

DRIVES TECHNOLOGY

KOSTAL

Flexibility is
the new efficiency.

INVEOR frequency converters from KOSTAL

RETHINK
now and
reduce costs
in the long term.

Smart
connections.



Efficient and powerful solutions for your application.

INVEOR frequency converters enable you to determine how efficiently and cost-effectively your application should run.

Achieve maximum performance – enjoy independence.

The modular INVEOR concept enables you to combine manufacturer-independent motors and gearboxes with our frequency converters. Find the best products for your power train – we will regulate your selection with maximum efficiency.

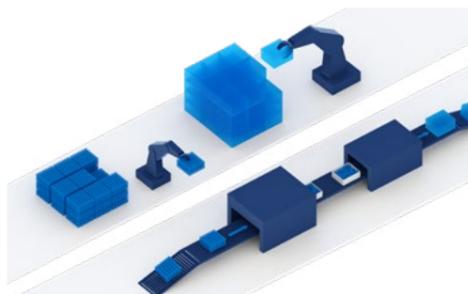
Save costs in the long term

The INVEOR controls all types of motors with maximum efficiency. By mounting it directly on the motor, you save space and the cost of purchasing a control cabinet and long, shielded motor cables. The INVEOR control process does not require any sensors at all. This reduces the costs necessary for the encoder, as well as its installation and maintenance. At the same time, the system will be heavy-duty-ready, because the most sensitive component is not needed.

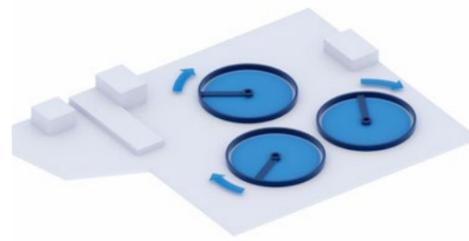
Future-proof and sustainable

Perfectly positioned for the future: The INVEOR not only regulates more efficiently than the specifications laid out in the Ecodesign Directive – it is also able regulate future motor types. This ensures that you are well positioned when carbon taxes are increased and new regulations demand the use of new motor technology.

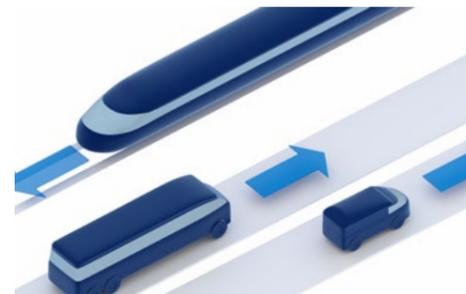
INVEOR converters: Versatile in application.



