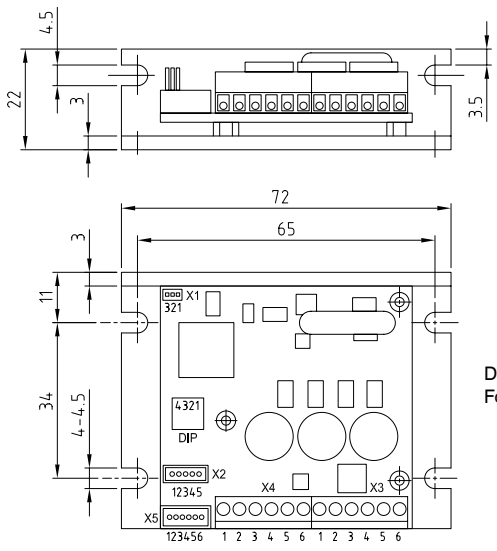
Closed loop motor controller with encoder input, SMCI35

Technical data

Operating voltage:	12 to 48 V DC
Phase current:	max. 6 A
Interface:	TTL-RS232 (3.3 V)
Operating type:	Position, speed, flag position, cycle direction, analog, joystick
Operating mode:	1/1, 1/2, 1/4, 1/5, 1/8, 1/10, 1/32, 1/64, adaptive (1/128)
Step frequency:	16 kHz in full step; in microstep, corresponding multiples (e.g. up to 1 MHz at 1/64)
Inputs:	6 digital inputs (TTL), 1 analog input +10 / - 10 V
Outputs:	3 digital outputs (TTL)
Position monitoring:	Yes, depending on rotary encoder
Current reduction:	can be adjusted from 0 to 100%
Protective circuit:	Overvoltage, undervoltage and heat sink temperature > 80 °C
Temperature range:	0 to + 40 °C

! 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)



DIP switch:
For setting the motor current 10 - 150%

Communication (X1)

Pin	Function*	Wire color (ZK-RS232-USB-3.3V)
1	GND	Black
2	TX	Yellow
3	RX	Orange

Encoder (X2) JST-ZHR 5

Pin	Function*
1	GND
2	CH-B
3	INDEX
4	CH-A
5	+5 V

Motor and supply (X3)

Pin	Function*
1	Motor coil A
2	Motor coil A\
3	Motor coil B
4	Motor coil B\
5	UB 24-48 V
6	GND

Inputs/outputs (X4)

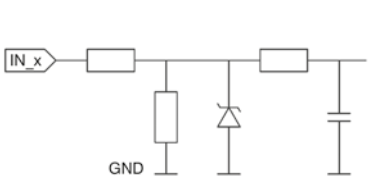
Pin	Function*	Function on delivery
1	Output 1	
2	Input 6	CLOCK
3	Input 5	DIRECTION
4	Input 4	ENABLE
5	Analog in 1	
6	GND	

Inputs/outputs (X5) JST-ZHR 6

Pin	Function*
1	GND
2	Output 3
3	Output 2
4	Input 3
5	Input 2
6	Input 1

*** from the perspective of the connected controller**

Input circuits



Order identifier

SMCI35