

TWO IN ONE

Brushed DC motor combined with controller

Two worlds meet and go hand in hand in the future, stated Dunkermotoren (Germany): The brushed DC motor (GR series) which is a universally-applicable drive motor which runs without semiconductors and the BGE 5510 dPro controller with CANopen.



Four-quadrant controller for control of brushless DC motors up to 250 W continuous output power (also available on request for brushed DC motors) (Source: Dunkermotoren)

At the first view it seems to be a contradiction to combine a seemingly outdated technology with a high-end controller instead of brushless DC motors (BG series), said the company. If the typical BG requirements for dynamics or service life are not critical in applications, there is no reason for not using GR motors. The opposite is the case, the company explained: The simplicity is reflected in the costs and, in addition, GR motors with incremental encoders show a balanced behavior and only very low cogging torques. In terms of position, speed, and current control, GR motors are in no way inferior from BG motors, the company concluded.

As known already, the GR motors from Dunkermotoren in the power range from 4 W to 240 W can be combined with all components of the modular system such as gearboxes and brakes. The BGE 5510 dPro can be configured via the Drive Assistant 5 commissioning software and the connected GR motor can be matched to the respective application. Control via CANopen communication is supported (CiA 402 CANopen device profile for drives and motion control). CANopen supports linking devices. In addition to the network management and device monitoring, communication between various nodes is supported as well. The CANopen interface can be used to enter parameters of a path curve, such as position, speed and acceleration values.

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