INDUSTRY



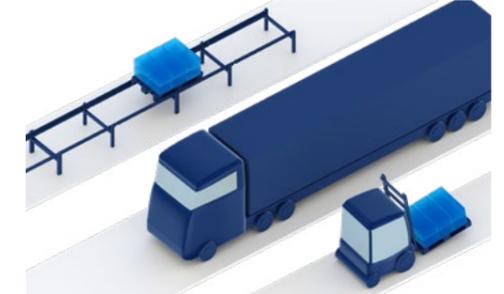
WATER / WASTE WATER



MOBILE APPLICATIONS



RENEWABLE ENERGY



LOGISTICS

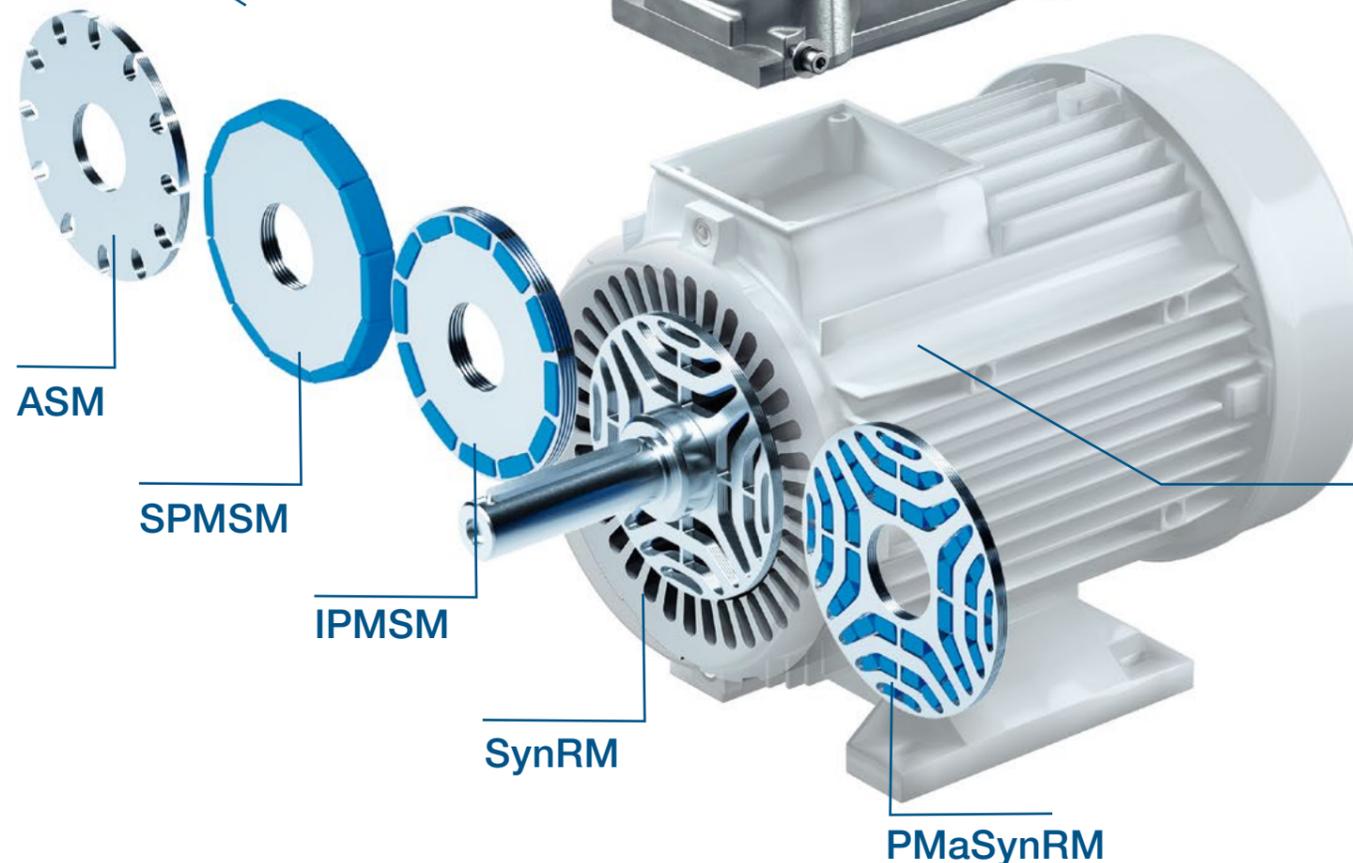
The INVEOR concept: Motor regulation considered flexibly

Whether asynchronous, synchronous or synchronous-reluctance motors:
The INVEOR enables you to regulate any type of motor with maximum efficiency, without sensors and with long-term cost savings.

ALL MOTOR TYPES REGULATED WITH MAXIMUM EFFICIENCY

The INVEOR regulates all motors with maximum energy efficiency, going beyond the specifications of the Ecodesign Directive. All motor types can be operated with maximum efficiency with just one device.

- Freedom in the choice of motor
- Future-proof technology
- Highest efficiency



SENSOR-FREE

Our future-oriented control process enables us to do away with the encoder. Because the encoder is a sensitive measuring instrument, doing away with it also means there is no need to take measures to protect or maintain it. This makes the system more fail-safe and robust.

- Cost-optimised
- Safe and durable
- Heavy-duty-ready
- Low maintenance

KOSTAL Inverter app

MOTOR-MOUNTED

INVEOR frequency converters are mounted directly on the motor and form a self-sufficient overall system via the adapter plate. Shielded cables and control cabinets are not required.

- Plug & Play
- Space and cost saving
- Mobile and flexible

Our INVEOR product line: How do you want to regulate?



INVEOR M

Robust and reliable –
not only for use in heavy-duty
environments

+ Regulate asynchronous motors with maximum efficiency, while remaining as economical as possible in buying costs and still meet the efficiency requirements of the Ecodesign Directive.



Bluetooth app



Sensor-free



Automatic motor identification



Heavy duty



INVEOR MP

The fully equipped
performance class

+ No equipment feature is left out, dynamic regulation with maximum overload and best regulation quality for the most demanding regulation tasks.



