# SMC42

# Compact Microstep Constant Current Driver



## **Technical Characteristics:**

Operating voltage: <u>DC 21 V to 37 V</u> max. Phase Current: <u>2A / phase</u>

**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  $4.700~\mu F$  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

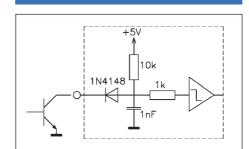
7 = GND (Power Ground)

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

### **Input Circuit**



### Step setting

Configuration:

The module is set to full step on delivery

Motor	Br.1	Br. 2
1/1 step	Х	Х
1/2 step	Х	
1/4 step		Х
1/8 step		

# Current Setting

