



hamotic varicon

# COMPACT SYNCHRONOUS DRIVE

with integrated controller



# Powerful and efficient

The **hamotic varicon** compact synchronous drive is a high-efficiency drive solution that saves space and is available in frame sizes 71 and 80. It is offered for power ratings ranging from 0.55 kW to 2.2 kW with single-phase power supply. All variations exceed the IE3 efficiency class and come with the „Super Premium“ IE4 class.

The motors are designed with single-tooth winding. The optimized rotor with integrated magnetic segments and non-circular surface decreases the impact of the magnetic fields and ensures a precise smooth running over the entire speed range.

## Features

- Highly-integrated, compact design
- Degree of efficiency in line with „Super Premium“ IE4 efficiency class
- Sensorless operation
- Also optional operation with sensors for high starting torques
- Power Factor Correction (PFC) for single-phase power supply
- All components from one supplier
- Powerful drive computer integrated and configured for use
- Wide variety of control options
- Infinitely adjustable speed control
- High degree of efficiency even under partial load
- High power density
- Low-maintenance design with IP54/IP55 protection rating
- Ball bearings lubricated for life

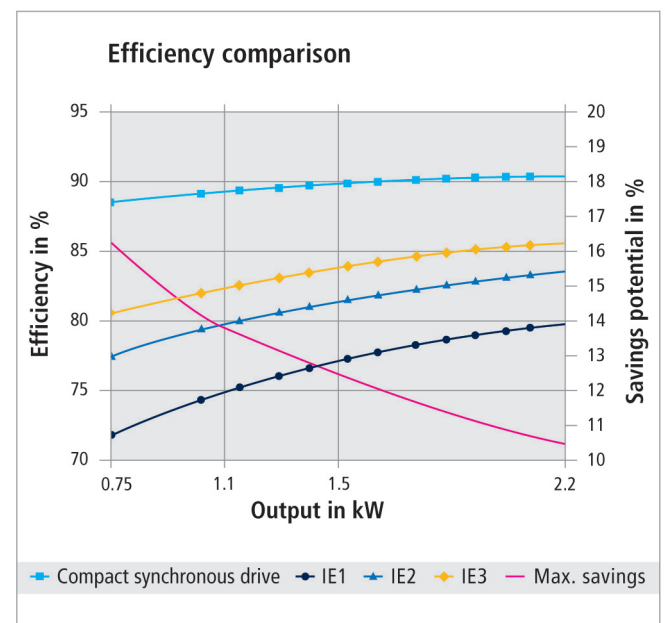
## Equipment Options

- IEC standard flanges or custom-tailored flanges
- Shaft ends as per IEC or custom-tailored shafts
- Special winding design possible for specific requirements
- Insulation class F
- EMC noise filter for 1st. and 2nd. environment as per EN 61800-3
- Control via customizable membrane keys in the terminal box
- Serial data interface via RS485
- Connection to field bus systems (PROFIBUS, CAN)
- Operating hours counter and diagnostic functions

For attaching to machine elements, we offer IEC standard flanges and special customer-specific versions as well. The drive computer is integrated with power control electronics in the rear bearing shield and optimally configured to the implemented variation of the motor. The terminal box includes the mains feed-in and the interface for controlling the **hamotic varicon** compact synchronous drive. An integrated control unit with membrane keys and display is used to set the speed and provide information about the operating state. The drive can also be controlled as an option via a field bus interface or with the aid of wireless signal processing unit.

## Sample Applications

- Pumps and fans, especially with variable capacities
- General machine construction and system engineering



*Efficiency comparison between IE classes and HANNING compact synchronous drives with integrated inverter*