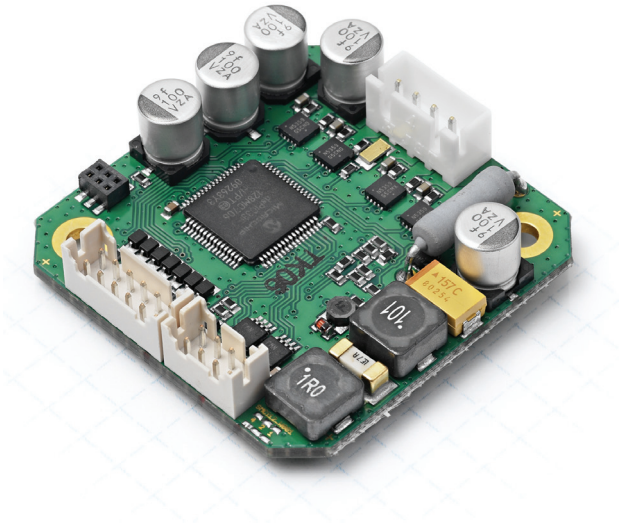
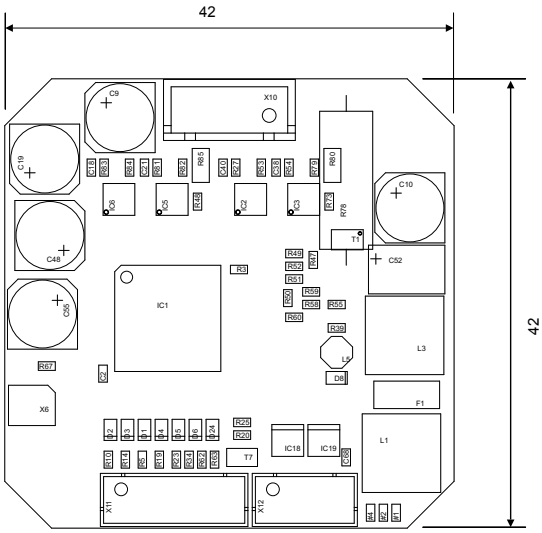
## SMCI12 positioning control



### Technical data

| | |
|---|---|
| **Operating voltage:** | 12-24 V DC |
| **Phase current**: | max. 2.7 A |
| **Interface:** | RS485 4-wire or CANopen |
| **Operating mode:** | RS485: Position, speed, flag position, clock direction, analog, joystick<br>CANopen: Position, speed, reference run, interpolated position (according to CAN standard DS402) |
| **Step resolution:** | 1/1, 1/2, 1/4, 1/5, 1/8, 1/10, 1/32, 1/64 |
| **Step frequency:** | 16 kHz with a full step, corresponding multiples with a microstep (e.g. up to 1 MHz with 1/64) |
| **Inputs:** | 6 digital inputs (TTL), 1 analog input +10/–10 V |
| **Outputs:** | 3 open collector, 24 V / 0.5 A max. |
| **Current reduction:** | Adjustable 0 - 150% |
| **Protection circuit:** | Overvoltage, undervoltage and heatsink temperature > 80 °C |
| **Temperature range:** | 0 to + 40 °C |

### Outline drawing (mm)




### Inputs/Outputs (X11)

| Pin | Function* |
|---|---|
| 1 | GND |
| 2 | Input 1 |
| 3 | Input 2 |
| 4 | Input 3 |
| 5 | Input 4 |
| 6 | Input 5 |
| 7 | Input 6 |
| 8 | Analog In |
| 9 | Output 1 |
| 10 | Output 2 |
| 11 | Output 3 |
| 12 | GND |

### Supply and communication (X12)

| Pin | Function* RS485 | Function* CANopen |
|---|---|---|
| 1 | GND | GND |
| 2 | GND | GND |
| 3 | RX- | n.c. |
| 4 | RX+ | n.c. |
| 5 | TX- | CAN low (CAN -) |
| 6 | TX+ | CAN high (CAN +) |
| 7 | GND | GND |
| 8 | UB 12-24VDC | UB 12-24VDC |

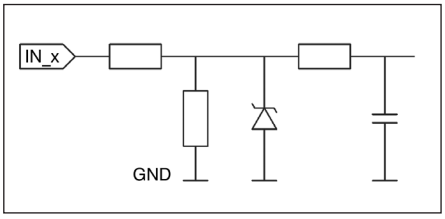
### Motor connection (X3)

| Pin | Function* |
|---|---|
| 1 | Motor coil A |
| 2 | Motor coil A\ |
| 3 | Motor coil B |
| 4 | Motor coil B\ |

* from the perspective of the connected controller

Connection cable for motors with 6 or 8 connections:
ZK-XHP-4-300

### Input circuits




### Order number

**RS485: SMCI12**
**CANopen: SMCI12-3**