1EM is to manufacture custom made motors to meet clients and market expectations. The actual production covers a large range of AC and DC motors, as well as brushless motors and Variable Frequency Drives , to provide total solution. This know how in supplying products to the Textile markets makes O1EM reliable and skilled for the ideal motor settings to secure long terms performances in heavy environment conditions.

## MAIN APPLICATIONS

COVERED BY ORANGE1 ELECTRIC MOTORS

***Textile machines***  
***Braiding machines***  
***Spinning machines***  
***Weaving machines***  
***Industrial washing machines***  
***Service for electric motors***

## Motors production

### Asynchronous vectorial motors

The asynchronous motors series have been specially engineered to achieve reduced dimensions, **high performances in variable speed applications** with flux vector type controllers. The main feature is in the laminated stator pack which carries out the functions of the frame and integrates the air circulation system. In particular, these motors, even though they are sensibly more compact, make it possible to achieve very high specific powers with regard to a standard motor with the same shaft height. This technology is really appreciated on the **industrial washing machines** because combines high power with relatively small motors and high precision of movement.



### Reluctance motors

Orange1 Group has developed a range of reluctance round motors that give an important advantage, compared with a standard induction motor, because of the **highest efficiency**, due to the elimination of the rotor losses. This brings to unbeatable energy savings in variable load applications, such as fluid motion. These motors are assembled using standard IEC 60072 mechanical parts, in order to guarantee 100% compatibility in case of retro-fitting. The highly innovative active parts, synchronous reluctance, are designed to ensure the best efficiency, above all in terms at partial load conditions, in order to guarantee to the customer a **quick payback** when these drives are selected to replace standard induction solutions. Other important features are the low noise level and the synchronous speeds, important to have very **precise speed regulation** and a lower inertia.



### Brushless motors

The Ngbe brushless range - the Ngbe brushless servomotors are designed to meet the increasingly demanding needs of the automation industry, which require high-performance systems, greater reliability, and reduced maintenance. we used high-quality materials to develop the Ngbe series. the new aesthetic and functional details introduced allowed us to reduce the overall dimensions, resulting in great savings for the customer. Ngbe servomotors are designed to reduce torque oscillation and promote **excellent rotation regularity**, especially for what regards the **high precision necessary for the textile machines**.



## Motors production

### Drive Motors

O1EM develops and manufactures Variable Frequency Drive for **AC, Brushless and PM motors**. O1EM range includes Single and Three phase input and Three phase output. The drives could be directly mounted on the motors as a unique kit. The internal R&D offers custom solution for the firmware according to the client's special applications. **Heavy duty cycles of the textile** applications is the main know how.



### AC motors

O1EM customs electrically and mechanically a large portfolio of AC motors. The range covers single phase, double speed and three phase motors. The motors can work worldwide in adjusting the voltage and frequency according to the machines destinations. The motors size is from 56 IEC to 250 IEC. According to the European norms all the motors are **High Efficiency** to save ENERGY. The internal technical and laboratory department work in co- engineering with our clients' network. O1EM **encapsulates the winding** on demand. With this solution the motor is resistant to the most hostile environments in terms of presence of water and humidity. This solution improves also the heating transmission and electrical insulation of the winding.



### PM motors

O1EM has launched this new solution. Motors are in IEC frame. This range improves the AC motor characteristics with **High Efficiency, better performances and smaller dimension**. PM motors have up IE4 efficiency for **Energy Savings**. The ideal application is in 24/7 use of the machines. O1EM manufactures the drive build on the motor as total solution, on demand.



## AFTER SALES, REPLACEMENT AND SERVICE

Orange1 Quality and Technical Team, together with a dedicated internal department, offers a full service system able to satisfy any specific request in to electric motor maintenance. Orange1 Service can provide an innovative diagnostic tools for electrical testing and analysis to pinpoint immediately specific motor issues, and can provide a **service of reparation** for the textile motors. Orange1 target is to be a preferred partner for **brushless motors replacement**.



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