

S-DIAS Current Controller Module

SR 020



with 1 DC motor output stage 3,5 A
 1 Power LED driver 350 mA
 1 LED driver 20 mA

The S-DIAS SR 020 current controller module is used to operate a DC motor with a 12-30 V supply voltage and a maximum motor current of 3.5 A. Higher starting currents are possible for a short period.

The module also contains a current-controlled LED driver with a maximum current of 20 mA, as well as a current-controlled power LED with a maximum of 350 mA.

Motor Output Specifications

Number	1
Supply voltage	12-30 V DC
Controller frequency	30 kHz
Current	0-3.5 A
Motor peak start current	maximum I^2t -value = 16 A ² s
Operation mode	S3/50 % duty cycle with a maximum on-time of 1.5 min
Intermediate circuit capacity	140 µF
Voltage monitoring	Overvoltage and under voltage monitoring
Motor current measurement	0-3.5 A
Protective function	Short circuit switch-off I^2t switch-off Over temperature switch-off

Current Output Specifications

Number	2
LED 1	0-20 mA at max. 10 V LED forward voltage
Resolution	8-bit
LED 2 (power LED)	0-350 mA at max. 10 V LED forward voltage
Resolution	8-bit

Electrical Requirements

Power supply +24 V	18-30 V	
Current consumption of +24 V power supply	maximum 210 mA/24 V	
Motor supply	12-30 V	
Current consumption of motor supply	depends on the motor	
Voltage supply from S-DIAS bus	+5 V	
Current consumption on the S-DIAS bus (+5 V supply)	typically 68 mA	maximum 80 mA
Voltage supply from S-DIAS bus	+24 V	
Current consumption on the S-DIAS bus (+24 V supply)	typically 15 mA	maximum 20 mA

Article Number and Miscellaneous

Article number	20-029-020	
Dimensions	12.5 x 104.2 x 72 mm (W x H x D)	
Standard	UL 61800-5-1 (E247993)	
Approvals	UL, cUL, CE	

Environmental Conditions

Storage temperature	-20 ... +85 °C	
Environmental temperature	0 ... +55 °C	
Humidity	0-95 %, non-condensing	
Operating conditions	pollution degree 2 altitude up to 2000 m	
EMC resistance	in accordance with EN 61000-6-2 (industrial area)	
EMC noise generation	in accordance with EN 61000-6-4 (industrial area)	
Vibration resistance	EN 60068-2-6	3.5 mm from 5-8.4 Hz 1 g from 8.4-150 Hz
Shock resistance	EN 60068-2-27	15 g
Protection type	EN 60529	IP20