

INVEOR – The new efficiency standard in pump technology

The universal drive controller for all common motor types



Smart connections.

Intelligent drive technology – Efficient down to the detail



1 The KOSTAL family has developed and branched out continuously. Due to the common roots we form a strong community in which everyone can rely on the other.



2 For everyone the suitable solution: Our INVEOR line of drive controllers is constructed for universal use. Of course, the INVEOR allows the possibility to adapt to the customer's needs easily.



3 Our universally applicable INVEOR line of drive controllers can be assembled both motor-integrated and motor-close. So, e.g. also wall mounting is possible.

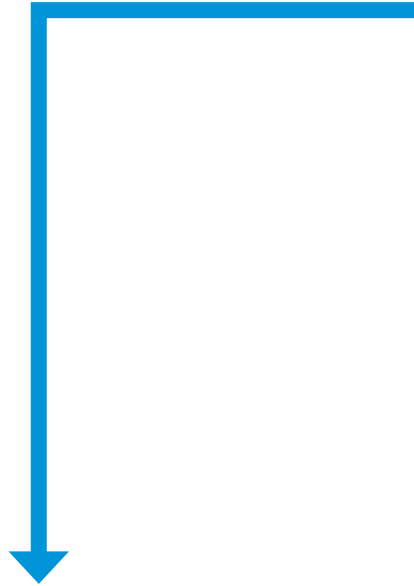
Partnership for more efficiency

The family owned company KOSTAL can draw on a century of business tradition and comprehensive expertise, making it your dependable business partner. The KOSTAL Group gives reliability thanks to its facilities all over the world, drawing on their development and production capacities when and wherever necessary. Due to this international connection KOSTAL offers a variety of competencies and technologies from one source. We set ourselves very high quality standards when developing and manufacturing our innovative and to customer requirements adaptable products, which is reflected by our zero-error approach to work. We make use of special quality tools throughout the entire development phase and also until the products go into serial production, e.g. the testing of electromagnetic compatibility (EMC) as well as a 100% final inspection. Furthermore, a dialogue with our customers based on partnership is very important to us, to ensure and guarantee shared success.

Universal INVEOR line of drive controllers

The drive technology had been used to be the focus of our business operation. Together with a series of reputable customers from different industries we develop and produce customer-specific solutions. Based on this wide range of experience we created an innovative line of our drive controller INVEOR which can be used universal due to its modular construction. Thus the INVEOR offers a variety of possibilities for increase in efficiency in many different industries.

All sizes of the INVEOR (from 0.25 kW to 22 kW) offer a basic model, which is almost identical in terms of design, handling and building structure. The INVEOR allows the possibility to adapt to the customer's needs easily. Therefore, all customers benefit from large-scale production, even if only a small quantity is needed without having to dispense individual preferences.



* For simple operation, the INVEOR can optionally be fitted with a foil keypad.



