



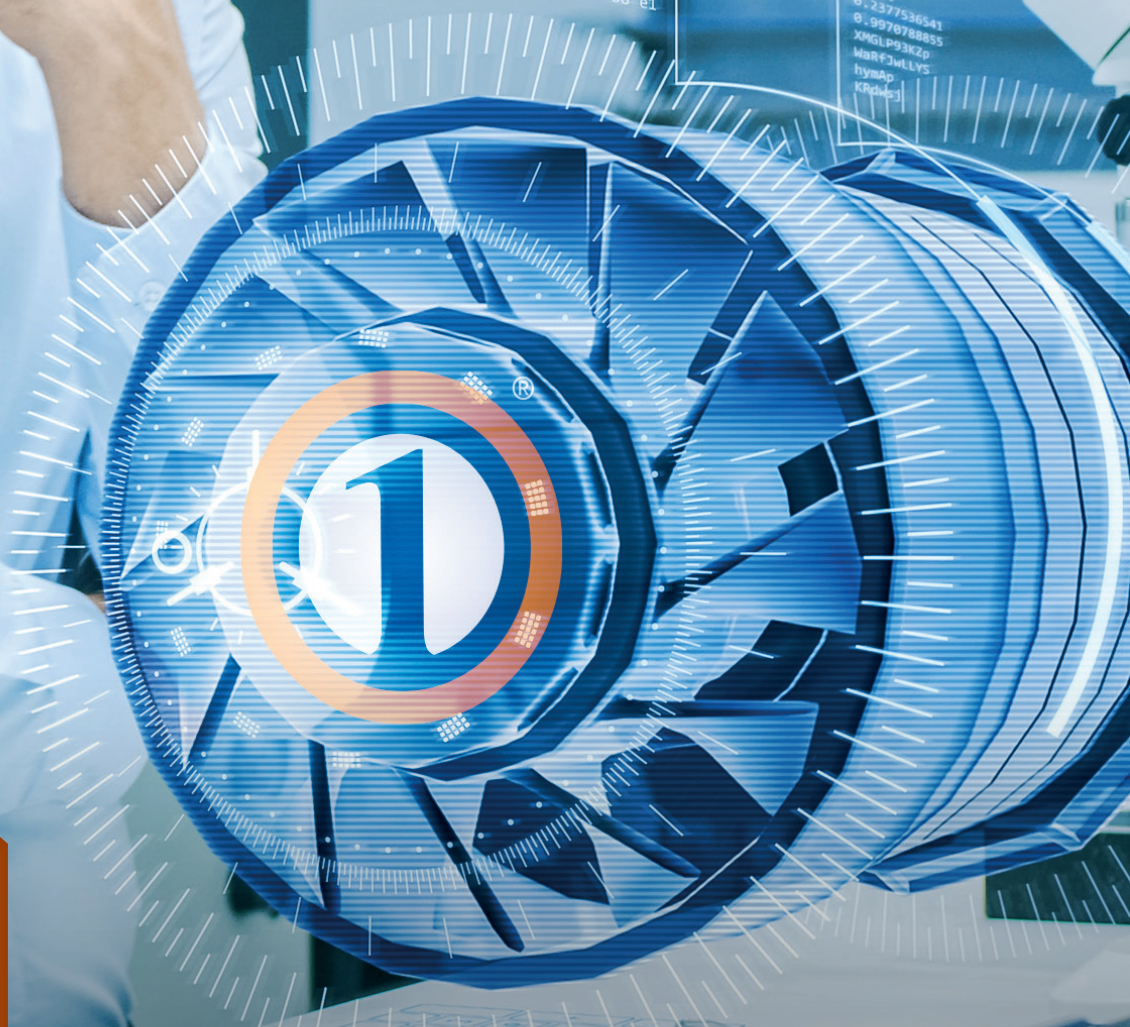
ORANGE1  
HOLDING

S-modul #073  
Z14 /SERW-1533/

1ehQzNVE5A  
SJzQ12Gm  
24 40 e2  
3d ad  
08  
68 e1

>Z4F ACTIV  
CORE #001 >> ON  
CORE #002 >> OFF  
CORE #003 >> ON

Ds3KQ  
0.2377536541  
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hywAp  
KRPwEj



