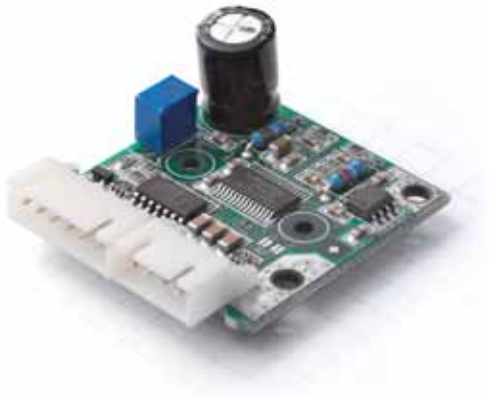
Compact microstep controller SMC11

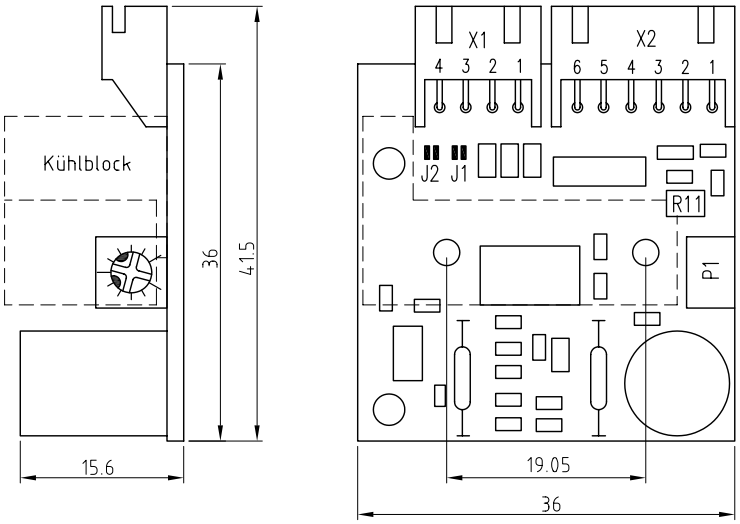


Technical data

Operating voltage:	12 to 35 V DC
max. phase current:	1.0 A / full step (1.25 A with cooling block) 1.4 A/microstep (1.8 A with cooling block)
Current setting:	Via potentiometer
Operating type:	Bipolar
Operating mode:	1/1, 1/2, 1/4, 1/8 (preset)
Protection function:	Overvoltage, undervoltage and over-temperature
Step frequency:	0 to 200 kHz
Current reduction:	Switchable to 40%
Input signals:	0 V active (L< 0.8 V; 3.5 V < H < 6 V or open)
Temperature range:	0 to + 40 °C
Connection type:	JST plug connector
Weight:	10 g
Fastening type:	2 bore holes at Ø19.05 mm for M2.5 - installed directly on the stepper motor

Caution: Always use a back-up capacitor for the operating voltage of the control system. This is to be placed as close as possible to the control system. Control systems up to 4 A require a 4700µF capacitor, and control systems up to 10 A require a 10,000µF capacitor. Otherwise, there is a danger of destruction of the control system.

Outline drawing (mm)



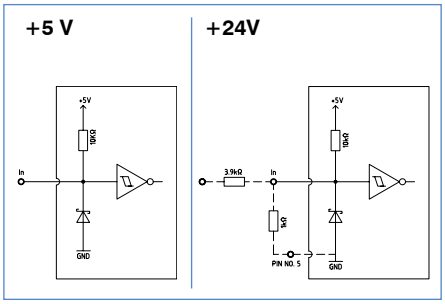
Input configuration, X1:

1=	Phase A
2=	Phase A\
3=	Phase B
4=	Phase B\

Input configuration, X2:

1=	Operating voltage, VSS
2=	Enable (L=active, H or open = disable)
3=	Direction
4=	Clock
5=	Operating voltage (0 V GND)
6=	Current drop

Input circuits



Order identifier

SMC 11 - 2

2 = 1/16 step automatic current reduction

Step switching

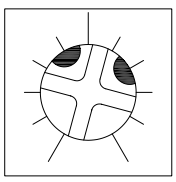
Configuration:
The module is configured to 1/8 step in the factory.

Step mode	J1	J2
1/1 step	X	X
1/2 step	X	
1/4 step		X
1/8 or 1/16 step		

Current setting

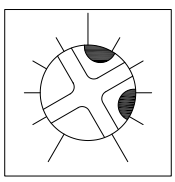
Max. phase current: (microstep)

P1



1.4 A
(without cooling block)

P1



1.8 A
(with cooling block only)