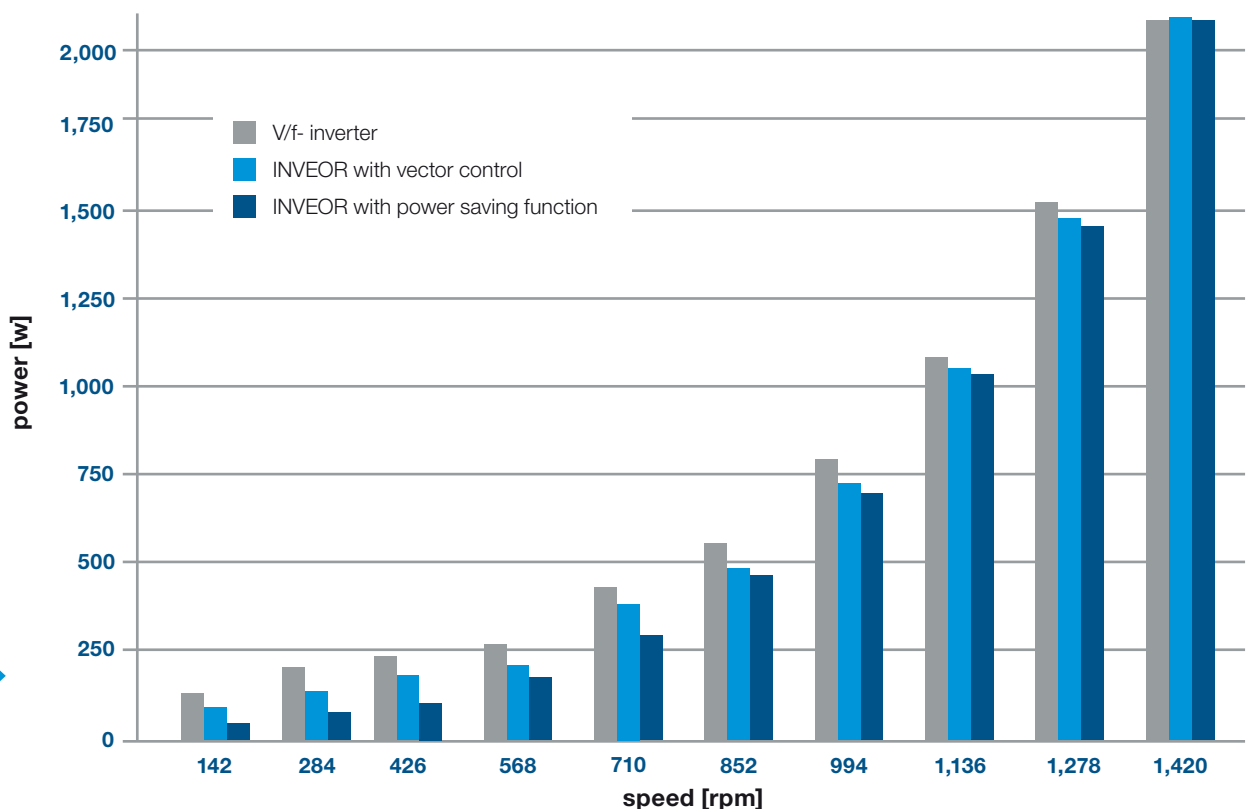
INVEOR – the efficient solution in the field of pump technology

With our drive controller INVEOR we provide a high-efficiency solution in the field of pump technology. Using a new kind of control process, adapted precisely to the specific requirements of different pump designs, we attain optimum system efficiency. This results in great energy-saving potential, especially with partial loads, which cannot be achieved using the standard procedure (see diagram below).

Due to an innovative adaptation all kinds of common motors can be driven by our energy-

efficient line of drive controllers. A foil keypad can be integrated to make the INVEOR particularly easy to operate. Furthermore, the INVEOR isn't just suited to simple frequency control, but also complex automation tasks. With its robust and compact die-cast casing and its very good resistance to temperature and vibration, the INVEOR makes light work of any drive task, even in tough environments. It's yet another illustration of the quality offensive thinking of KOSTAL Industrial Electronics.

The drive technology by KOSTAL is always a smart connection – today, tomorrow and in the future.



Product features



Unique product features illustrate that the efficiency thinking in our INVEOR line of drive controllers is integrated down to the smallest detail.

Intuitive usability and programming concept:

- Foil keypad can be integrated optionally
- Handheld controller with plain text display available
- Integrated Soft-PLC in acc. with EN 61131-3
- PC software with integrated oscilloscope function
- Optional fieldbus systems (e.g. CANopen, EtherCAT, Profibus)
- Touchscreen control and automation terminal available

Various fields of application:

- Flexible application on all common motor types
- Universal line of drives controllers from 0.25 to 22 kW

Easy assembly:

- Motor-integrated or close to the motor assembly
- Suitable for indoor and outdoor use

Energy efficiency:

- Vector control
- Pump operation with power saving function
- PID controller with integrated stand-by function
- Wide input voltage range

Ease of maintenance:

- Robust and compact die-cast casing
- High temperature and vibration resistance
- Modern circuit topology
- Self-convection up to 7.5 kW
- S1 operation within 3-phase devices

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