# Build the Future

Company Profile

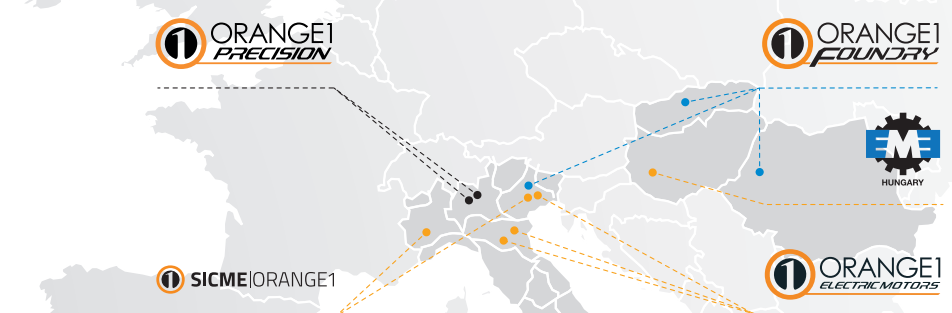






## A dynamic, strong and ambitious Group

Orange1 Holding is an international renown Group, one of the most important European manufacturers of single-phase and three-phase asynchronous electric motors. It has an annual capacity of more than 1 million motors and 5 million electric stators with an annual turnover of approx 235 million euro and more than 1600 workers in 15 production facilities. The group, established in 1971 by Leone Donazzan, chaired today by his son Armando Donazzan, is strongly focused on technological innovation, performance and customization to meet individual clients requirements.



DIE CASTING

ELECTRIC MOTORS

TURNING PARTS



# 2020

235 million turnover  
1600 workers



125 ml Turnover  
6 Factories  
800 Headcount



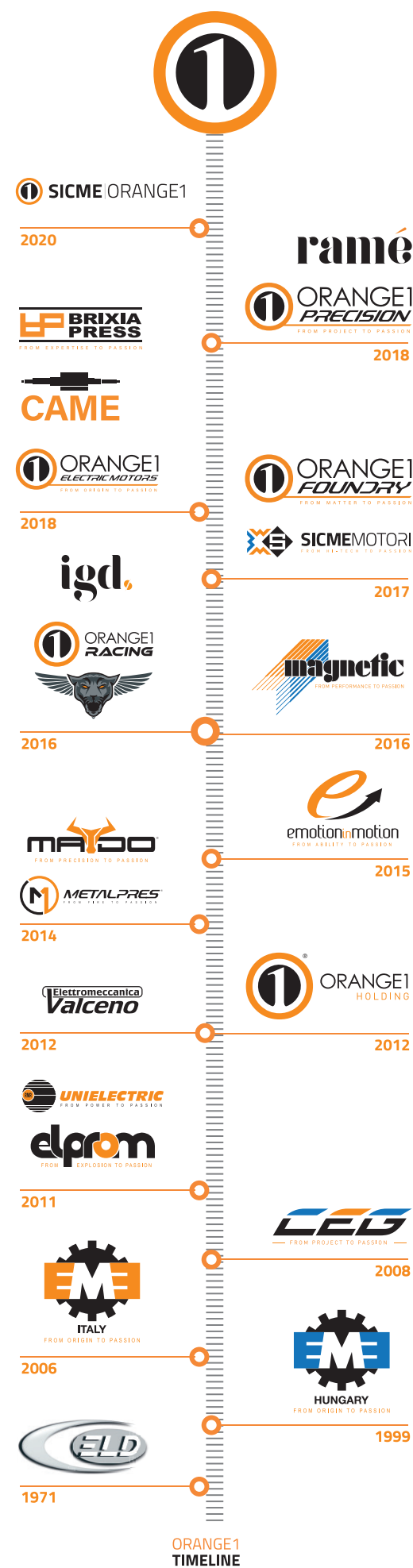
100 ml Turnover  
4 Factories  
720 Headcount



10 ml Turnover  
1 Factory  
80 Headcount



Timeline



WE ARE PASSION

We look to the future,  
to anticipate customers' needs.



