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 10.5 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**
**Technical data**

**Motor Reference Code**

| Max Torque | 10.5 | 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**: $\phi_{12h8}$ 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

*Special requirements upon customer specifications. Right to change reserved.*

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