

DC Motor Controller Module for C-885 PIMotionMaster

For DC Motors and Brushless DC Motors, 2 Axes



C-863.20C885

- High-speed encoder input to 60 MHz
- PID controller, parameter changing during operation
- Powerful macro programming language, e.g., for stand-alone operation
- Data recorder
- Nonvolatile EEPROM for macros and parameters
- Extensive software support

Digital motion controller for DC servo motors

2 axes. Motion control of PI positioning systems with DC motors: Direct motor control; PWM control for fast PI stages with integrated ActiveDrive amplifiers or with brushless motors and integrated block commutation. PID controller. Supports motor brake.

Extensive functions, software support

Powerful macro command language. Nonvolatile macro storage, e.g., for stand-alone operation with autostart macro. Data recorder. PID controller, parameter changing during operation. Extensive software support, e.g., for LabVIEW, C, C++, MATLAB, Python. PIMikroMove user software.

Plug-and-play installation in the C-885 PIMotionMaster

Can be inserted in any free slot. Automatic detection and external communication (USB, Ethernet) by the processor and interface module of the C-885. Can be expanded with optional digital inputs and outputs. Power via the power supply of the C-885.

Specifications

C-863.20C885	
Function	DC motor control, servo controlled, for C-885 PIMotionMaster modular multi-axis controller system
Axes	2
Supported functions	Point-to-point motion. Startup macro. Data recorder for recording operating data such as motor voltage, velocity, position or position error. Internal safety circuitry: Watchdog timer.
Motion and control	
Controller type	PID controller, parameter changing during operation
Servo cycle time	50 μ s
Profile generator	Trapezoidal velocity profile
Encoder input	A/B quadrature single-ended or differential TTL signal acc. to RS-422; 60 MHz
Stall detection	Automatic motor stop when a programmable position error is exceeded
Limit switches per channel	2 \times TTL (programmable polarity)
Reference point switches per channel	1 \times TTL
Motor brakes per channel	1 \times TTL, can be switched by software
Electrical properties	
Output voltage	0 to 24 VDC
Current limitation per channel	3 A
Interfaces and operation	
Communication interfaces	USB or Ethernet, via C-885.M1 / C-885.M2 Digital Processor and Interface Module
Motor and sensor connection	2 \times Sub-D 15 (f)
I/O lines	Optional with C-885.iD Digital Interface Module for PIMotionMaster: 4 analog/digital inputs (0 to 5V/TTL), 4 digital outputs (TTL)
Command set	PI General Command Set (GCS)
User software	PIMikroMove
Application programming interfaces	API for C / C++ / C# / VB.NET / MATLAB / Python, drivers for LabVIEW
Miscellaneous	
Operating voltage	24 V DC, supply via C-885
Max. current consumption	6 A
Operating temperature range	10 to 40 $^{\circ}$ C
Mass	132 g
Dimensions	186.42 mm \times 128.4 mm (3 RU) \times 19.98 mm (4 HP)

Ordering Information

C-863.20C885

Motion controller module for DC motors, 2 axes, for PIMotionMaster, PID controller