Soul, Heart and Brain striving to create real value to our customers and to ourselves. Our principal motto is “We Are Passion” in order to win the most passionate challenge: anticipate customers’ needs.

With its mission the company try to create real value to the customers by considering their perspectives and realizing their expectations.

Orange1 Holding defines itself as a “Manufacturer of Solutions”.

How to ride through time? Orange1 tries to move with the time acting without hesitation in order to be constantly at the cutting edge of development in its sector.



## RESEARCH & DEVELOPMENT

The R&D Department  
is a strategic advantage for the Group.



The design and development of new products is a crucial factor in such a changing industrial society considering the technological innovations and the competitors.

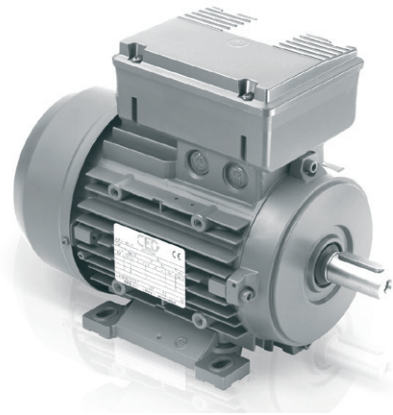
Corporate strategies and choices are extensive technological research, desire to emerge and a high level of originality. Orange1 products suit customers and market needs despite the high level of personalization. The launch of a new product is the conclusion of a thorough market analysis. By focusing on the flexibility and efficiency Orange1 Group responds to customers' demands designing customized models for special applications.

This has allowed a notable technological and production development.



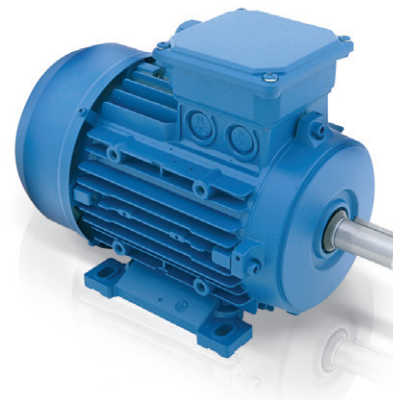


## Products Range



### Single Phase Asynchronous Motors

We manufacture single phase motors with permanent capacitor or with run capacitor and start capacitor equipped with centrifugal or electronic switch. Motor range from IEC 56 up to IEC 100 frame size in aluminum housing in 2-4-6 pole. Available mountings are B3-B5-B14-B3/B5 –B3/B14. The motors could be offered with UL/CSA approval on demand.



### Three Phase Asynchronous Motors

One speed or two speeds three phase motors manufactured in accordance with different specifications requested by the clients. Available in 2-4-6-8 pole from 0,09 kW up to 30 kW, in aluminum housing IEC 56 up to IEC 180. UL/CSA approval available on demand.



### IE2 and IE3 High efficiency Asynchronous Motors

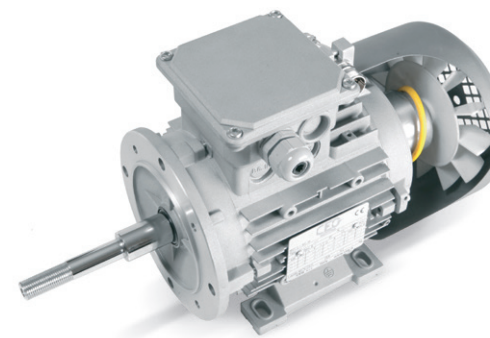
We are constantly researching new ways to achieve high performances while meeting requirements for effective energy savings. Motors are available from size 80 to size 180, in 2-4-6 pole in continuous duty from 0,75 kW up to 40 kW, in extruded or casted aluminum housing. Available mountings are B3-B5-B14-B3/B5 –B3/B14.



