

EtaK2.0 **Geared Motors**

Control - regulate - drive with intelligent decentralised drive technology



Efficient and decentral!

Compact drive solutions with continuously variable speed in the power range from 0.75 kW up to 7.5 kW



Control types

• Suitable for asynchronous and synchronous motors

Control algorithms

VFCplus: V/f control (linear or

quadratic)

• SLVC: Sensorless vector control (motor speed)

• VFCplus eco: Energy-efficient V/f control

Basic functions

- User-definable menu
- Parameter switching
- Trap-and-trace
- S ramps for gentle acceleration
- PID controller
- Exclusion frequencies

Monitoring and protection

- Short circuit
- Frame fault
- Overvoltage
- Motor phase dropout
- Overcurrent
- I2t motor monitoring
- Motor overheating
- Mains phase dropout
- Protection against cyclic mains switching
- Motor stalling

- DC braking function

- 3 fixed frequencies

Braking

- Integrated brake management
 - Integrated brake chopper
 - Braking resistor accessory module or external braking resistor

Overload current

• 200 % (3 s); 150 % (60s)







Diagnostic interface

- For hand-held terminal
- For PC through USB adapter

Potentiometer

• For 0-100% speed control

LED as status indicator

 Clearly visible even under difficult installation conditions

EtaK2.0 Geared Motors

Efficient and decentral!

EtaK2.0 geared motors make a significant contribution to energy savings and efficiency optimisation in your application

The benefits at a glance

Space minimization

- Integrated safety technology and field bus communication according to specific needs
- Modular structure minimises spare parts stock

Energy efficiency

- VFC eco mode provides intelligent adjustment of magnetising current
- Energy savings of up to 30% possible under partial load conditions

Efficiency class

 Motor and VFD combinations surpass IES 2 system efficiency class according to EN 50598-2 and IEC 61800-9-2

Time savings

- Plug-and-socket connectors reduce assembly and installation time – "unpack, plug in and go"
- Easy memory module exchange simplifies series commissioning and enhances availability

Mechanically and electrically robust

 Suited to extremely harsh environments thanks to IP65 enclosure rating

Added benefits

- 200% overload current (3 s)
- V/f control with or without encoder
- Sensorless vector control
- Short-circuit and frame fault protection
- Direct current braking
- S ramps for gentle acceleration
- Maximum output frequency 300 Hz
- CANopen, Profibus, Profinet, EtherCAT, EtherNet/IP and AS-i
- STO safety function

Memory-Module

- All parameter settings are stored in a memory module for quick transfer to a new unit in the event of service exchange
 - The memory module can also be duplicated using a copying station
 - Parameter download to memory module through USB





Eberhard-Bauer-Str. 37 73734 Esslingen Tel.: +49 711 3518-0

