

CPB3, CPB6, CPB15

Motor controller – CPB series

The CPB motor controllers are designed for integration in customer applications and in customized boards produced in medium and high quantities. The plug-in controllers significantly reduce space and cabling requirements which is particularly advantageous in multi-axis applications.

Maximum performance

In combination with extended features such as the acceleration feed forward and jerk-limited ramps, the field-oriented torque, speed and position control provides optimum dynamic performance and thus cycle time. In addition to motor feedback via Hall sensors, incremental encoders or SSI encoders, it is also possible to integrate a second rotary encoder.

Easy to adapt

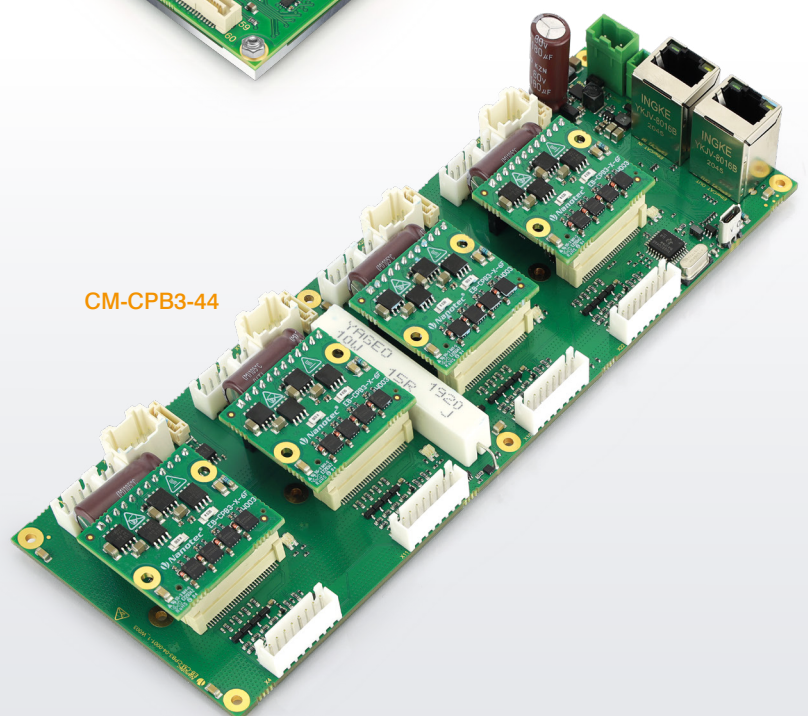
As the hardware wiring for the fieldbus, the input/output and the encoders is provided on the carrier board, the controllers can be adapted to individual requirements easily.

Uniform concept

The three variants with 150, 300 and 750 watt rated power have the same features and identical pin assignment on the logic connector. As a result, several performance classes of a customized carrier board or multi-axis board can be realized with different requirements for each axis.

Compact multi-axis controller

The 4-axis EtherCAT controller CM-CPB3-44 demonstrates how a multi-axis controller for the highest requirements can be implemented in the smallest of spaces. The four EtherCAT axes are directly connected to the board by means of an EtherCAT network and can additionally be configured via USB. In this way, all axes can be controlled via just one interface.



Technical data

CPB series	CPB3	CPB6	CPB15
Motor type	BLDC motors, stepper motors		
Operating voltage	12 - 58 V		
Rated current	3 A	6 A	15 A
Peak current	9 A	18 A	45 A
Interfaces (external wiring required)	CANopen, EtherCAT, Modbus RTU, Modbus TCP, Ethernet/IP, Profinet, IO-Link, SPI, USB		
Inputs/outputs (external wiring required)	11 digital inputs/outputs 2 analog inputs 1 brake output 2 encoder inputs		
Dimensions	30 x 36 mm	40 x 45 mm	50 x 60 mm

4-axis controller	CM-CPB3-44
Motor type	BLDC motors, stepper motors
Operating voltage	12 - 58 V
Rated current	3 A
Peak current	9 A
Interfaces	EtherCAT, USB hub for configuration
Encoder/Hall (per axis)	1 x incremental encoder, 1 x SSI encoder, 1 x hall sensor
Inputs/outputs (per axis)	4 digital inputs (5 V PNP) 2 digital outputs (open drain) 1 analog input 1 brake output
Dimensions	220 x 70 mm



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