### Gearboxes Asynchronous Motors

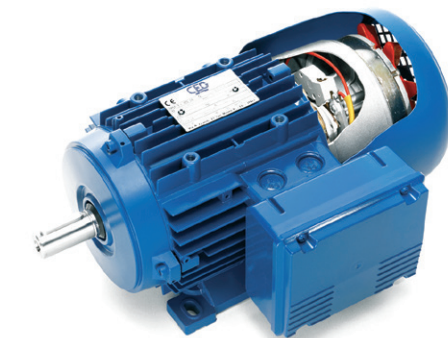
The new asynchronous three-phase and single phase motors range comes from an attentive and careful project developed with clients specifications. The target application is the gearbox. All the motors are B5 or B14 Model, with phase insulation in 2 and 4 pole. Orange1 Group approved motors.

## Products Range



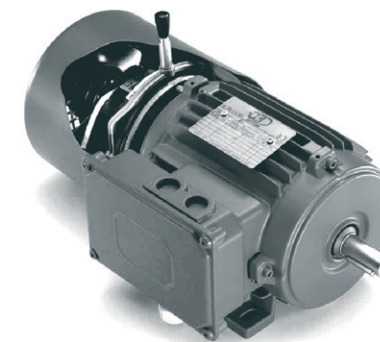
### Inverter Duty Motors

These motors are designed to work with frequency inverter, with force ventilation system to ensure maximum cooling power after prolonged running at significantly low speed. Special setting to carry encoder able to monitor the speed of the motor. Special solutions to ensure perfect functioning of bearings in addition to special winding.



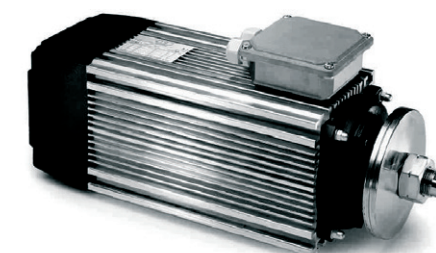
### Gradual Brake Motors (FPC)

Motors equipped with brake offering a gradual and silent brake stop of the moving parts in accordance with the regulation of safety in workplace. The motors are made in single and three phase, single or double speed, 2-4-6-8 poles from 0,13 kW up to 18,5 kW. On demand it is available IE2 efficiency, UL approved.



### High Torque brake Motors (FHC-FHA)

Suitable for all the application where it's necessary a sudden and precise braking. Available with DC or AC brake, single or three phase, single or double speed in 2-4-6 and 8 poles up 30 kW with different custom made settings. UL approval on demand.



### Low Centre Motors

This range of motors will be used in application where high power is combined to low centre. Available with blade discs or flange. Special arrangements with collet chuck shaft end on demand. Motors are made for inverter duty in 2 and 4 pole single and three phase. Available with Gradual brake and /or UL approval from 0,25 kW up to 15 kW.



Products Range



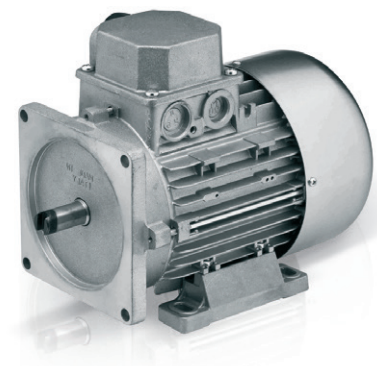
Hollow Shaft  
Motors

Motors for high pressure pumps with hollow shafts are designed for direct coupling to reach a perfect alignment between the electric motor and the majority of hydraulic pumps. These motors guarantee high performance, reliability and efficiency. Available in single and three phase, standard or with elastic coupling on IE2 on Demand.



