EDC ENGEL Drive Control

for brushless and brushed DC motors High Quality - Customizable - Flexible



Your trusted partner for durable drive solutions since 1923



ENGEL EDC Drive Control

Our drive controllers are decentralised, compact speed, current and positioning controllers for brushless and brushed DC motors with a voltage supply (power) of up to 60 volts. The differences lie in the current strengths and the required functionality. All devices are freely parameterizable and programmable.

The integrated MPU (Motion Process Unit) enables the storage of your own logic and consequently intelligent operation without a superordinate control system.

EDC-E class

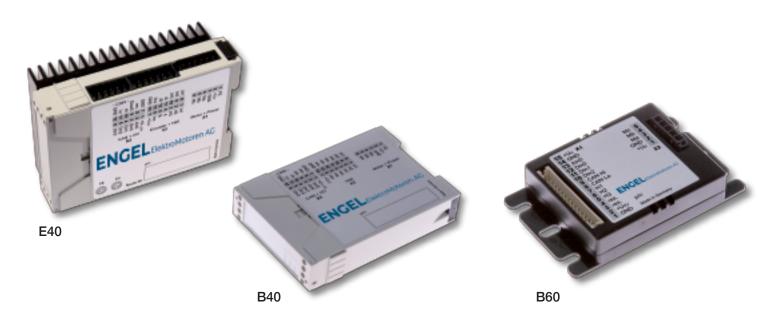
The drive controllers of the E class are available in the combination Hall sensor and incremental encoder interface, or Sin/Cos encoder, the operation of single and multiturn encoders (only SSI, Gray Code) is also possible.

These drive controllers have a modular design and are therefore optionally available with the common field buses such as CANopen, EtherCAT and Profinet.

| Туре | Suitable for ENGEL motors | Power supply | Electronic supply | Rated voltage 24Vpc / 48Vpc | Features | | |
|--------|--|--------------------|--------------------|--------------------------------|--------------------------------------|-------------------|--|
| E20 | GNM21GNM8035 HSM38HSM7145 | 960Vdc | 930V _{DC} | 30A / 21A | digital IN digital oUT | analog | |
| E25 | GNM21GNM80 HSM38HSM7145 HSM7160* | 960Vdc | 930Vdc | 35A / 26A | 100% digital digital PWM IN OUT | analog M IN | |
| | | | | | | | |
| E40 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 10A / 8,5A | digital III OUT digital OUT | analog M IN | |
| E40-HC | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 12,5A / 12,5A | digital III OUT | analog | |
| E45 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 10A / 8,5A | 100% PWM digital IN OUT | analog M | |
| E45-HC | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 12,5A / 12,5A | 100% digital PWM In | analog | |
| | | | | | digital digital | analog | |
| E50 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 8A | | | |
| E50-HC | GNM21GNM54 HSM38HSM71xx | 960V _{DC} | 930V _{DC} | 13A | digital IN OUT | analog | |
| E55 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 10A | 100% PWM digital IN OUT | analog | |
| E55-HC | GNM21GNM54 HSM38HSM71xx | 960Vdc | 930Vpc | 14A | 100% PWM digital IN OUT | analog M IN | |
| | | | | | | | |
| E60 | GNM21GNM4125 HSM38 | 960VDC | 930VDC | 5A / 4,3A | digital IN digital OUT | analog M | |
| E65 | GNM21GNM4125 HSM4615-24 HSM4630-48* HSM38 | 960VDC | 930VDC | 5A / 4,3A | 100% PWM digital IN OUT | analog N | |
| | 11310130 | | | | | | |

HC = version with heatsink *Only applies to 48V_{DC} winding version As an option, it is also possible to make customer-specific modifications to the controllers and/or commission us to carry out the parameterisation.

A CAN stick is required for on-site parameterisation.



EDC-B class

The B class drive controllers are only equipped with a Hall sensor interface and CANopen as a bus system. As a result, they are more cost-effective variants with reduced functionality, which is enough for a lot of applications.

| Туре | Suitable for ENGEL motors | Power supply | Electronic supply | Rated voltage 24Vpc / 48Vpc | Features | | | |
|--------|--|--------------------|--------------------|--------------------------------|-------------|---------|------------------------|-------------------|
| B40 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 10A / 8,5A | | digital | | |
| B40-HC | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 12,5A / 12,5A | | digital | | |
| B45 | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 10A / 8,5A | 100% PWM | | | analog |
| B45-HC | GNM21GNM5440 HSM38HSM7130* | 960V _{DC} | 930V _{DC} | 12,5A / 12,5A | 100% PWM | digital | | analog N |
| B60 | GNM21GNM4125 HSM4615-24 HSM4630-48* HSM38 | 960VDC | 930VDC | 5A / 4,3A | | digital | | analog M IN |
| B65 | GNM21GNM4125 HSM4615-24 HSM4630-48* HSM38 | 960VDC | 930VDC | 5A / 4,3A | 100% PWM | digital | digital IIII OUT | analog M IN |

HC = version with heatsink

*Only applies to $48V_{\text{DC}}$ winding version

We are glad to answer your questions promptly and are always available for a personal consultation. Contact us via email at kontakt@engel-elektromotoren.de or by telephone under +49 (6123) 994-400.



This flyer only presents an excerpt from our product range. Further information and the data sheets for the complete product range can be found at www.engel-elektromotoren.de

Alternatively please use our personal consultation service.

We will find the most optimum drive for your requirements.

We offer a wide range of standard versions of brushed and brushless electric motors, gearboxes and drive controllers, as well as technical advice on special designs. Our technically experienced employees will develop the best possible drive solution. While always with a focussing on achieving the best possible savings potential in your application.



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