Bluetooth app



MQTT protocol



Sensor-free positioning



Automatic motor identification



Extended speed range



Multi-pump operation



INVEOR MP modular

The modular high performer
with room for individual customer
electronics

+ Integrate your own application electronics into the housing for a more individual design. All connections are 100% pluggable (grid, IOs, fieldbus, MMI) and thus remain flexible.



Bluetooth app



Modular drive unit



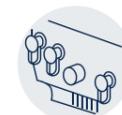
Sensor-free positioning



Automatic motor identification



Extended speed range



With plug connectors

Which properties are decisive
for your drive solution:
Equipment, economy or
customisability?

We will work with you to find
the motor converter solution
that achieves the perfect
results for your application.

INVEOR at work

Reduce your costs in the long term.

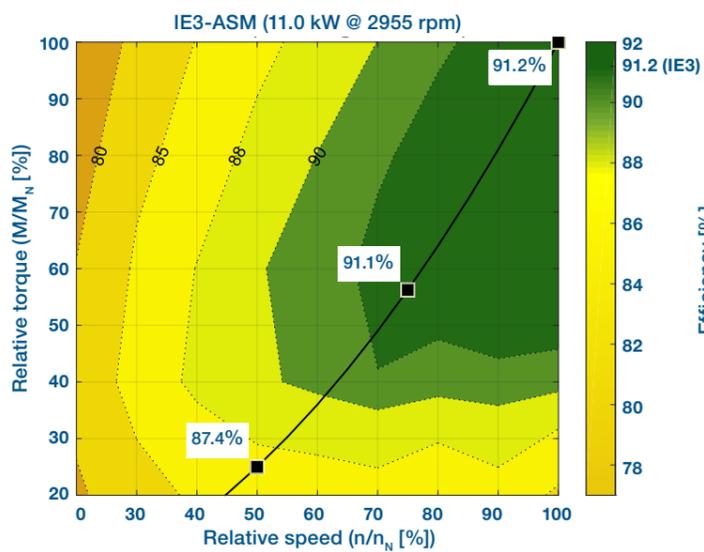
Savings potential of various INVEOR-motor combinations compared to an asynchronous motor on the grid

In the load profile illustrated, loss costs of between € 1,184 and € 1,300 can be saved in just one year, depending on the type of motor used. If the motor operates at partial load for more than the assumed 20 hours, the savings potential increases accordingly.

Load profile: 11 kW motor, partial load operation with 50% speed, 100% torque, 20 h/week