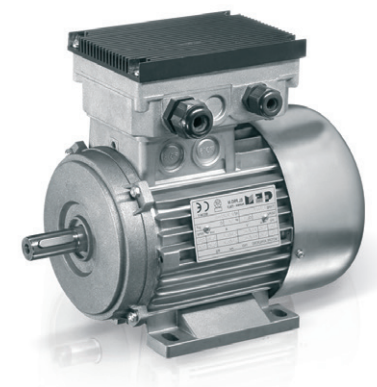
Burners  
Motors

The motors are designed for gas and fuel burners, hot air generators and drying kilns. They have reduced dimensions and increased protection, from IP20 to IP55 in class F or H insulation. They have the possibility of coupling to different flanges depending on the power. On demand they are available with double shaft configuration and flexible coupling to be directly applied to the pump.



Hydraulic pumps  
Motors

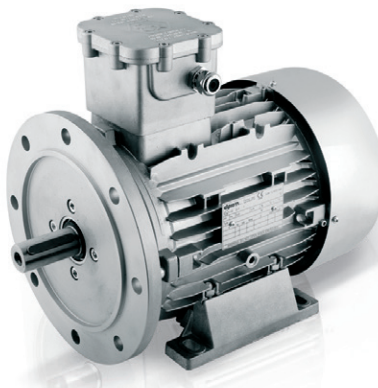
Powerpack range is made for Oil hydraulic application, it has a special designed flange and shaft for coupling the motor directly on the pump, additional flange or bell interface are not required. The squared flange match all the pumps body standards. The shaft could be custom made and hardened.



Motoinverter

These motors are improved with a frequency inverter integrated into the reduced terminal box. This solution offer room saving, absence of shielded cables from inverter to the motor, an easier installation with high protection rate (IP55). The motors are designed according the application and it could be implemented with an integrated filter on demand.

Products Range



Atex Ex d  
Motors

Motors in conformity with the Essential health and Safety Requirements for potentially explosive atmospheres according to European Standards. Three phase and Single phase asynchronous motors, single and double speed. Completely modular aluminum motors with removable feet and flanges. Flameproof enclosures for Zone1 - 2 - 21 - 22 . Available from size IEC56 to IEC132.



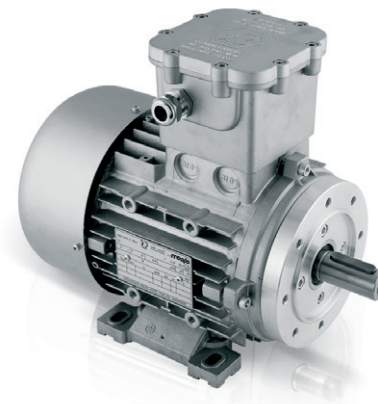
Atex Ex e  
Motors

Increased Safety Motors to be applied in surface plants where an explosive atmosphere can occur. Available in single and three phase, in single and double speed, from size IEC56 to Size IEC160.



Atex Ex nA  
Motors

Motors non sparking to be applied in Zone classified the presence of explosive atmosphere rarely occurs in normal operation and in short period. Available in single and three phase, in single and double speed, from size IEC56 to Size IEC160.

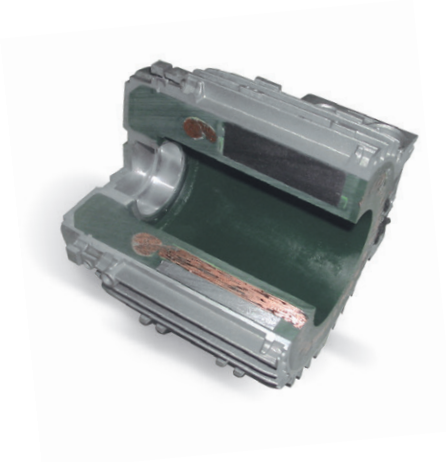


Atex Ex de  
Motors

The motors combine the flameproof enclosure of the Ex d to the Increased safety of the Ex e. They have been designed to be used in presence of explosive atmosphere. Available in single and three phase, in single and double speed, from size IEC56 to Size IEC132.



