D-SINUS 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.

Benefits

– Sensorless motor control
– Maximum efficiency
– High degree of synchronization
– Compact design
D-SINUS Motor Controller

Technical Data
Input voltage
16-52VDC (D-Sinus 120/180)
22-58VDC (D-Sinus 350); 22-98VDC and 22-134VDC on request

Phase current
D-SINUS 120 120A
D-SINUS 180 180A
D-SINUS 350 350A

Operating modes
Speed control
Torque control

Options
– 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