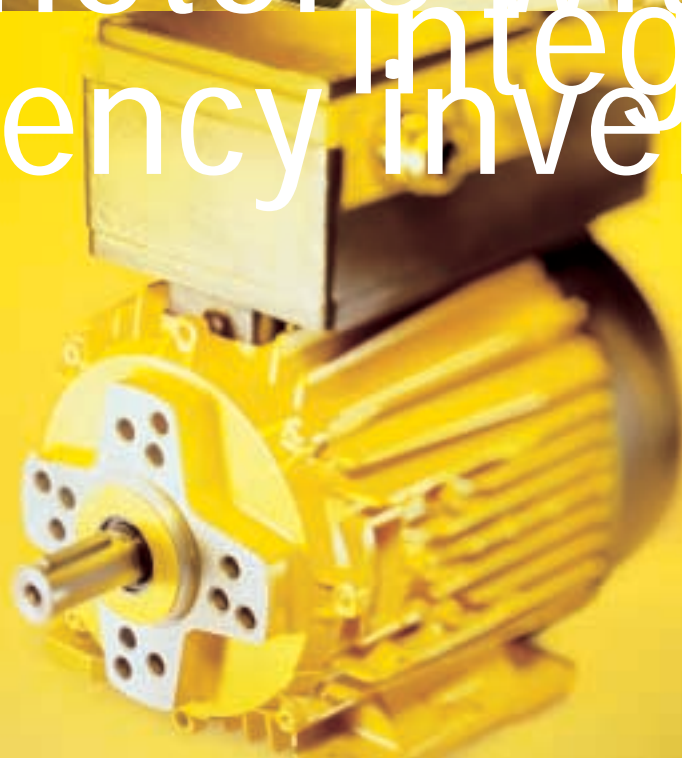




motors with  
integrated  
frequency inverters



**ATB DYNAMOT**  
**ATB DYNASPEED**

**ATB**  
Technik in Bewegung



ATB ANTRIEBSTECHNIK AG,  
Welzheim, Germany



ATB AUSTRIA ANTRIEBSTECHNIK AG,  
Spielberg, Austria

# brand quality

## **ATB competence**

ATB is a leading manufacturer of electrical drive systems for industrial applications and appliances. As a partner to highly respected producers, we facilitate the production of innovative products around the world.

## **ATB product quality**

Drive system dependability is an absolute priority in motor manufacture. Our motor design and production technology guarantee maximum operational reliability.

## **ATB programme range**

Whether for standardised motors, or customised applications, individual components or package solutions comprised of motors and electronics, we offer the ideal concept for a wealth of drive tasks in virtually every area of application.

## **ATB innovation**

The ATB mission statement is to constantly develop the very latest drive solutions. The new motors with integrated frequency inverters are symbolic of this innovative strength.

## **ATB flexibility**

The specialist ATB domain is the provision of tailor-made motors, which are similar to standardised versions. All operational procedures are flexible and orientated to individual needs.

## **ATB economy**

Both ATB standard motors, the ATB DYNAMOT and the ATB DYNASPEED, offer convincing price-performance ratios with regard to both purchase and operation.

## **ATB punctuality**

Our SME structure ensures that inquiries, special requests and orders are rapidly dealt with. This means short delivery periods and a high degree of punctuality.

## **ATB service**

Our motors are virtually maintenance-free. In the case of a service requirement, all the required spare parts are quickly available.

## **ATB human resources**

The competence of our employees in sales, production and engineering provides the impetus for maximum customer satisfaction. At our plants in Welzheim near Stuttgart and Spielberg in Austria, a work force of 1,400 manufactures high-quality drive solutions.

## **ATB presence**

ATB contact persons are always in close proximity to the customer. We have a comprehensive sales network throughout Europe.



High-performance laser coolant pump

## ATB motors with integrated frequency inverters

ATB DYNAMOT and ATB DYNASPEED are universal compact drives, which can be used for a wide variety of applications that demand variable speed motors. The performance range available extends from 0.25 up to 1.1 kW and covers numerous drive solutions in the industrial sector.

The ATB DYNAMOT can be used wherever an unusually robust asynchronous motor is needed. This robustness also extends to the inverter due to its structural unity with the motor. The motor-inverter unit simplifies installation and reduces start-up times. The high standard of inverter enclosure and EMC compatibility facilitate a wide range of applications.