## Products Range



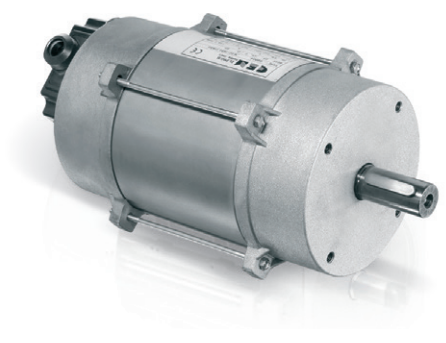
### Encapsulated Water Proof Motors

We have developed a process using a special resin material that makes the electric internal parts of the motors completely waterproof. The motors are resistant to the most hostile environments in terms of presence of water and humidity. All the motors of our range could be manufactured with this technology with no restrictions.



### Under Oil Motors

This range of motors is designed to work under hydraulic oil and it can be used coupled directly with hydraulic geared pumps. The power pack will be completely submersed into the oil tank. Flange and shaft couple with the most common geared hydraulic pumps.



### Open Motors

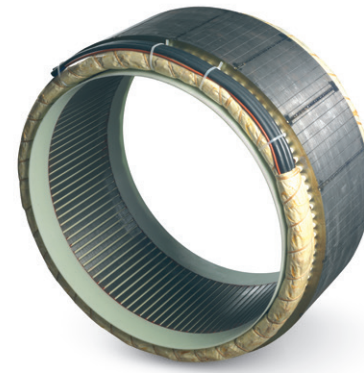
Different applications especially in machines or tools connected with automotive industries demand for Open Motors supplied with two end shields instead of motor housing. We manufacture single and three phase motors in 2-4-6 and 8 pole in a large range of powers and sizes.



### Automatic Made Windings

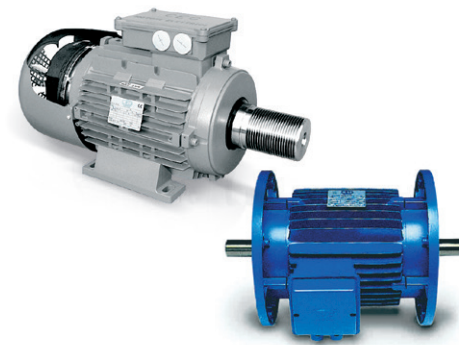
We can offer a large range of stators wound with fully automatic process from 80 mm external diameter to 152 mm and from 40 mm internal diameter to 90 mm in single and three phase 2-4 and 6 poles. The range is bigger with the semiautomatic process as the external diameter is from 73 mm up to 200 mm and the internal from 38 mm up to 125 mm. Special execution on demand are available.

## Products Range



### Hand Made Windings

With one of the largest output in Europe we wound electric stators from 55 mm up to 1.200 mm including insulated phases, double impregnations or vacuum impregnation. We co engineering the winding with the client or we develop the setting according to the applications demands.



### Custom Made Motors

Our Group is well know in the electric motors market for the large range of special custom made motors we are manufacturing. Customizations refer to mechanical executions, electrical performances, voltages and frequencies. We develop in co engineering with our clients motors solutions. Our custom made motors aim is to perform according to the application and to the specifications of the market.



### Permanent Magnet Brushless Servomotors

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.



### Asynchronous Vectorial Servomotors

These asynchronous motors have been specially engineered to achieve dimensions of dc motors of similar power and to be suitable for high performance, flux vector type controllers in variable speed applications. The distinctive electromagnetic and mechanical design permits operation in constant power mode at maximum speeds of up to 8000 RPM. The efficient stator cooling system uses an auxiliary electrofan to combine the benefits of reduced dimensions and high, continuous, low-speed torque capability.



## Products Range



### P-NP series – Direct Current square-framed motors

These motors are a benchmark on the market of DC motors, with 50 years of experience, since 1967. All these motors have fully laminated frames and class H insulation. The whole series comprises 20 shaft heights (80-90-100-112-132-160-180-200-225-250-280-315-355-400-450-500-560-630-710-800), each one with 3 or more core lengths, thus being one of the most complete on the market today, fully engineered and manufactured in Italy. The power and speed ranges of the versions with and without compensating windings are generally similar for any given size and armature voltage, but compensation, available for 132 and bigger frame-sizes, enhances the performance under conditions of overload or weakened flux. A broad set of standardised windings are available for each size in both versions, which offers a considerable number of winding voltage-speed combinations.



