

MCC-2 LIN Linear controller for two axes

www.phytron.co.uk/MCC-2lin

The MCC-2 LIN, phytron's freely programmable dual axis stepper motor controller, is a compact stand-alone unit (CPU, Indexer and power stage) for 2 phase stepper motors providing up to 1.7 A_{PEAK} phase current.

Controllers in the MCC series have many inputs and outputs (digital and analogue) and encoder inputs for step position monitoring plus possibilities to connect limit switches all as standard.

Due to the viariety of available host interfaces

(USB, Ethernet etc.), the MCC can be quickly and easily integrated into existing applications.

This controller is easy to program and can operate either directly (remote) via its bus or stand alone (local) with the program routines stored within.

Application

As a compact stand-alone device, it convinces expecially in small experimental setups, machines and equipment, which can be dispensed in a PLC.

Highlights

Stand-alone

Once programmed the MCC-2 LIN can work without additional PC/controller.

Low Noises

Low noises operation for sensitive applications for medical and scientific applications.

LabVIEW[®]

LabVIEW[®] is a simulation software with a graphical interface. Use the VIs (Virtual Instruments) generated by phytron and integrate them in your LabVIEW[®] project. So you can easily control the MCC from your usual programming environment.

MiniLog-Comm®

MiniLog-Comm[®] is phytron's communication software running under WINDOWS[®] to facilitate programming of the stepper motor controller. It provides quick and easy generation of sequential programs.

MiniLog-Comm[®] software is delivered free with phytron controllers and offers additional functions for test mode, step by step control or single sequence command execution of a motor move, a motor status window and even a Motion Creator.



- 2 axes stepper motor control unit with integrated power stages
- Use in EMC-sensitive applications possible
- Phase currents up to 1.7 A_{PEAK}
- Power supply 24 to 48 V_{DC}
- Step resolution 1/1 up to 1/256 step
- Host interfaces: USB, Ethernet, RS 485 or RS 232
- Interfaces:
 - 2 encoders
 - 2 analog inputs
 - 8 digital inputs and 8 outputs
 - 4 limit switches
 - 2 redundant designed enable inputs
- Programming in well-tried MiniLog format, acc. to DIN 66025 or in LabVIEW[®]
- LabVIEW[®] drivers for including the MCC in your LabVIEW[®] project
- Remote or local mode



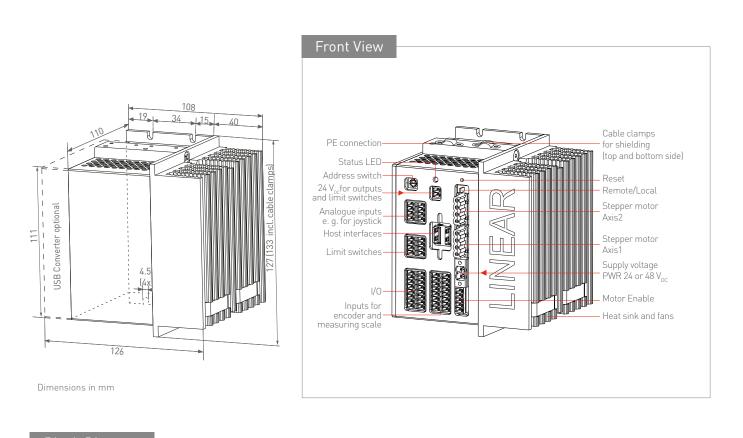
Stand-alone

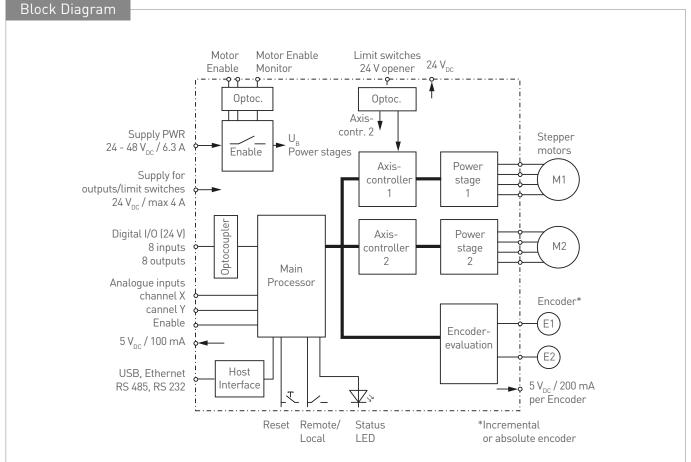
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Low Noises

