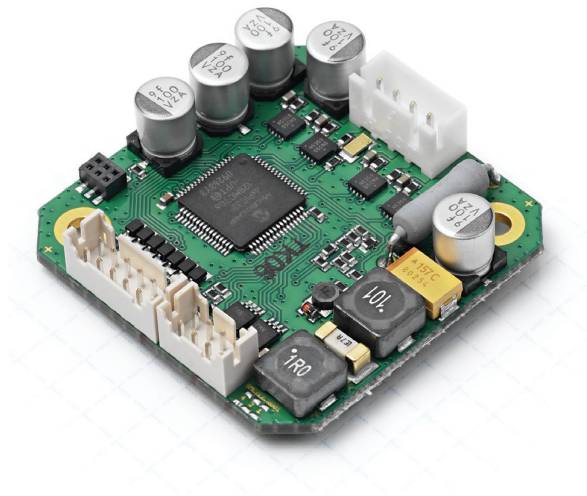


# Stepper motor drivers

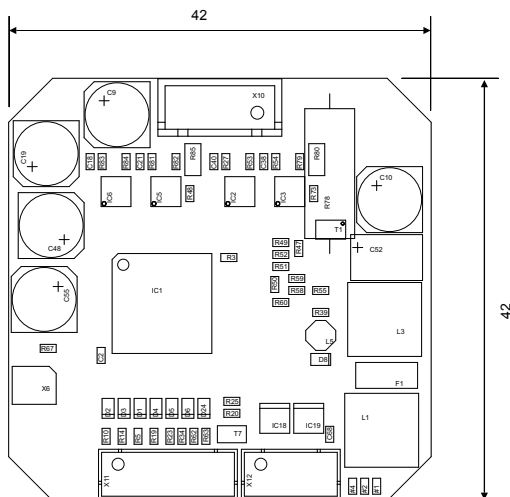
## SMCI12 positioning control



### 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  
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	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

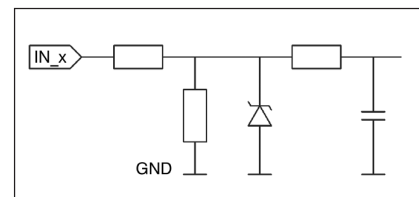
### Motor connection (X3)

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