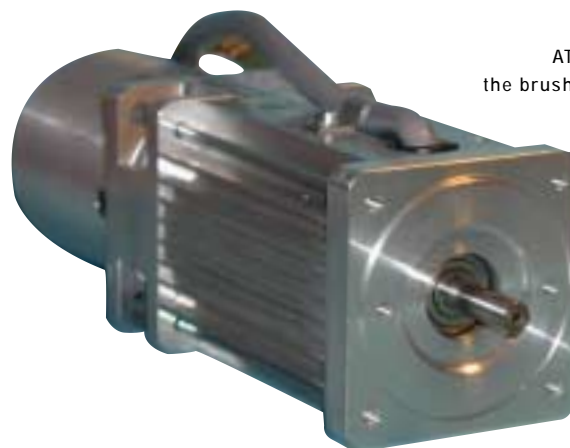
The ATB DYNASPEED demonstrates its strengths wherever maximum performance intensity is required with speeds of well over 3,000 rpm along with constant torque over the entire speed range.

Both drives form a compact unit comprised of a motor and an inverter, which removes the necessity for standard installation and wiring work, and thus offers the user cost advantages with regard to the installation and start-up of the drive. In the case of larger batch orders, a complete tailor-made solution with drive-specific software parameters can be provided on request.

ATB DYNAMOT and ATB DYNASPEED are state of the art products with an optimum price-performance ratio.



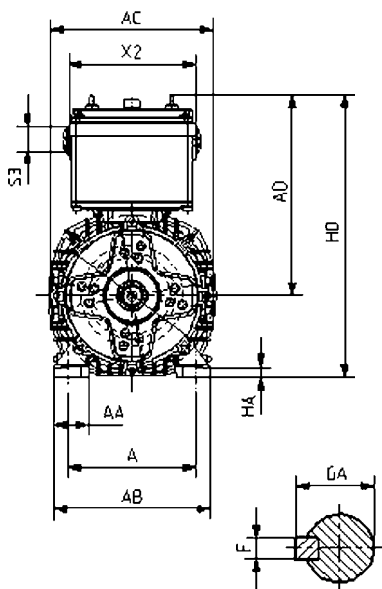
ATB DYNAMOT –  
the asynchronous motor with  
integrated frequency inverter



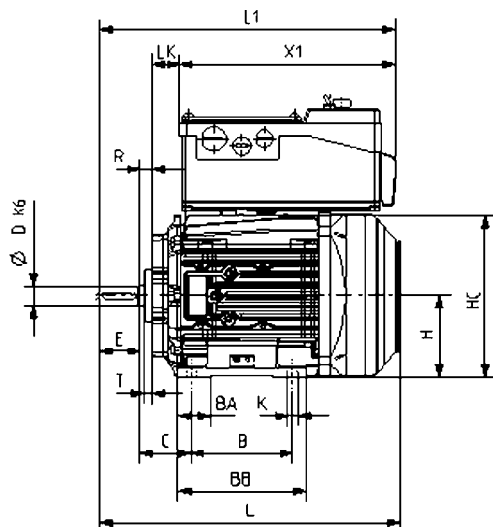
ATB DYNASPEED –  
the brushless DC  
motor with frequency inverter

ATB DYNAMOT series frequency inverters are versatile and reasonable priced devices in the 0.25 up to 1.1 kW. They provide the continuous speed adjustment of standard, three-phase asynchronous motors in industrial use. Above all, the ATB DYNAMOT is characterised by its compact design and easy operation.

## ATB DYNAMOT – the asynchronous motor with integrated frequency inverter in the 0.25 up to 1.1 kW range



Dimensional drawings  
Dimensions in accordance  
with the tables



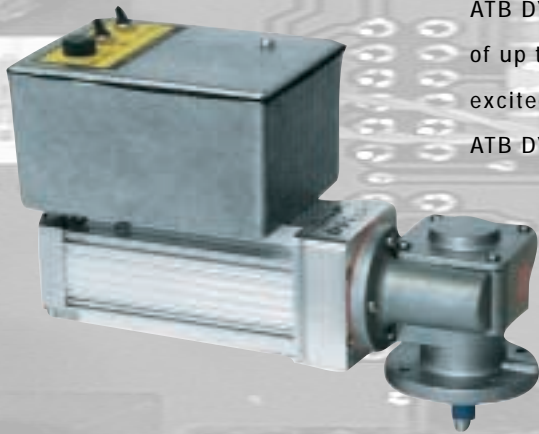
### The ATB DYNAMOT has the following outstanding features:

- Compact, space-saving design, no switching cubicle required.
- Time savings through simple assembly, installation (generously designed connection area) and quick start-up.
- Low running noise due to the inverter's 15.7 kHz switching frequency.
- Optimum match of the inverter and motor.
- Reduced winding insulation loads due to overvoltage and voltage spikes.
- Integrated thermal motor protection.
- High levels of EMC compatibility, permitting use of the complete drive unit in both the residential and industrial areas.
- No additional filter connection, no screened cabling etc.
- Universal applications due to high enclosure standard (IP 55).
- Designed on the basis of long-term inverter production experience.
- Support during planning and commissioning.
- FU control panel as an option.
- Eight frequency settings.
- Frequency gating to prevent resonance.
- DC braking.
- If required, the ATB DYNAMOT parameters can be set using a PC or notebook via the RS 485 interface. In addition, a software program is available to the user, which due to its clarity of design permits quick parameter adjustment. The parameters are arranged according to function in sub-groups. Setting of the parameters is assisted by graphics.
- The maximum output frequency can be increased to 300 Hz (special motor design necessary) for certain applications.
- Due to its functional versatility, the ATB DYNAMOT is suitable for an extensive range of industrial applications.





