Version S.C.L.
(sensorless closed loop)

COMBIVERT F5

...encoderless speed controlled drives...
The **COMBIVERT F5** series motor control, previously used for closed-loop control of synchronous and induction motors, now has a new option

**Version S. C. L. (Sensorless Closed Loop)**

- the newest technical advantage from KEB -
- **without encoder-feedback** -

The advantages:

- no encoder mounted on the motor
- no extra wiring from the drive to the motor
- no encoder interface required in the inverter

The customer benefits from this superior drive package in the following ways:

- cost reduction - no encoder or cables
- very tight speed regulation - synchronous motors together with ultrafast speed regulation
- wide operating range > 100:1 of the rated motor speed
- up to rated motor torque at zero speed
- minimal shaft movement during the measurement of the rotor position (start up under brake is possible with certain motor designs)
- auto tuning of motor parameters (resistances and inductances)
- full dynamic control of the synchronous motor as well as excellent overload characteristics using motors with neodymium-permanent magnets
- stable operation even with high inertia ratios (load to motor)

Available in the entire power range of the standard KEB COMBIVERT F5 series and can be universally applied in combination with

- Servo motors
- Spindle motors
- High-pole direct drives (torque motors)

Under development solutions for

- Linear motors
- Induction motors

**Potential applications**

- Compressors
- High-pressure pumps
- Textile applications

**Setting higher standards for premium drives!**