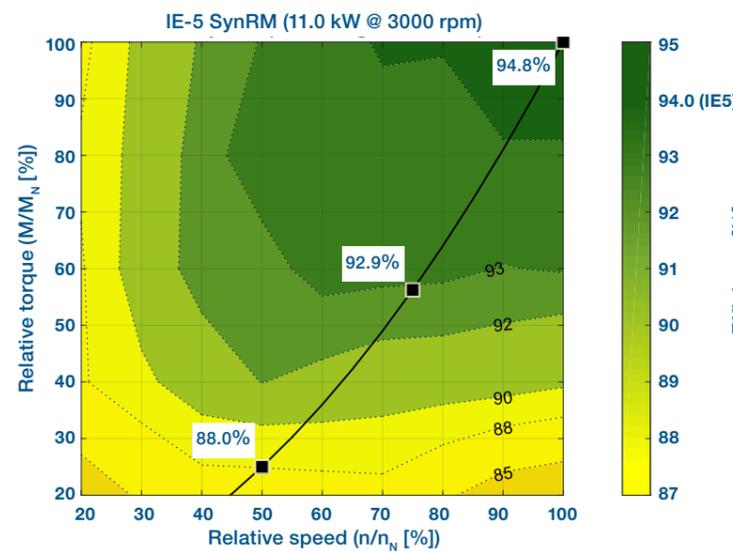
Asynchronous motor + INVEOR MP

ROI: 9 months



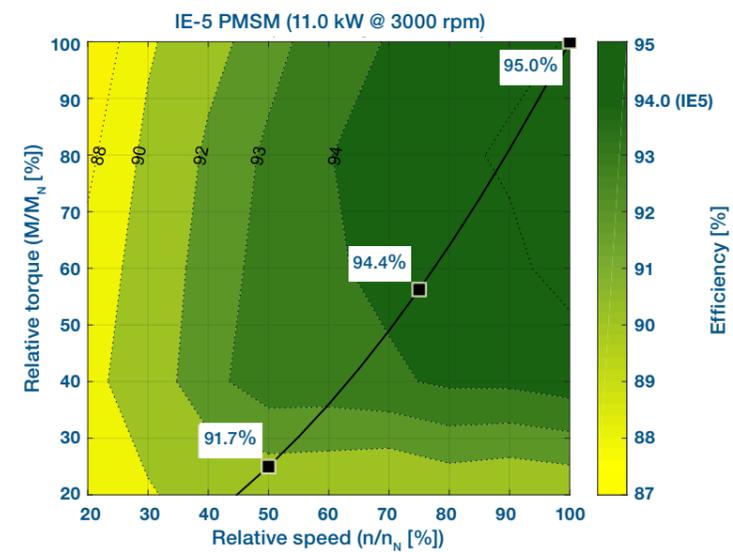
Synchronous reluctance motor + INVEOR MP

ROI: 10.5 months



Permanent magnet synchronous motor + INVEOR MP

ROI: 13 months



Flexible in use

You will find the INVEOR in action in all applications here. Contact us and we will also find the right solution for your application.

PUMPS



Water/
waste water pump

PUMPS



Eccentric
screw pump

PUMPS



Multiple-pump
operation

PUMPS



Lubricant pump

PUMPS



Hydraulic pump

INDUSTRY & AUTOMATION



Industrial mixer

COMPACTOR



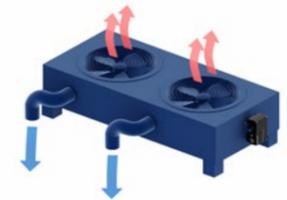
Compactor

COMPACTOR



Piston compressor

COMPACTOR



Refrigeration/
air conditioning
compressor

COMPACTOR



Brake compressor

ROLLER BEARING DRIVES



Azimuth drive

ROLLER BEARING DRIVES



Pitch system

PUMPS



Lubricant pump

PUMPS



Hydraulic pump

INDUSTRY & AUTOMATION



Industrial mixer

CONVEYOR TECHNOLOGY



Roller drive

CONVEYOR TECHNOLOGY



Chain conveyor

CONVEYOR TECHNOLOGY



Conveyor belt

BLOWERS



Radial fan

BLOWERS



Axial fan

BLOWERS



Snow cannon

DOOR DRIVES



High-speed door

We provide support where you need us: Regardless of industry and motor manufacturer.

Benefit from our expertise in the field of drive technology and our decades of experience gained as part the KOSTAL Group in the field of international, industrial production.

We will accompany you through the entire cycle, from planning to commissioning, and will also be at your side during ongoing operation.



Operation made easy.

- Assistant-guided commissioning
- Clone data records and send by e-mail
- Parameter settings in plain text
- Control mode, control the frequency converter via your mobile end device
- Access to all process variables and device information
- Error analysis, error history with additional data
- Demo mode
- Data records compatible with KOSTAL INVERTERpc software
- Multiple languages (9 languages)

PLANNING

Whatever the requirements of your application: We will examine your application and find the best motor-INVEOR solution for you.

SELECTION

Our experience for your application: Our development team will support and advise you, whichever motor or transmission is selected. We will help you to find the perfect combination for your power train.

INSTALLATION

The INVEOR automatically detects the most important parameters of your motor (Selfcom). With the app, you can set individual parameterisations or clone devices wirelessly via Bluetooth. This is particularly helpful in places that are difficult to access. In addition, we provide a commissioning service and PLC programming through our technicians. Ensuring that everything is perfectly regulated.

OPERATION

Support via app: Parameters are read out directly and sent to our customer support team. This enables us to react quickly and without requiring a specific language to be used.



Service support for our products

With our KOSTAL training courses, we provide you with practical expertise and interesting insights into the world of INVEOR frequency converters.

You will always find our latest seminar offers on our website.



Basics of drive technology



INVEOR frequency converters



Basics of PLC programming



INVEOR operating concept



Using the mobile KOSTAL INVERTERapp



KOSTAL control process – encoder-free regulation



Subscribe to our newsletter and receive the latest information directly in your inbox.



Over 25 years of experience in developing frequency converters for industry.
Over 100 years of KOSTAL.

Take advantage of our expertise.



We will provide tailored advice on selecting the right device. Contact us.

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