The PM motors with integrated drive electronics from the new ATB DYNASPEED series are versatile and low cost devices in an output range of up to 1 kW. They provide continuous speed adjustment in permanently excited DC motors in both the industrial and domestic sectors. Above all, the ATB DYNASPEED is characterised by its compactness and simple operation.



Version with gearing for frying machine.

## ATB DYNASPEED – the brushless DC motor with integrated electronics and outputs of up to 1 kW

### The ATB DYNASPEED has the following outstanding features:

- Compact, space-saving design.
- Simple, time saving installation and start-up.
- Low running noise.
- Optimum match of the inverter and the permanent magnet motor.
- Reduced winding insulation loads due to overvoltage and voltage spikes.
- Integrated thermal motor protection.
- High levels of EMC compatibility, which enables use of the complete drive unit in both the residential and industrial areas.
- Developed on the basis of long-term inverter production experience.
- Assistance during commissioning.
- Smooth commissioning due to plant presetting is a primary advantage of this modern motor series.
- Compact design and the use of serial production components, which provide economic drive.
- Apart from basic applications, special applications with speeds of up to

13,000 rpm are possible.

- If required, the ATB DYNASPEED can be linked to superordinated control computers, SPS and IPC, etc.
- In particular, major user advantages are provided by the fact that the electromagnetic compatibility directive (EMC) is met in full. The standard integrated radio interference suppression filter ensures compliance with the limits contained in EN 50081, part 1 (interference suppression in the domestic, business and commercial sectors).
- DYNASPEED compact drives can be matched to numerous industrial applications through an extensive range of output characteristic parametering.

### Specific customer applications are possible:

- Envelope machines
- Centrifuges
- Ventilators
- Door openers
- Laboratory equipment
- Your application ....

High-speed pump drive



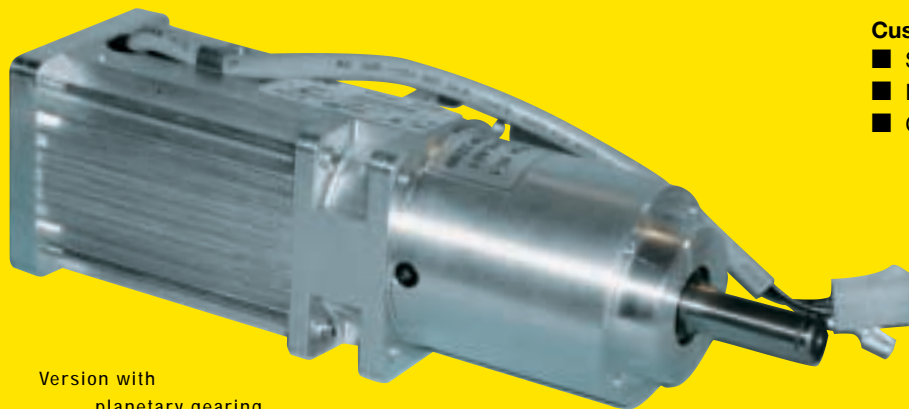
Actuator motor





Elevator door drive

The most important technical data for  
**ATB DYNASPEED** motors  
 with integrated frequency inverters



Version with planetary gearing

**Customised solutions are available with:**

- Serial linkage
- Manual operation
- Customised software

Voltage	90 ... 259 V, Power Factor Control
Current	5 A, 10 A
Output	200 ... 1000 W
Mains frequency	50 Hz
Enclosure class	1 (protective conductor connection)
Rated speeds	1000, 1500 ... 8500 min <sup>-1</sup> , maximal 13000 min <sup>-1</sup>
Characteristic curve	linear
Connection	metric-screwing Optimum: rubber sleeves possible
Enclosure (electronic)	IP X5 (cable screwing)
Encoder	commutation encoder
Ventilation	unventilated or own ventilation
Square flange	72 mm
Stator diameter	60 mm
Poles	6
Core length	20, 40, 60 ... 100 mm
Commutation mode	block
Encoder system	incremental encoder, 18 increments per revolution