

## Who we are

ESTAN GmbH is your innovative and reliable partner when it is about the application of demanding driving technologies with electric motors – flexible, precise and robust. Due to the great experience with special voltages and special customizations, our enterprise acquired an excellent reputation. The many years of knowhow of our employees and the innovative solutions of our R&D department allow us to offer you special benefits:

- innovative und reliable products with robust design
- motors with high efficiency and large control range
- competent consultancy for realisation of customer specific drive system
- efficient after-sales service
- favourable price-to-performance ratio

## Quality

Quality is of top priority. For this reason our quality management system is certified according to DIN EN ISO 9001.



# ESTAN

## Your flexible partner for robust and sophisticated drive systems



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**Quality  
Made in  
Germany**

DC permanent-magnet motors  
DC motors with excitation winding  
EC motors with electronic regulator  
Three-phase motors and  
one-phase capacitor motors  
Liquid-cooled asynchronous motors  
Gear motors

## DC permanent-magnet motors

The robust ESTAN DC motors are manufactured with steel shell and stabilized permanent magnets. The design is according to EN 60034 and VDE 0530. Performance of 5 to 3.500 W. Voltages of 12 to 180 V – other voltages on request.

ESTAN permanent-magnet motors have a shunt characteristic, i.e. approximately constant rotation speed when the load changes. Steep current curves and low moment of inertia result in an especially good control behaviour as well as a dynamic behaviour.

### APPLICATION

- especially suitable for electronic speed control in the 1Q- to 4Q-operation in the automation and for CNC controlled machines
- mobile applications in the railway sector, in agricultural machinery, heavy-duty vehicles and special vehicles
- hydraulics and industry

### BENEFITS

- high efficiency
- wide regulating range
- no loss of excitation
- compact type for example B3, B4, B14
- various possibilities of mounting, for example fan, brakes, etc.
- isolation class possible up to H
- protection class up to IP65



## DC motors with excitation winding

In the case of electrically excited DC motors the magnetic field of the stator field is generated using an electromagnet. Wattage of 5 to 2.000 W. Voltages of 12 to 180 V – other voltages on request.

For ESTAN shunt motors the excitation winding is located parallelly to the armature winding. With this kind of excitation, the rotation speed remains almost the same.

### APPLICATION

- wherever a constant rotation speed is required, for example for tractive units, starters for vehicles, etc.

### BENEFITS

- high efficiency
- strong tightening torque at rotation speed zero
- simple speed variable
- linear rotation speed torque behaviour
- compact type for example B3, B4, B14
- isolation class possible up to H
- protection class up to IP65



## EC motors with electronic regulator

Brushless motors are like a synchronous motor assembled with constant magnet excited rotor and combine all the advantages of the DC motors. By reason of the electronic commutation, you need neither carbon brushes nor a collector.

### APPLICATION

- rail traffic
- automotive industry
- medicine technology
- industrial applications

### BENEFITS

- almost constant continuous torque
- overload carrying capacity up to 5-fold nominal current
- precise positioning
- maintenance-free
- long service life
- high operation safety, as protection class possible up to IP 65



## Three-phase motors and one-phase capacitor motors

Three-phase asynchronous motors and one-phase capacitor motors run at an almost constant rotation speed. The design is according to EN 60034. Both motor versions are especially robust in case of electrical and mechanical overload. Wattage from 50 to 3.000 W.

The motors are protected as standard by an integrated temperature sensor in the winding. Optionally the temperature sensor can also be driven via an external tripping unit.

### APPLICATION

- drive of compressors and vacuum pumps
- drive of machine tools
- gear motors with flange-mounted speed reducer

### BENEFITS

- energy efficient design according to IEC 60034-30
- long service life
- maintenance-free
- version practicable for operation with frequency converter
- isolation class possible up to F
- protection class up to IP 65



## Liquid-cooled asynchronous motors

These motors are jacket-cooled, i.e. they have a double-jacket. As a cooling medium, water or oil can be used. The cooling medium flows around the inner stator jacket. Due to such optimal cooling the motors achieve a significantly higher output compared to motors with a surface ventilation.

The motors can be designed individually for various voltages and frequencies as well as for reverse operation. Standard version with integrated temperature sensor.

### APPLICATION

- laboratory units
- office machines
- labelling machines
- pumps

### BENEFITS

- low noise
- extremely low heat dissipation to the environment
- easy install via plug connection
- compact type B14
- isolation class possible up to H
- protection class up to IP 54



## Gear motors

Worm-gear motors with mounted-on DC permanent-magnet motors are available in six different types with driving power up to 3.500 W.

### APPLICATION

- conveyor technology
- agricultural machines
- water technology
- apparatus construction

### BENEFITS

- maintenance-free operation
- any installation position possible
- isolation class possible up to H
- protection class up to IP 65