Control

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Features Stepper motors Suitable for the control of 2 phase stepper motors with 4, 161 or 8 lead wiring Supper motors Controller and motor: 24 to 48 Vo;; Limit switches and outputs: 24 Vo; Phase current Up to 17.4 Cosk Step resolution 1/1, 1/2, 1/4, 1/5, 1/8, 1/10, 1/20, for smoother motor rotation: 1/32, 1/64, 1/128 up to 1/256 step of a full step Step frequency 40000 step/s/sec Physical resolution Aprenz, 51, 200 positions per resolution (0.007?/step withe .200 step motor: An encoder with a counter should be considered for very fine positioning. Hardware error detection Sobort circuit lebrewen phase and power supply: between both phases; within a motor against ground)) -Over temperature Sobort circuit lebrewen phase and power supply: between both phases; within a motor against ground)) -Over temperature Sobort circuit lebrewen phase and power supply: between both phases; within a motor against ground)) -Over temperature Sobort circuit lebrewen phase and power supply: between both phases; within a motor against ground)) -Over temperature Sobort circuit lebrewen phase and power supply: between both phases; within a motor against ground)) -Over temperature Sobort circuit lebrewen holds Digradi culputs Sobort circuit lebrewen holds Bort digradit Sobort circuit le	Weight	Арргох. 1350 g		
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Ariencoder with a counter should be considered for very fine positioning. Hardware error detection -Short circuit lbetween phase and power supply: between both phases; within a motor against ground)] Cable length Short circuit lbetween phase and power supply: between both phases; within a motor against ground)] Diagnostic LEDS Ready, busy, ERROR Operating mode "Remote" - via bus; "Local" - stand-alone mode with sequence program Interfaces Interfaces Analog outputs 2x (A, B, C, D) for two 2 phase stepper motors Digital outputs adigital outputs, overload-proof, each electrically isolated from power supply? 24 V power supply? de separately; the maximum load is 1 A on each output; 4 A for all outputs Host interfaces Optional: USB, Ethernet, PS 45B, PS 232 Analog inputs 2 x 10 Bit AD converter e.g. for a joystick. The joystick power (S V _{Dec} : 100 mA max.) is provided by the controller Digital inputs -8 digital inputs, electrically isolated, 24 V input level 4 umit switches: Sype PNP NCC or NOC -8 digital inputs, electrically isolated, 24 V input level 4 umit switches: Sype FNP NCC or NOC -8 digital inputs, electrically isolated, 24 V input level 4 umit switches: Sype FNP NCC or NOC -8 digital inputs, electrically isolated, 24 V input level 4 umit switches: Sype FNP NCC or NOC -8 digital inputs, electrically isolated, 24 V input level 4 umit switches: Sype FNP NCC or NOC -8 digital inputs, electr	Step frequency	40,000 steps/sec		
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Approval CE		Acc. EN 61000-6-1, -3, -4		
	Approval	CE		

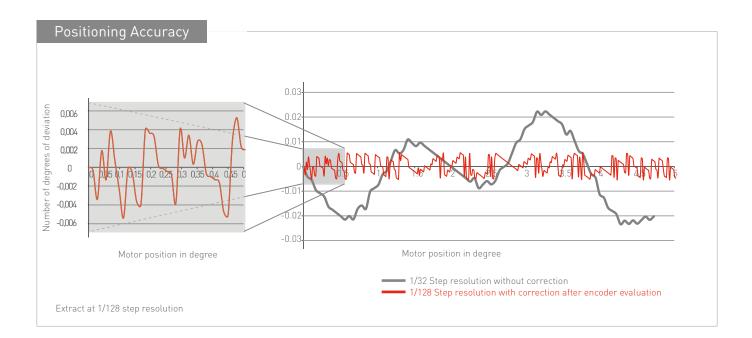




Edition 2012 July / DS-011-A001 UK / 3

www.phytron.co.uk

Control



Ordering Code		
The variable elements of the product are displayed in colour.	1 yae	Current/Chapper Motor rollage Step resolution Host interface Mounting Terminal adaptor
Ordering code	MCC-2 LIN - 20) - 48 MINI - <mark>USB - W - B</mark>
Options		
Host interface	USB ETH RS 485 RS 485-USB RS 232	USB port Ethernet port RS 485/4-wire port RS 485/4-wire + USB converter RS 232 port
Mounting	W H	Wall mounting With attached clip for DIN rail mounting
	В	RS 232 adaptor for BT 5 operator terminal

LabVIEW[®] is a trade mark of National Instruments Corporation.

MiniLog-Comm[®] is a trade mark of Phytron-Elektronik GmbH.

Extent of Supply

- A CD-ROM with MiniLog-Comm[®] software, LabVIEW[®] VIs and USB driver
- Connector set

Optional Accessories

- Cable assembly
- Power supply unit PS 5-48
- BT 5 operator terminal
- Mini USB-RS 485 converter

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