

# D-SINUS motor controller

Sinus-commutated speed controller



*+ More*

Innovative motor controller

The innovative motor regulation in the Deutronic® D-SINUS Series is based on state of the art, sinus-commutated speed controller technology.

Compared with the competition the extremely complex control algorithm of the D-SINUS controller enables operation without the need for additional, elaborate sensors.

Therefore a higher degree of synchronisation can be achieved by field-oriented-controlled phase currents. Due to the sinusoidal current characteristic the efficiency is increased and the torque generated is constant in contrast to block commutation.

Power .....



**DEUTRONIC**   
EDWANZ group

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Sinus-commutated speed controller



## Advantages

- ✓ Sensorless, sinusoidal commutated motor controller for a soft, steady and quiet running motor
- ✓ No torque ripple, high level synchronisation and high starting torque
- ✓ Up to 95 % efficiency (Controller + Motor)
- ✓ Low package space
- ✓ Different interfaces:  
CAN (D-SINUS 180 and 350), Uart, ext. temperature sensors, position sensing (Hall-sensors/Quadrature encoder)
- ✓ Telemetry
- ✓ Recuperation (current limited) for controlled battery charging
- ✓ Highest efficiency

## Technical data

| Type        | Input voltage | Max. Output current |
|-------------|---------------|---------------------|
| D-Sinus 120 | 16–52VDC      | 120A                |
| D-Sinus 180 | 16–52VDC      | 180A                |
| D-Sinus 350 | 22–58VDC      | 350A                |
| D-MIC       | 3,3–8,0VDC    |                     |

