Features

- Induction, PMSM and BLDC motor types
- Support for different types of rotor position sensors
- Advanced sinus vector control (also with hall sensors)
- Automatic field weakening mode for induction and PMSM motors
- Different regeneration modes
- Controller and motor protection with gradual power decrease at high temperature or low battery voltage
- Galvanic isolation between control and power signals (specific models)
- CAN (CANOpen) interface
- On board FLASH memory for real time logging

Product range

<table>
<thead>
<tr>
<th>emDrive</th>
<th>emDrive 150 / 60</th>
<th>emDrive 200 / 60</th>
<th>emDrive 150 / 125</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX supply voltage</td>
<td>60 VDC</td>
<td>60 VDC</td>
<td>125 VDC</td>
</tr>
<tr>
<td>1 min peak current</td>
<td>250 A</td>
<td>400 A</td>
<td>300 A</td>
</tr>
<tr>
<td>Continuous current</td>
<td>150 A</td>
<td>200 A</td>
<td>150 A</td>
</tr>
<tr>
<td>Output power</td>
<td>15 / 9 kW</td>
<td>24 / 12 kW</td>
<td>37.5 / 18.5 kW</td>
</tr>
<tr>
<td>Weight</td>
<td>1,5 kg</td>
<td>1,7 kg</td>
<td>1,7 kg</td>
</tr>
<tr>
<td>Dimensions W x D x H</td>
<td>200 x 150 x 43 mm</td>
<td>200 x 150 x 53 mm</td>
<td>200 x 150 x 53 mm</td>
</tr>
</tbody>
</table>

emDrive 150 / 125

- MAX supply voltage: 120 VDC
- 1 min peak current: 800 A
- Continuous current: 500 A
- Output power: 100 / 62 kW
- Weight: 5,0 kg
- Dimensions W x D x H: 310 x 205 x 68 mm
- Cooling: Liquid

emDrive 200 / 135 kW

- MAX supply voltage: 450 VDC
- 1 min peak current: 450 A
- Continuous current: 300 A
- Output power: 200 / 135 kW
- Weight: 7,0 kg
- Dimensions W x D x H: 244 x 228 x 126 mm
- Cooling: Liquid

Key features

- Motor type: BLDC, PMSM, Induction
- Switching frequency: 16 kHz
- Rotor angle sensor: Hall, SSI, Resolver, Sin / Cos, AB incremental
- Communication: CAN (CANOpen) interface
Product range

**BMS S05**
- Stackable solution for up to 144 cells (1 master 5 slave units)
- Each module can control up to 24 cells
- High precision voltage measurement (< 1,2 mV)
- Passive cell balancing with 500 mA
- Galvanic isolation between control and battery part
- CANOpen, RS232, Bluetooth, OBDII communication
- Different charger control modes (ON/OFF, voltage or CAN)
- Relay control (main, precharge, charge)
- Analogue outputs (SOC, charge and discharge current limit)
- Integrated safety interlock circuit and isolation monitor
- Communication with controller and display

**BMS 2405**
- Balancing up to 24 cells
- Passive cell balancing (500 mA)
- Integrated charge relay
- High precision voltage measurement
- Analogue SOC output
- Communication with controller

**Digital current sensor**
- Measuring current range up to 500 A
- High accuracy 0,5 %
- Low offset error < 100 mA
- Fully galvanic isolated
- Direct connection to BMS S05

**CAN interface**
- CAN to USB interface (compatible with USB: 1.1, 2.0 and 3.0)
- Bit rate from 5 kbit/s up to 500 kbit/s
- CANOpen compatible
- CAN bus connection via D-sub 9 pin connector
- Galvanic isolation of the CAN up to 500 V

PC software

**eDrive Configurator**
- CANOpen protocol
- emDrive control and real time data acquisition
- emDrive parameter configuration
- Load, save and duplicate configuration easily
- Control of emDrive internal oscilloscope functions
- Firmware update
- Integrated help