SMC100

Compact motion control

SMC100

SMC100 is a stepper motion controller for bipolar 2-phase stepper motors. Similar to MC105 the controller offers some functions for configuration and safety. You will benefit from an integrated logic module for configuring and saving operating data.

Key Features

- **Control of two bipolar 2-phase stepper motors**

- **Phase current of up to 10 A**

- **Four galvanically isolated in-and outputs**

- **1× CAN interface acc. to ISO 11898**

- **Own intelligence for self regulation and data management**

- **Free configuration and storage operating data**

- **Compact housing with IP20 and integrated top hat rail mounting**

Housing

The compact housing is made of aluminium. It contains a top hat rail mount and a front cover with all interfaces for better overview in the control cabinet. The technician will note the convenience while working at the bus cabling. You can also set module address and baud rate in short time via DIP switch.

Stepper motor

All connected stepper motors are current-controlled. Either 24 V or 48 V stepper motors with up to 10 A can be dealt with. The current in each phase is seperately controlled. Finally, standby current can be adjusted to the nominal current between 0 and 100 %.

Technical Data

CPU	Texas Instruments TMS320 DSP
Fieldbus	CANopen acc. to DS 402
Interfaces	4× DI / 4× DO, galv. isolated, optional 1× encoder interface
Operating modes	1/1, 1/2, microstep
Operating system display	1× LED green for supply voltage (5 V) 1× LED green for operating mode (run) 1× LED red for error status (err)
Dimensions (l×w×h)	115 mm × 45 mm × 118 mm
Housing	Aluminium housing with protection class IP20
Storage temperature	−10 °C up to +70 °C
Operating temperature	0 °C up to +60 °C
Rel. humidity	90% non-condensing
Power supply	24 V DC / 48 V DC
Supply of the motors	isolated, 24 V / 48 V DC up to max. 10 A

Pin assignment

CAN D-Sub9

1	–
2	CAN low
3	CAN GND
4	–
5	–
6	–
7	CAN high
8	–
9	–

DIP switch

0	10
1	20
2	50
3	125
4	250
5	500
6	800
7	1000

Operation modes

You can switch between full, half and micro-step. There is an incremental encoder with a resolution of 16 bit available as well.

Safety first

The current limit can be configured and saved as a basis value, avoiding errors in the calculation. Like all our controlling devices SMC100 also contains an emergency-stop function which is activated as soon as it registers a lack of bus communication.

Order information

V966295400	SMC100

Mobile Automation

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We are looking forward to your enquiry!

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