### RP series

Improved version of NP motors, with higher performance and dynamics, with power range 75 to 800 kW



### C series

ATEX and IEC-Ex Explosion proof motors, with power range 0.16 to 35 kW, DC supply from 110 to 440V  
IIB + IIC certifications by Bureau Veritas



### SM-ML series

Heavy duty AISE standard motors, with power range up to 450kW  
Ratings, specific operating features and outline dimensions according to AISE St. No. 1 – rev 1968

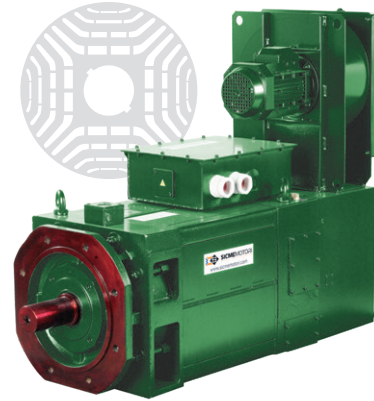


### SQ series – Synchronous Permanent Magnet square-framed motors

These motors are the best choice in performance for both torque density and efficiency and they are specifically designed to drive the operating machines directly, thus removing the need to use a gearbox (solution is called "Direct-Drive"). They are manufactured using the last generation of neodymium, iron, boron magnets, which are sourced and fully checked by a very attentive quality procedure, developed thanks to its 12 years long experience and up-to-date expertise and equipment. Their main advantages are the higher torque density, which grants the required performance in a smaller overall dimension and better dynamics, thanks to a high torque/inertia ratio

Thanks to Direct-Drive solution, there are less mechanical components, thus a higher reliability and a higher efficiency; moreover, these motors can be proposed with super premium efficiency (when applicable and upon request).

## Products Range



### SRQ series - Assisted Synchronous Reluctance square-framed motors

These products are designed from the series of motors for industrial automation and get the best of such proven technologies, together with the advantages of the variable reluctance solution. The important advantage of the SR machines, compared with a standard induction motor, is the higher efficiency. These motors are supplied with IE4 super premium efficiency, due to the elimination of the rotor losses, which is making the difference at variable-speed and partial-load conditions above all (refer to the graphic here below). This brings to unbeatable energy saving in variable load applications, such as fluid motion. Another important feature is the high dynamics, due to the absence of the fundamental rotor losses, which can be used to reduce the size of the motor.

### ASR series - Assisted Synchronous Reluctance square-framed motors

ASR series motors are assisted synchronous reluctance square-framed motors, which is the improved version of SRQ series and the most evolved technology for synchronous motors with low pole pairs. These motors unify advantages of high torque density, dynamic and excellent efficiency class of brushless motors, with a flexible use, even better than asynchronous motors. A very important feature of these motors is to have good torque overload even in flux-weakening operation, which is important in many industrial automations. They can be proposed with super premium efficiency IE4, for applications where energy saving is important, but can also be exploited for their very wide constant power operation (for instance, for test benches, winders, etc.).



### SRCa series – Standard IEC round frame Synchronous Reluctance motors

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 synchronous speeds, important to have very precise speed regulation and a lower inertia, due to the fact that the rotor winding or cage are missing.

