

## Positioning controller with encoder input, SMCI47



### Inputs/Outputs (X1)

| Pin | Function   |
|-----|------------|
| 1   | Input1     |
| 2   | Input2     |
| 3   | Input3     |
| 4   | Input4     |
| 5   | Input5     |
| 6   | Input6     |
| 7   | Signal GND |
| 8   | Output 1   |
| 9   | Output 2   |
| 10  | Output 3   |
| 11  | Analogue   |
| 12  | GND        |

### Technical data

|                      |   |
|----------------------|---|
| Operating voltage:   | DC 24 to 48 V   |
| Phase current:       | Nominal current 7.5A, adjustable to max. 12 A/phase                       |
| Interface:           | RS485   |
| Operating mode:      | Position, speed, clock direction, analog, joystick,                       |
| Step resolution:     | 1/1, 1/2, 1/4, 1/5, 1/8, 1/16, 1/32, adaptive (1/128)                     |
| Step frequency:      | 0 to 50kHz in the clock/direction mode,<br>0 to 25 kHz in all other modes |
| Inputs:              | 6 optocoupler inputs (5V)   |
| Outputs:             | 3 transistor outputs (open collector)                                     |
| Position monitoring: | Automatic error correction up to 0.9°                                     |
| Current drop:        | Adjustable 0- 100%  |
| Protection circuit:  | Oversupply, undervoltage and heatsink temperature > 80 °C                 |
| Temperature range:   | 0 to + 40°C   |

\* Phoenix connectors are included in the delivery.

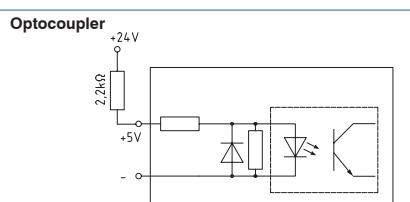
### Encoder (X2)

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

### Motor connection (X3)

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

### Input circuits



**!** Note: A charging capacitor of at least 4,700 µF (Z-K4700/50) **must** be provided on the supply voltage so that the admissible voltage is not exceeded during the braking process.

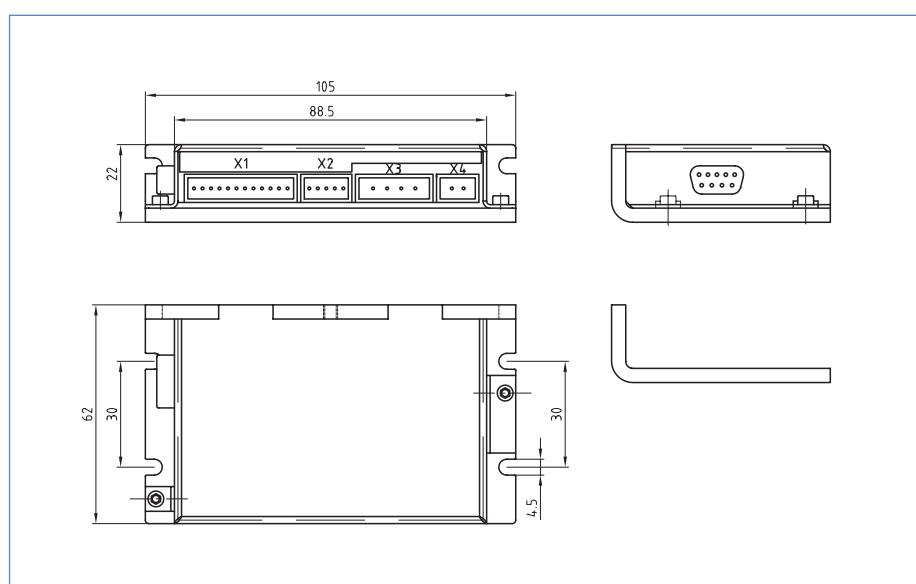
### Supply (X4)

| Pin | Function |
|-----|----------|
| 1   | UB24-48V |
| 2   | GND      |

### SMCI47-2: RS485 (X5)

| Pin | Function |
|-----|----------|
| 1   | NC       |
| 2   | RX+      |
| 3   | +5V      |
| 4   | TX+      |
| 5   | NC+      |
| 6   | NC-      |
| 7   | RX-      |
| 8   | GND      |
| 9   | TX-      |

### Outline drawing (mm)



### Order number

SMCI47-  
2= RS485