

## Electrical Motor Controller

The brushless controller is a discrete analogue controller for brushless fuel pumps with different protection circuits.

The controller contains three major parts:

- the electronic commutation and safety circuits
- the power stage with thermal protection
- the solder interface for connection with the motor, the EMC/EMI filter and the power supply terminals.

The brushless controller serves for the electronic commutation of the three pole brushless motor and includes safety related functions. The main functions are:

- electronic commutation
- speed regulation
- hall sensor supply
- speed reduction for low supply voltage
- DC current limitation
- thermal overheat protection.



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| > Brushless controller type | Brushless controller for motor with 3 pole pairs and logical hall-sensor outputs |
| > Nominal supply voltage    | 28 VDC   |
| > Output phases             | 3  |
| > Operation mode            | Speed control  |
| > Output frequency          | 531Hz (10620 RPM)  |
| > Hall sensor output supply | 6.25V  |
| > DC current limitation     | ≤10A (PWM frequency changed)   |
| > Blocking protection       | After 30 sec. OFF if set speed is not reached                                    |
| > Speed reduction           | 22-12V approx. 27Hz/V  |
| > Overheat protection       | max. 110°C   |