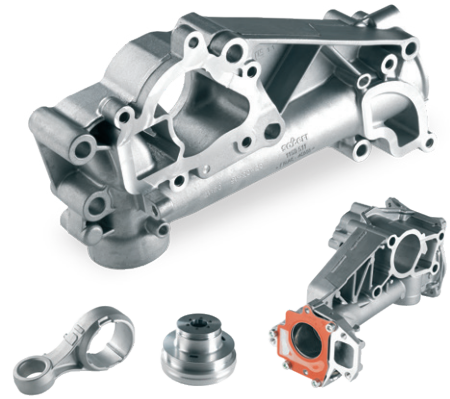


### HTQ Series Torque motors

Torque motors HTQ series are permanent magnets synchronous motors designed for industrial machines integration. They have been specially engineered to achieve the higher and higher performances required in the automation field by a high torque capability at low speed and by the elimination of the traditional components of the kinematic chain which allows to increase the precision and the efficiency of industrial machines. The high efficiency of these motors makes them particularly suitable even for applications of electricity generation in hydroelectric field and from wind turbines. In order to meet the market requirements, a new synchronous motors series has been designed with high poles number and equipped with last generation magnets made of neodymium, iron and boron.



## Products Range



### Automotive Aluminium Die Casting Products

We realize die casting parts that vary from 10 grams to 10 kg, managing till 10 different alloys. We reach a great quality of our die casts thanks to vacuum technology. The moulds are engineered by our technical office in co-design mode with the customer in order to optimize the production process since the first productions. Our evolved machinery starts from 3 melting furnaces that feed die casting presses from 250 to 1600 ton. Automatized productions are organized in islands robot assisted. Our finishing and mechanical processing complete the parts and where we can't be with our forces we have a group of trusted and highly specialized partners. This completes our production capability enabling us to reach the greatest quality possible.



### High Precision Mechanics and Small Parts Sector

"We produce high precision small parts mainly for hydraulics, automotive and for high-pressure pumps thanks to a well equipped turning and grinding department with trained staff. Multispindles up to Ø 35 and CNC-swiss type and fixed head up to Ø 65, grinding machines between centers and centerless, honing machines. Free-cutting steel, case-hardening steel, stainless steel 300-400 series, brass and aluminum are the most important materials used. We control every single step of the production process with a technologic and innovative quality equipment. Precision is our must and our core business".



### Drive Motors

**AC Drive** is an electronic device designed to convert direct current DC power input into alternating current output.

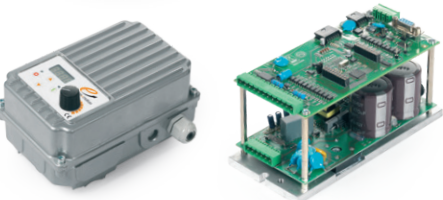
This device is mainly used for two reasons:

1. to change the frequency of the asynchronous electric motors in industrial application. Without the VFD these motors will run with constant speed as they get a constant frequency (50 Hz in Europe)
2. to convert the direct current of renewable energy systems to alternating current output to be sold to the National electricity network. This is a typical domestic application.

**PM Drive** is an electronic device having AC Drive functions with higher performance on firmware and hardware.

The Pm motors have mainly three advantages:

1. Smaller dimensions
2. It's a synchronous motor, it accomplishes strictly the orders of the drive in terms of torque, acceleration and deceleration according to the application.
3. Top efficiency makes it perfect to meet the efficiency norms.





## CERTIFICATIONS

The Group is certified ISO 9001:2008



Corporate policy is aimed at encouraging positive attitude and behavior of its personnel for all the activities promoted by the company. Orange1 Holding tries to develop a "Quality Culture" which values teamwork and open communication. Furthermore the company seeks to improve the quality of the product running analysis, inspections and tests during the production phase, in order to prevent construction errors and increasing this way customers' satisfaction.



**OVER 1.000.000** SINGLE-PHASE AND THREE-PHASE  
ASYNCHRONOUS ELECTRIC MOTORS

**5.000.000** WINDINGS FOR ASYNCHRONOUS ELECTRIC MOTORS

**60.000** DRIVES FOR ELECTRIC MOTORS

**25.000** TONS OF DIE-CAST ALUMINUM

**12.000.000** HIGH PRECISION TURNING PARTS  
FOR THE AUTOMOTIVE SECTOR

**235.000.000 €** TURNOVER

**15** FACTORIES

**70** COUNTRIES

**1.600** HUMAN RESOURCES

**48** YEARS OF HISTORY





## Note

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