

SMC42

Compact Microstep Constant Current Driver



Technical Characteristics:

- Operating voltage:** *DC 21 V to 37 V*
- max. Phase Current:** *2A / phase*
- Current setting:** via fixed resistors (Rsens)
- Mode:** Bipolar-Chopper-Driver
- Operating Mode:** Full- (1/1), half-, quarter-, 1/8-step
- Step frequency:** 0 to 50 kHz
- Current down:** automatically to 65%
- Input signals:** 0 V active
- LED:** error-message (overvoltage; cooling device temp. >80°C)
- Temperature range:** 0 bis +40°C
- Type of Connection:** via screw-type terminals, alternatively via screw type plug-in terminals
- Kind of mounting:** via DIN-rail EN 50 022 35 x 7.5
- Weight:** 130 g

Attention: A charging capacitor of at least 4.700 µF has to be provided in the supply voltage so that the permissible voltage is not exceeded during the braking process.

Pin-Assignment: (AWG 26-16)

- 1 = GND (Signal Ground)
- 2 = + 5V (Measuring Point)
- 3 = Direction (DIR)
- 4 = Clock
- 5 = Enable (H or. open=Enable / L=Disable)
- 6 = VSS Operating Voltage
- 7 = GND (Power Ground)
- 8 = not used

If phase current is set lower than 1.5 A, the resistor Ri has to be 2,7kOhm, otherwise the red LED will display an error message (Ri standard=12 kOhm); position Ri - see drawing

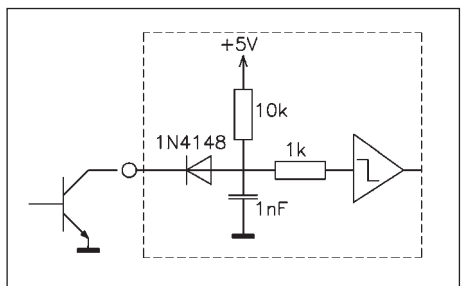
Order Code: SMC 42-□-□

Phase Current e.g. 0.8 = 0.8 A/phase

Type of connection terminals 1-8:

- 1 = screw -type (standard)
- 2 = screw-type plug-in

Input Circuit



Step setting

Configuration:
The module is set to full step on delivery

| Motor | Br.1 | Br. 2 |
|----------|------|-------|
| 1/1 step | X | X |
| 1/2 step | X | |
| 1/4 step | | X |
| 1/8 step | | |

| Phase Current A | Rsens1 Ohm | Rsens2 Ohm |
|-----------------|------------|------------|
| 0.3 | nc | 2.2 |
| 0.5 | nc | 1.5 |
| 0.8 | nc | 1.0 |
| 1.0 | 0.82 | nc |
| 1.3 | 0.82 | 2.2 |
| 1.5 | 0.82 | 1.5 |
| 1.7 | 0.82 | 1.0 |
| 2.0 | 0.82 | 0.82 |

Current Setting

