The Compact Power BLDC CPM90 features a brushless, permanent-magnet synchro-motor as well as a fully integrated control unit. The motor achieves a maximum efficiency -over 90%- for all low voltage applications.

► Features & Benefits

- Brushless DC motor with integrated CAN bus control electronics
- Torque up to 5 Nm peak
- Supply voltage range between 18V and 32V
- Protection index up to IP6k9k, with integration to customer’s housing
- Operating temperature from -40°C to 85°C
- Integrated connector

- Outstanding compactness
- Torque control / Speed control
- Power / Battery current control
- Energy recuperation / 4 quadrant operation
- Field oriented control
- Integrated failure diagnostics

► Dimensions

![Dimensions Diagram]
Motor Reference Code | 5922R1015
Max Torque | 5 Nm
Max speed | 5000 rpm

Electrical and Mechanical Interface

- Integrated signal connector: Deutsch DT04-6P, Mating connector DT06-6S
- Signal connector pinout: 1=CAN Shield, 2=CAN low, 3=Wake-up, 4=CAN high, 5=Enable GND, 6=Enable signal
- Screw terminals for power supply: 2x M6 bolts, available length of thread 10 mm
- Communication: CAN 2.0, Baudrate 250 kbit/s, 500 kbit/s, 1 Mbit/s
- Over and under voltage protection: Integrated, up to 36 V
- Reverse polarity protection: Integrated, up to -32 V
- Maximum battery current: 120 A
- Quiescent current (Enable "Low") | 1< mA
- Output shaft: Φ 12h8 with groove for feather key DIN 6885 – A 4x4x10

Operating conditions

- Operating Temp. Range: -40°C / +85°C
- Vibration level: 5g RMS, further validations upon request
- Protection class: Up to IP 6K9K after integration to the customer’s housing
- ROHS (Lead Free): Compliant